

Translation of Horse Colors in Zechariah 1:8; 6:2–3, 6 Based on Textual and Material Evidence

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The first and final visions of Zechariah include the Hebrew Bible's only descriptions of horses in terms of their color. The color terms employed have long sparked debate about whether these horses have realistic or imaginative colors, the significance of these colors for the interpretation of Zechariah's visions, and whether technical or ordinary color terms are most appropriate for translating them today. Recent genetic studies of the coat color of ancient horses prompt a new consideration of these terms in Zechariah. This article combines Athalya Brenner's textual analysis of the color terms in the Hebrew Bible with a list of genetically probable horse coat colors in Iron Age Israel in order to produce working translations of these terms for American audiences. This list of genetically probable horse coat colors results from the integration of David Anthony's study of the initial domestication of horses with Arne Ludwig et al.'s genetic study of horse coat color in the ancient world. The evaluation of current genetic analyses of ancient horse coat colors in light of the broader use of color terms in the Hebrew Bible produces translations of these terms that are as precise as possible, given current genetic evidence, and sensitive to the contours of the source and target languages.

The Hebrew Bible describes the color of horses only in Zech 1:8 and 6:2–3, 6, in Zechariah's first and last visions; these colors constitute part of the *inclusio* in the imagery of the visions. The translation and significance of the colors have been widely debated, but the most compelling proposals suggest that these color terms reflect realistic horse colors and contribute to the interpretation of the passage. Athalya Brenner's textual analysis of the color terms in the Hebrew Bible can be combined with a list of genetically probable horse coat colors in Iron Age Israel to develop translations for the color terms describing horses in Zechariah for

American audiences familiar and unfamiliar with horses.¹ A list of genetically probable horse coat colors in Iron Age Israel will be deduced from David W. Anthony's account of horse domestication and trade patterns, which reveals how domesticated horses most likely entered ancient Israel, and Arne Ludwig et al.'s genetic study of coat colors present in ancient horse populations.²

In Zech 1:8, a man is riding one horse with more horses behind him: "In the night I saw a man riding on a red [אדם] horse! He was standing among the myrtle trees in the glen; and behind him were red [אדמים], sorrel [שרקים], and white [לבנים] horses" (NRSV). Zechariah 6:2–3 lists four chariots with differently colored horses: "The first chariot had red [אדמים] horses, the second chariot black [שחרים] horses, the third chariot white [לבנים] horses, and the fourth chariot dappled gray [ברדים] horses" (NRSV). The last word of Zech 6:3, אמצים, suggests that all of these horses are also "strong." In Zech 6:6, the groups of chariot horses head in different directions: "The chariot with the black [השחרים] horses goes toward the north country, the white ones [הלבנים] go toward the west country, and the dappled ones [הברדים] go toward the south country" (NRSV). The basic meanings of אדם, שחר, and לבן are, respectively, "red" or "brown," "black," and "white," but שרק and ברד are more obscure. שרק is a secondary term in the "red" range, and ברד refers to a type of speckled appearance.

I. THREE CONTESTED ISSUES

The debates about the color of the horses in Zechariah center on three issues: (1) whether these horse colors are realistic or visionary; (2) how significant these colors are to the interpretation of the text; and (3) whether technical terms or ordinary terms should be used to translate these horse colors into modern English.

Commentators have reached different conclusions about these issues.³ Joyce

¹ The terminology for horse coat colors varies across the English-speaking world. My proposals use terms common in the United States.

² David W. Anthony, *The Horse, the Wheel, and Language: How Bronze-Age Riders from the Eurasian Steppes Shaped the Modern World* (Princeton: Princeton University Press, 2007); Arne Ludwig et al., "Coat Color Variation at the Beginning of Horse Domestication," *Science* 324 (2009): 485, <https://doi.org/10.1126/science.1172750>.

³ William D. McHardy, "The Horses in Zechariah," in *In Memoriam Paul Kahle*, ed. Matthew Black and Georg Fohrer, BZAW 103 (Berlin: Töpelmann, 1968), 174–79; Joyce G. Baldwin, *Haggai, Zechariah, Malachi*, TOTC (Downers Grove, IL: InterVarsity Press, 1972), 95, 131, 138–40; David L. Petersen, *Haggai and Zechariah 1–8: A Commentary*, OTL (Philadelphia: Westminster, 1984), 136–60, 263–72; Carol L. Meyers and Eric M. Meyers, *Haggai, Zechariah 1–8: A New Translation with Introduction and Commentary*, AB 25B (Garden City, NY: Doubleday, 1987), 107–34, 316–36; Barry F. Peachey, "A Horse of a Different Colour: The Horses in Zechariah and Revelation," *ExpTim* 110 (1999): 214–16, <https://doi.org/10.1177/001452469911000704>; David J. Clark, "Red and Green Horses?," *BT* 56 (2005): 67–71. See also David J. Clark and Howard A.

Baldwin, David L. Petersen, Carol L. Meyers and Eric M. Meyers, and David Clark treat these colors as realistic for horses, while Barry Peachey argues that such an attempt is misguided because the horses are in Zechariah's visions and thus do not possess realistic coat colors.⁴ Petersen and Meyers and Meyers maintain that horse color is an integral detail in the interpretation of the passage, while Baldwin and Peachey are skeptical that the precise colors bear on the text's interpretation.⁵ Baldwin notes that the text does not ascribe specific meaning to the horse colors and suspects they were "merely background."⁶ Peachey does not consider the colors significant because he does not know how much contact ancient Israelites had with horses.⁷

Petersen favors technical terms when translating these words, while Peachey and Clark prefer ordinary terms.⁸ Because Peachey argues that the horses in Zechariah's visions do not necessarily have realistic colors, he contends that technical terms are not needed to translate these colors.⁹ Clark recommends ordinary terms for translations that strive to use accessible language.¹⁰

II. PREVIOUS TRANSLATIONS

All of these scholars agree that "white" and "black" are good translations for לבנים and שחורים, respectively, but debate surrounds the other terms. ברדים is taken as "dappled" or "gray." Proposals for the translation of אדמים include "red" (McHardy and Meyers and Meyers), "bay" (Baldwin), "dark chestnut" or "bay" (Petersen), "chestnut" or "sorrel" (Peachey), and "brown" (Clark).¹¹ שרקים has been translated

Hatton, *A Handbook on Haggai, Zechariah, and Malachi*, UBS Handbook Series (New York: United Bible Societies, 2002), 161–62, 165.

⁴Baldwin, *Haggai, Zechariah, Malachi*, 95; Petersen, *Haggai and Zechariah 1–8*, 140–42; Meyers and Meyers, *Haggai, Zechariah 1–8*, 112–13; Peachey, "Horse of a Different Colour," 214; Clark, "Red and Green Horses?," 67.

⁵Petersen, *Haggai and Zechariah 1–8*, 140–42; Meyers and Meyers, *Haggai, Zechariah 1–8*, 112–13, 320–22; Baldwin, *Haggai, Zechariah, Malachi*, 139; Peachey, "Horse of a Different Colour," 215.

⁶Baldwin, *Haggai, Zechariah, Malachi*, 139.

⁷Peachey contends, "We do not know very much about the relationship of the *habiru* with equines, but we do know that in general in the ancient world the ownership of horses bespoke status" ("Horse of a Different Colour," 215).

⁸Petersen, *Haggai and Zechariah 1–8*, 141; Peachey, "Horse of a Different Colour," 215–16; and Clark, "Red and Green Horses?," 67. McHardy also uses "ordinary" color terms, but he does not state his motives for doing so. McHardy's essay focuses more on reconstructing the original lists of the horse colors than on proposing the best translations for the color terms themselves ("Horses in Zechariah," 174–79).

⁹Peachey, "Horse of a Different Colour," 216.

¹⁰Clark, "Red and Green Horses?," 67.

¹¹McHardy, "Horses in Zechariah," 179; Meyers and Meyers, *Haggai, Zechariah 1–8*, 107; Baldwin, *Haggai, Zechariah, Malachi*, 95; Petersen, *Haggai and Zechariah 1–8*, 136, 141, 263; Peachey, "Horse of a Different Colour," 214; and Clark, "Red and Green Horses?," 67.

as “light bay” (Petersen), “sorrel” (Meyers and Meyers), “flea-bitten grey” (Peachey), and “grey” (Clark).¹² McHardy and Baldwin argue that אַמְצִים is a color word; McHardy places it in the “yellow” range, and Baldwin renders it “bay.”¹³ Meyers and Meyers and Clark, however, argue that אַמְצִים is from the root אִמַּץ meaning “strong” and does not function as a color term here.¹⁴ Table 1 summarizes the proposals for the translations of these terms in Zech 1:8 and 6:2–3.

TABLE 1. Translation Proposals for the Color Terms in Zech 1:8 and 6:2–3

Verse	1:8	1:8	1:8	1:8
Hebrew color word	אָדָם	אָדָמִים	שָׂרָקִים	לְבָנִים
NRSV	Red	Red	Sorrel	White
McHardy	Red	Yellow ¹⁵	Black ¹⁵	White
Petersen	Dark Chestnut	Dark Chestnut	Light Bay	White
Meyers and Meyers	Red	Red	Sorrel	White
Peachey ¹⁶	Chestnut/Sorrel	Chestnut/Sorrel	Flea-Bitten Gray	White
Clark	Brown	Brown	Gray	White
My proposal for an American audience familiar with horses	Chestnut	Chestnut	Chestnut Sabino/ Mealy Chestnut	Gray/ White
My proposal for an American audience unfamiliar with horses	Reddish Brown	Reddish Brown	Reddish Brown with White/ Lighter Areas	White

¹²Petersen, *Haggai and Zechariah 1–8*, 141; Meyers and Meyers, *Haggai, Zechariah 1–8*, 107; Peachey, “Horse of a Different Colour,” 214; Clark, “Red and Green Horses?,” 68.

¹³McHardy, “Horses in Zechariah,” 174–77; and Baldwin, *Haggai, Zechariah, Malachi*, 138. Athalya Brenner argues that אַמַּץ is a secondary color term that refers to “light reddish-brown” (*Colour Terms in the Old Testament*, JSOTSup 21 [Sheffield: JSOT Press, 1982], 112–14).

¹⁴Meyers and Meyers, *Haggai, Zechariah 1–8*, 107; Clark, “Red and Green Horses?,” 68–69. See also Clark and Hatton, *Handbook on Haggai, Zechariah, and Malachi*, 162, 165.

¹⁵These proposals follow McHardy’s textual emendations. McHardy argues that the lists in Zech 1:8; 6:2–3, 6 originally contained the same four colors and that these consistent lists diverged when the abbreviations in early texts were written fully in subsequent copies (“Horses in Zechariah,” 174–79).

¹⁶These are the technical color terms that Peachey argues are closest to the Hebrew color terms rather than the ordinary terms he prefers for English translations (“Horse of a Different Colour,” 214).

TABLE 1 (cont.)

Verse	6:2	6:2	6:3	6:3
Hebrew color word	אֲדָמִים	שְׁחֵרִים	לְבָנִים	בְּרָדִים
NRSV	Red	Black	White	Dappled Gray
McHardy	Red	Black	White	Yellow ¹⁷
Petersen	Bay	Black	White	Dappled
Meyers and Meyers	Red	Black	White	Dappled
Peachey ¹⁶	Chestnut/Sorrel	Black	White	Gray
Clark	Brown	Black	White	Gray
My proposal for an American audience familiar with horses	Chestnut	Black	Gray/White	Dappled Gray/ Blue Roan
My proposal for an American audience unfamiliar with horses	Reddish Brown	Black	White	Speckled

III. CONTESTED ISSUES REEVALUATED

Brenner's analysis of how these color terms function in the Hebrew Bible provides a starting point for translating these terms in Zechariah. The terms that describe the horses in Zechariah refer to realistic horse colors because the Hebrew Bible elsewhere uses these terms to describe humans, animals, and objects that are part of the natural world.¹⁸ Brenner concludes that אֲדָם includes a range of colors from "brown" through 'red' to 'pink.' This term is particularly associated with blood, but it also refers to "animals' hides, lentils, blood, wine, [and] human complexion." The term לָבָן connotes "bright, 'clear,' 'hueless,' 'light,' 'pale,' [and] 'white.'" It is used to describe "animals' fleece, wood bark, teeth, גָּד-seed, hair, clothes, [and] the appearance of diseased skin." שָׁחַר refers to things that are "'dark-coloured' [or] 'black,'" and it is used of "human hair, human skin (complexion), [and] animals'

¹⁷This proposal corresponds to אֲמָצִים, which, according to McHardy, functioned as or replaced an earlier color word. He suggests that בְּרָדִים was a later gloss of אֲמָצִים ("Horses in Zechariah," 174–77). In contrast, Brenner proposes that בְּרָדִים was a "(mistaken) explanatory gloss" for אֲמָצִים (*Colour Terms*, 113).

¹⁸Brenner leaves open the question of whether the horses in Zechariah's vision have realistic or unrealistic colors (*Colour Terms*, 69–70, 114–15).

skin.” Brenner identifies אדם, לבן, and שחר as primary color terms while שרק is a secondary term. שרק is “yellow-red,” and related forms denote a type of vine. ברד is a pattern term that describes “a ‘spotted’ or ‘speckled’ appearance.”¹⁹

The author of Zechariah would have been capable of describing horses with color terms applicable to other aspects of the natural world. Because agriculture and husbandry were prevalent in ancient Israel, color terms were likely used to describe animals regularly. Indeed, all of the color words used in Zechariah except שרק are used for other animals in the Hebrew Bible. Horses and chariots were used during the monarchy in Israel, and by the time Zechariah was written in the post-exilic period, at least some Israelites would have had contact with Persians, whose use of horses was also advanced.²⁰ Ancient Israelites could apply everyday color terms to horses, which were colored similarly to other familiar animals, including goats, sheep, and cattle.

Because the Hebrew Bible uses color terms sparingly and in connection with horses only in Zechariah, these terms in Zechariah stand out as significant details in the text. Jacob and Laban’s flocks in Gen 30–31 provide a helpful comparison. These texts describe the flocks with multiple color and pattern words, and Jacob distinguishes members of the flocks by their physical appearance as he sorts them.

¹⁹The quoted descriptions in this paragraph are from *ibid.*, 69–71 and 179; 85 and 180; 181; 39–43; 114–15; and 112–13 and 169.

²⁰Petersen, *Haggai and Zechariah 1–8*, 144–45. The presence of horses in Iron Age Israel is well established, as Gerald Klingbeil demonstrates. Klingbeil examined the use of equids in Iron Age I–II Palestine using a multidisciplinary approach that included the use of textual, iconographic, and paleozoological investigations. He considered the use of terms for equids in 1 and 2 Kings in contexts of military use, transportation, social-status markers, and religious practice. He also cataloged osteological remains, including four fragments of horse bones from Tel Dan and twenty from Hesban (“Man’s Other Best Friend”: The Interaction of Equids and Man in Daily Life in Iron Age II Palestine as Seen in Texts, Artifacts, and Images,” *UF* 35 [2003]: 259–89, esp. 259, 263–64, 269–70).

Extrabiblical textual evidence also supports the prevalence of horses during the monarchic period. In the ninth-century inscription on the Kurkh Monolith, Shalmaneser III declares that “Ahab the Israelite” contributed two thousand chariots and ten thousand foot soldiers to the coalition resisting him at Karkara (James B. Pritchard, ed., *The Ancient Near East: An Anthology of Texts and Pictures* [Princeton: Princeton University Press, 1958], 190). Additionally, in a seventh-century inscription, Sennacherib boasts of taking humans as well as “horses, mules, donkeys, camels, big and small cattle beyond counting” when he attacked Jerusalem and the surrounding area during the reign of Hezekiah (*ibid.*, 200).

Deborah O’Daniel Cantrell argues that horses and chariots were the critical factors that allowed monarchic Israel to maintain its autonomy. As she examined monarchic Israel’s six-chambered gates and architectural remains at Megiddo and Jezreel, she saw such extensive evidence of horses and chariots that Ahab’s two thousand chariots mentioned in the Kurkh Monolith would be a realistic rather than an inflated number (*The Horsemen of Israel: Horses and Chariotry in Monarchic Israel [Ninth–Eighth Centuries B.C.E.]*, HACL 1 [Winona Lake, IN: Eisenbrauns, 2011], 35–38, 76–113, 142–43).

Jacob also controls the color of their offspring by placing certain rods in front of mating pairs. This Genesis text demonstrates that ancient Israelites could distinguish individual goats and sheep by coat color and possibly tried to influence the color of their offspring.²¹

Even if it is not as explicit as the role of the colors of the flocks in Gen 30–31, the colors of the horses in Zechariah have interpretive significance. Nogah Hareuveni, Meyers and Meyers, and Petersen explore how the significance of the horses' colors could have been obvious to the original audience of Zechariah's prophecy in view of their cultural knowledge. Hareuveni and Meyers and Meyers argue that the horse colors in Zech 1:8 would blend into the colors of vegetation at the time of year specified in Zech 1:7, and they assume that the color of seasonal vegetation was well known at the time when Zechariah was written.²² Petersen quotes an Arabian proverb to suggest that horse colors were linked to other attributes.²³ In this case, the colors themselves would convey additional details about

²¹ This episode is only loosely connected to the horses in Zechariah; Gen 31:10, 12 contain the only other occurrences in the Hebrew Bible of the sole pattern term used of Zechariah's horses, בִּרְדִּים. This term describes the goats in Jacob's dream after he successfully manipulated the color of Laban's flocks.

²² For Hareuveni, the explicit date in Zech 1:7, "the twenty-fourth day of the eleventh month, the month of Shebat," points to a specific time of year characterized by certain colors of wild vegetation on uncultivated land. He says, "Towards the middle of *Shvat*, the almond tree adorns the landscape in a blaze of snowy white blossoms, white and red anemones sparkle in the fields." The horse colors blend into this landscape: "the horses which return from scouting out the land are 'red, purple and white,' as though they were carrying the very colors which, in this season, characterize the wild fields which have lain fallow 'these seventy years'" (Nogah Hareuveni, *Nature in Our Biblical Heritage*, trans. Helen Frenkley [Kiryat Ono, Israel: Neot Kedumim, 1980], 115–17). Meyers and Meyers follow Hareuveni's proposal about the seasonal vegetation and horses in Zechariah's first vision (Meyers and Meyers, *Haggai, Zechariah 1–8*, 112–14).

²³ Petersen underscores the differences between the imagery of the two visions. The significance of the colors lies in the horses themselves in the first vision, while the colors in the latter vision distinguish the chariots going toward each compass point. The Arabian proverb, which is of indeterminate date, is an example of the kind of association between the color of a horse and its other attributes that would have been possible in the ancient Near East: "The fleetest of horses is the chestnut, / the most enduring the bay, / the most spirited the black, / and the most blessed the white." Petersen suggests that these kinds of associations guided the meaning of the horse colors in the first vision (*Haggai and Zechariah 1–8*, 142, 268–69).

Some links between coat colors and other horse attributes have a genetic basis, and geneticists are beginning to explore these connections. Anna Stachurska and P. Jansen contend, "Horse breeders have always believed that coat colour was associated with a horse's performance. Such a connection would result from genes which control the coat colour and simultaneously are linked with genes responsible for the performance" ("Crypto-Tobiano Horses in Hucul Breed," *Czech Journal of Animal Science* 60 [2015]: 1, <https://doi.org/10.17221/7905-CJAS>). One such documented example is the connection between horses with leopard spotting and congenital stationary night blindness in horses homozygous for the leopard-spotting gene (Rebecca R. Bellone et al., "Fine-Mapping and Mutation Analysis of *TRPM1*: A Candidate Gene for Leopard

the horses. For these scholars, the significance of the horse colors emerges in their connection to now-lost background knowledge about seasonal vegetation and horse traits.

The importance of the color terms necessitates care in translating them, and different color vocabularies in Biblical Hebrew and modern English affect the rendering of these terms in the target language. Color terms are notoriously difficult to translate because various languages divide the color spectrum in different ways. Horse color terms present additional difficulty for translation into modern English because it has a separate set of technical terms used specifically for horses, while Biblical Hebrew uses the same color terms for a range of everyday animals and objects as well as for the horses in Zechariah. This requires one translation in modern English for those who are familiar with horses and a different translation for those who are not. Although some modern English speakers have a much wider range of experience with horses and other livestock than did ancient Israelites, others have minimal interaction with horses and farm animals. Modern English speakers who are familiar with horses use an extensive vocabulary to describe the associated colors, equipment, movement, ailments, and so on; they learn this vocabulary through their experiences in subcultures that arise around different equine practices.

As a result, technical horse color terms are appropriate for translations aimed at a modern audience well acquainted with horses. Their use shows that the author of Zechariah was using color terms that were both realistic and as precise as were available to him. The use of ordinary color terms for such an audience, however, might mistakenly communicate that the author of Zechariah did not know how to describe horse color or that he saw horses that did not have realistic colors. Conversely, ordinary color terms are appropriate for modern audiences unfamiliar with horses because such terms are the clearest way to describe horses. The use of technical terms for this audience could wrongly communicate that the horses did not have colors readily known by the average person. The diversity of experience with horses among modern English speakers requires different translations to convey the precise and realistic colors of the horses in Zechariah.

Complex [LP] Spotting and Congenital Stationary Night Blindness in Horses," *Briefings in Functional Genomics* 9 [2010]: 193, <https://doi.org/10.1093/bfpg/elq002>).

Likewise, D. Phillip Sponenberg notes, "A small collection of European research is beginning to verify that horses of specific colors tend to react somewhat predictably in certain situations and that these reactions vary from color to color. A general trend seems to be that horses of darker colors are livelier than lighter ones, but the breeds in which this was determined were not noted, so the range of colors is likewise uncertain.... Even though the relationships of behavior and color are speculative, they are an interesting part of the art of horse breeding and horse keeping" (*Equine Color Genetics*, 3rd ed. [Ames, IA: Wiley-Blackwell, 2009], 9). Even as the connections between specific colors and qualities remain tentative, the Arabian proverb that Petersen quotes also, interestingly, links darker horses with livelier qualities.

IV. ASSESSING THE GENETIC EVIDENCE

Examining the available material evidence of horse coat colors in ancient Israel will help produce more precise translations of the terms used to describe them in Zechariah. Anthony's study of early horse domestication can be combined with Ludwig et al.'s genetic study of horse coat color in ancient populations to establish, according to the best evidence available at present, which coat colors were most likely present in Iron Age Israel.

In *The Horse, the Wheel, and Language*, Anthony uses archaeology, anthropology, and historical linguistic reconstructions of Proto-Indo-European to trace the initial migrations of speakers of Proto-Indo-European from their homeland in the Pontic-Caspian steppe. Herders in the Pontic-Caspian steppe domesticated horses as a source of winter meat as early as 4800 BCE and were riding them by 4300–4000 BCE. Horseback riding allowed these groups to become formidable raiders; to shepherd larger herds of sheep and cattle across more grazing land; to engage in long-distance metal trade; and to spread domesticated horses into Europe, the eastern steppe, Central Asia, Mesopotamia, the Near East, and Egypt. If Anthony's migration and trade patterns are correct, the domesticated horses in ancient Israel descended from wild horses initially domesticated in the Eurasian steppe.²⁴

Anthony's account of the diffusion of domesticated horses from the Eurasian steppe into the ancient Near East traces at least three possible paths: through western Anatolia, through the Caucasus Mountains, and through Central Asia. First, domesticated and ridden horses entered western Anatolia from the Danube River valley in the third or fourth millennium BCE.²⁵ No clear evidence connects these early horses with the Near East, but by the second millennium BCE, groups in Anatolia had horse-trading relationships with the Near East. Second, the Maikop culture persisted in the Caucasus Mountain region from 3700 to 3000 BCE and rode steppe horses. Maikop maintained trade relationships with Mesopotamia during this period, but domesticated horses did not move into the Mesopotamian lowlands until later.²⁶ Third, groups derived from Sintashta in the Ural Mountains and eastern steppe brought horses and chariots into Central Asia and from there into well-attested trade routes with the Near East around 2100–1900 BCE.²⁷ Domesticated horses probably entered the Near East and ancient Israel by multiple routes, but the domesticated horse populations in the surrounding regions all descended from those in the Eurasian steppe.²⁸

²⁴ Anthony, *Horse, the Wheel, and Language*, 182–85, 216, 220–24, 237, 460–63.

²⁵ Ibid., 260–62.

²⁶ Ibid., 282–99.

²⁷ Ibid., 397–427.

²⁸ After the Ice Age, ten thousand to fourteen thousand years ago, wild horses survived primarily in the Eurasian steppe; small populations may have persisted “in Europe, central

Ludwig et al.'s genetic study of the color of horses in Eastern Europe and Siberia definitively reveals coat colors present in domesticated horse populations ancestral to and contemporaneous with those in ancient Israel.²⁹ The performance of genetic studies like those of Ludwig et al. on horse remains from archaeological sites in ancient Israel would provide more conclusive evidence about coat colors in the domesticated horse population there. In the absence of such studies, however, genetic studies of domesticated horse populations ancestral to and descended from the same initial groups as those in ancient Israel indicate coat colors that are likely present among the domesticated horses there. Of course, it is possible that not all colors in the ancestral population were part of the population in ancient Israel, and it is also possible that new coat colors arose in populations there or elsewhere. Furthermore, because the genetic control of some horse coat colors is still unknown, ongoing work in equine coat color genetics will also refine the identification of colors in ancient horse populations.³⁰

Ludwig et al.'s Tartas I and Lchashen sites fit most directly into Anthony's routes from the Eurasian steppe to ancient Israel. Tartas I lies in western Siberia near the border with Kazakhstan.³¹ Ludwig et al.'s horses from Tartas I lived after migrations brought horseback riding to the nearby Botai-Tersek cultures around

Anatolia (modern Turkey), and the Caucasus Mountains," but there is no evidence for wild horses in Mesopotamia after this climatic shift. Mitochondrial DNA and Y chromosome studies indicate that domesticated populations were supplemented with other wild horses, particularly mares, from the Eurasian steppe at many points (Anthony, *Horse, the Wheel, and Language*, 196–98; and Sebastian Lippold et al., "Discovery of Lost Diversity of Paternal Horse Lineages Using Ancient DNA," *Nature Communications* 2 [2011]: article no. 450, <https://doi.org/10.1038/ncomms1447>). Vera Warmuth et al.'s population genetics study concurs with Anthony's proposal that domesticated populations spread from the steppe in "modern-day Ukraine and northwest Kazakhstan" and were primarily supplemented with wild mares ("Reconstructing the Origin and Spread of Horse Domestication in the Eurasian Steppe," *Proceedings of the National Academy of Science* 109 [2012]: 8202–6, <https://doi.org/10.1073/pnas.1111122109>).

²⁹Ludwig et al., "Coat Color Variation," 485. Genetics determine the pigmentation of a horse's coat, but environmental factors, including diet and exposure to sunlight, can affect how brilliant or dull a coat appears (Sponenberg, *Equine Color Genetics*, 27–28).

³⁰Genetic studies of horse coat colors are continuing with promising results. For example, see Bellone et al., "Fine-Mapping and Mutation Analysis," 193–207; Melanie Pruvost et al., "Genotypes of Predomestic Horses Match Phenotypes Painted in Paleolithic Works of Cave Art," *Proceedings of the National Academy of Science* 108 (2011): 18626–30, <https://doi.org/10.1073/pnas.1108982108>; Emma Svensson et al., "Coat Colour and Sex Identification in Horses from Iron Age Sweden," *Annals of Anatomy* 194 (2012): 82–87, <https://doi.org/10.1016/j.aanat.2011.11.001>; Bianca Haase et al., "Accumulating Mutations in Series of Haplotypes at the *KIT* and *MITF* Loci Are Major Determinants of White Markings in Franches-Montagnes Horses," *PLoS One* 8 (2013): e75071, <https://doi.org/10.1371/journal.pone.0075071>; Regula Hauswirth et al., "Novel Variants in the *KIT* and *PAX3* Genes in Horses with White-Spotted Coat Colour Phenotypes," *Animal Genetics* 44 (2013): 763–65, <https://doi.org/10.1111/age.12057>; and Stachurska and Jansen, "Crypto-Tobiano Horses in Hucul Breed," 1–9.

³¹Ludwig et al., "Coat Color Variation," supplementary online text 5, 15, and 17.

3500 BCE. The Petrovka offshoot of Sintashta incorporated some descendants from the earlier Botai cultures and spread into Central Asia around 1900 BCE.³² Thus, the horses from Tartas I were likely part of populations ancestral to the horses traded into the Near East through Central Asia.

Ludwig et al.'s Lchashen site in Armenia lies in the Caucasus Mountain region where the Maikop culture rode steppe horses around 3700–3000 BCE. By the mid-second millennium, the Mitanni dynasty south of Lchashen had become skilled trainers of chariot horses and provided another connection between domesticated steppe horses and trade networks in the ancient Near East.³³

At Tartas I, Ludwig et al. found three bay horses, three black horses, a chestnut horse, and a bay sabino horse dating between 3000 and 2500 BCE, and at Lchashen,

³²Anthony, *Horse, the Wheel, and Language*, 237, 264–65, 441–57. The presence of horse milk on Botai pottery from 3500 BCE provides additional strong evidence that the Botai culture had domesticated horses during this period (John Travis, “Trail of Mare’s Milk Leads to First Tamed Horses,” *Science* 322 [2008]: 368a, <https://doi.org/10.1126/science.322.5900.368a>).

³³The Mitanni group spoke an Indo-European language, possessed sophisticated chariot skill and technology, migrated from Central Asia, and conquered “a Hurrian-speaking kingdom in north Syria about 1500 BCE” (Anthony, *Horse, the Wheel, and Language*, 50, 403, 412, 454). Mitanni maintained a kingdom in northern Syria until the Hittite ruler Suppiluliuma I defeated them around 1350 BCE (Ann Nyland, *The Kikkuli Method of Horse Training* [Armidale, Australia: Presto Print, 1993], 9; and Gerard F. Probst, *The Kikkuli Text on the Training of Horses* [Lexington, KY: King Library, 1977], 2).

Around this time, the Hittites commissioned Kikkuli, a Mitanni horse trainer, to record his method of conditioning chariot horses. Kikkuli’s text remains the earliest known written horse-training manual. Written in a cuneiform Hittite, this text describes a 214-day program for developing a horse’s endurance, including the time of day for exercise; the distance the horse should be driven or ridden; how much grain, hay, and water the horse should consume; and instructions for bathing the horse in the river (Probst, *Kikkuli Text*, 2–3 and i–xxxviii; and Nyland, *Kikkuli Method*, 8). Nyland re-created Kikkuli’s method with ten horses in 1991 and found it to be very effective in achieving peak fitness and in preserving overall health and soundness. Kikkuli’s method uses the principles of interval training, which are employed by human athletes today (*Kikkuli Method*, 10).

The Kikkuli text does not describe horses in terms of color but demonstrates that the earliest known text about horse training is very sophisticated and was produced by an Indo-European language speaker whose group came from the Eurasian steppe via Central Asia. The Ugaritic hippiatric texts reflect a similarly sophisticated knowledge of horses in their description of remedies for a range of horse ailments. These texts were discovered at Hattusa and date not long after the Kikkuli text (Chaim Cohen and Daniel Sivan, *The Ugaritic Hippiatric Texts: A Critical Edition*, AOS Essays 9 [New Haven: American Oriental Society, 1983], 2, 10).

When the Hittites conquered Mitanni, they could participate in the already flourishing horse trade in the ancient Near East. The Hyksos had previously introduced horses from the north into Egypt, and Egypt in turn became another source of horses for the Hittites (Nyland, *Kikkuli Method*, 10). Likewise, during monarchic Israel, the Israelites acquired horses from Egypt, Kue (southeast of Anatolia), and Beth-Togarmah (in Armenia). Even if the dates remain uncertain, Deut 17:16, 1 Kgs 10:26–29, 2 Kgs 18:23–24, 2 Chr 1:14–17, 9:28, Isa 31:1–3, and Ezek 27:14 preserve memories of this horse trade (Cantrell, *Horsemen of Israel*, 44–46).

they found a chestnut sabino horse dating between 1410 and 1250 BCE.³⁴ The bay color consists of a mostly brown coat with black regions covering the lower legs, ear rims, mane, and tail.³⁵ Bay horses range from reddish brown to almost black, but rarer genetically black horses also exist.³⁶ Chestnut horses are entirely reddish brown.³⁷ The sabino pattern consists of large white spots overlaying a base coat color of bay, chestnut, black, or brown.³⁸ Sabinos characteristically have speckled areas and extensive white markings on their legs and head. The extent of white spotting in sabino horses varies, and those with maximal spotting can have white over almost all of their body.³⁹

Anthony's account connects the population of initially domesticated horses in the western Eurasian steppe with populations of domesticated horses in Siberia and Armenia that were in turn traded into the Near East. Therefore, the coat colors that Ludwig et al. identified in Siberia and Armenia comprise the list of probable coat colors in Iron Age Israel: bay, black, chestnut, bay sabino, and chestnut sabino.

V. COMBINING TEXTUAL AND MATERIAL EVIDENCE FOR TRANSLATIONS

When combined with Brenner's catalogue of the ranges of the color terms used in the Hebrew Bible, this list of probable coat colors in Iron Age Israel provides

³⁴Ludwig et al., "Coat Color Variation," supplementary online text 15 and 17.

³⁵Horses with a bay coat possess at least one dominant allele of the gene for the agouti-signaling protein, ASIP (Sponenberg, *Equine Color Genetics*, 17–20). Ancient wild horses were predominantly bay and black, likely with a dun dilution. The dun dilution causes a base color to appear lighter and is controlled by a genetic mechanism separate from those that control base coat colors. The dun dilution gene, however, has not been identified. The diversity of coat colors increased markedly after humans domesticated and started breeding horses (Pruvost et al., "Genotypes of Predomestic Horses," 18627–28; and Sponenberg, *Equine Color Genetics*, 40–46).

³⁶The genetic control of whether bays have a lighter or darker shade is not yet characterized, but genetically black horses possess two recessive alleles for the ASIP gene (Sponenberg, *Equine Color Genetics*, 19–20, 26–28).

³⁷Chestnut horses have two recessive alleles with mutations in the gene that codes for the melanocyte-stimulating hormone receptor, or *MC1R*. Because the genetic control of the chestnut color is epistatic to the ASIP gene, a horse with two alleles for the chestnut color will be chestnut regardless of whether it carries genes for bay or black color at the ASIP gene (Sponenberg, *Equine Color Genetics*, 20).

³⁸Brown horses that are not bay or chestnut are rare. The gene that causes the uniform chocolate-brown color of dogs and other animals does not affect horse coat colors; other genes cause brown horse colors (Sponenberg, *Equine Color Genetics*, 23, 26).

³⁹Horses with white spotting have a base color controlled by the ASIP, *MC1R*, etc. genes, and additional genes affect the white markings. The *KIT* gene codes for the mast cell growth factor, and mutations at this gene are responsible for several different white patterns. One type of sabino pattern is caused by a single base pair change in the *KIT* gene, and Ludwig et al. used this mutation, called *sabino-1*, to test for sabino horses in their archaeological samples (Sponenberg, *Equine Color Genetics*, 73–74, 97–102; and Ludwig et al., "Coat Color Variation," supplementary online text 13).

a way to translate more precisely the color terms used for horses in Zechariah.⁴⁰ Brenner argues that אדם includes a range from brown to red to pink. Of the genetically probable coat colors, chestnut lies most clearly within this range, which likely also encompasses lighter bays. From prehistoric times to today, bay remains one of the most common horse colors, and it would be unlikely, although not impossible, for the lists in Zechariah to omit bay horses.⁴¹ Lighter bays fall closer to the range of אדם than to that of the other color terms used for Zechariah's horses. אדם is likely a larger category than chestnut or light bay, so an exact category correspondence between it and a modern English technical horse color term is impossible. "Chestnut" best renders אדם for an audience familiar with horses because it conveys both the reddish and brown nuances of אדם. For audiences unfamiliar with horses, "reddish brown" is an appropriate translation because it includes both chestnuts and lighter bays, as אדם does.

For Brenner, שרק is a secondary red color term, and, like Brenner, Meyers and Meyers suggest that it is related to the Arabic word *ʿašpar*, "which designates horses that have a ruddy tinge over white."⁴² Chestnut and light bay sabino are the only colors from the genetically probable list that adequately fit into this range. Several other colors, however, would be appropriate for the combination of a reddish color over or in addition to white or lighter regions, as designated by שרק. The genetic mechanism for several of these coat patterns, including roan and mealy, remains unknown. Roan coats consist of white hairs interspersed with a base coat color.⁴³ D. Phillip Sponenberg describes the mealy pattern as having "pale red or yellowish areas on the lower belly and flanks, behind the elbows, inside the legs, on the muzzle, and over the eyes."⁴⁴ Tobiano and leopard-spotted horses could also be included in the range of שרק. In the tobiano pattern, large white spots with definite edges overlay a base coat color, and the base coat color covers the head.⁴⁵ Horses with leopard spotting appear to have small colored spots against a white background,

⁴⁰The following translations are of the color terms in the MT rather than those of the various textual emendations proposed. For a discussion of ancient translations of the coat colors in Zech 1:8; 6:2–3, 6, see Garrick V. Allen, "Zechariah's Horse Visions and Angelic Intermediaries: Translation, Allusion, and Transmission in Early Judaism," *CBQ* 79 (2017): 222–39.

⁴¹Sponenberg, *Equine Color Genetics*, 17; and Pruvost et al., "Genotypes of Predomestic Horses," 18627.

⁴²Meyers and Meyers, *Haggai, Zechariah 1–8*, 113. Brenner similarly deems a "reddish-brown colour of horses" a good rendering of שרק in Zech 1:8 (*Colour Terms*, 114–15).

⁴³Sponenberg, *Equine Color Genetics*, 80.

⁴⁴American terminology varies for mealy chestnuts. Draft-horse breeders call mealy chestnuts "sorrel," but quarter horse breeders use "sorrel" for lighter chestnuts regardless of whether they exhibit the mealy modification. Sponenberg also indicates that the mealy modification was likely present in wild-type horses, which makes its presence in ancient horse populations probable (*Equine Color Genetics*, 32–35).

⁴⁵*Ibid.*, 90–93. Ludwig et al. found a bay tobiano in Miciurin, Moldova, dating between 1500 and 1000 BCE, but this area is farther away from trade routes into the ancient Near East ("Coat Color Variation," supplementary online text 17).

and this pattern can extend from the haunches to the entire body.⁴⁶ שרק probably included at least horses with sabino, roan, mealy, tobiano, or leopard-spotted patterns in addition to a base coat color of chestnut or light bay if they were present in Iron Age Israel. Given the current genetic evidence, a good translation of שרק for audiences familiar with horses would be “chestnut sabino” or “mealy chestnut” because both of these suggest a lighter modification of base reddish-brown color and were likely present in ancient populations. As with אדם, the modern English technical categories are probably narrower than the range שרק designates. Although a bit cumbersome, “reddish brown with white/lighter areas” is a precise translation for audiences unfamiliar with horses.⁴⁷

לבן includes light colors as well as white in Brenner’s catalog. לבן probably included both genetically white and gray horses if they were present in Iron Age Israel.⁴⁸ The only color from the list of genetically probable coat colors in Iron Age Israel that could fit into this range is a maximally expressing sabino, which would appear almost completely white. Further genetic studies are needed to determine

⁴⁶Sponenberg, *Equine Color Genetics*, 110–20. Ludwig et al. did not include leopard spotting in their study, but Pruvost et al.’s subsequent study tested for its presence in some of the Copper Age and older samples from Ludwig et al.’s study. Pruvost et al. found two leopard-spotted horses around 3650–3380 BCE in Mayaki, Ukraine, shortly before the Usatovo culture appeared in that region around 3300 BCE with domesticated horses (“Genotypes of Predomestic Horses,” 18627–28; and Anthony, *Horse, the Wheel, and Language*, 302, 349–52). Further testing of later Iron Age samples would provide clearer connections to Anthony’s trade routes into the Near East and would illuminate whether leopard-spotted horses were likely present in Iron Age Israel.

⁴⁷This explanation of the color terms in Zechariah focuses on precise descriptions; however, literary translations would elicit more artful renderings.

⁴⁸Although adult white and gray horses can appear similar, they differ genetically. Genetically white horses are born with pink skin underneath a white coat; they have pigmented eyes and are not albino. Genetically gray horses are born with gray skin under a black coat that becomes whiter with age. Some gray horses appear completely white with age while others exhibit a flea-bitten pattern of small brown dots throughout their coat. As their coats lighten, gray horses can go through a dappled stage in which white spots intersperse throughout their darker coats. Genetically gray horses are much more prevalent than white horses. Gray horses have a mutation in the *STYX17* gene, but several mutations in the *KIT* gene produce white horses. Because multiple mutations can cause white horses, it is hard to identify and test for all types of genetically white horses in ancient populations (Sponenberg, *Equine Color Genetics*, 74–77, 100, 109–10; and Haase et al., “Allelic Heterogeneity at the Equine *KIT* Locus in Dominant White [W] Horses,” *PLoS Genet* 3 [2007]: e195, <https://doi.org/10.1371/journal.pgen.0030195>).

Ludwig et al.’s study did not test for white or gray horses, but textual evidence suggests the presence of white, gray, or both colors of horses in ancient populations. Herodotus and Xenophon remember the Persians ascribing cultic significance to white horses, as did the Assyrians (Petersen, *Haggai and Zechariah* 1–8, 141). Augusto Azzaroli also says, “White horses are mentioned in writings since the second millennium B. C. and were frequently selected for sacrifices; among Indo-European tribes the cult to the twin god-heroes and riders, the Dioskours, was celebrated with the sacrifice of a black and a white horse” (*An Early History of Horsemanship* [Leiden: Brill, 1985], 166).

if “gray” or “white” is a more accurate translation for audiences familiar with horses. “White” is certainly an appropriate translation for audiences unfamiliar with horses.

Brenner indicates that שחור includes both dark colors and black. Black horses are genetically probable and certainly part of the range of this term. Dark bays are probably also included in the range of שחור. Nonetheless, “black” is an appropriate translation for audiences familiar and unfamiliar with horses because it is often difficult to determine the difference between a genetically black horse and very dark bay based on visual appearance alone.

According to Brenner, the pattern ברד refers to some kind of speckled appearance. Clark connects this color term with a word from the same root that denotes “hail,” and he links it to “the speckled appearance of the ground after hail has fallen.”⁴⁹ It is difficult to determine if this pattern is limited to or independent of certain base coat colors in its use in Biblical Hebrew. None of the colors that are genetically probable in Iron Age Israel fits into this category. ברד could include a range of speckled patterns, including dappled grays, flea-bitten grays, roans, and leopard-spotted horses. Blue roans have a black base coat color with the roan pattern and bear a striking similarity to hail on the ground in Israel.⁵⁰ Given the current genetic uncertainty, “dappled gray” or “blue roan” is an adequate translation for an audience familiar with horses, and “speckled” is appropriate for audiences unfamiliar with horses.

VI. CONCLUSION

Brenner’s analysis has been combined with the genetically probable colors determined from Anthony’s migration routes and Ludwig et al.’s genetic study to unite the textual context of the color descriptions of horses in Zechariah with the best available material evidence about the appearance of horses in Iron Age Israel. This combination produces probable color ranges for each of the color terms in Zech 1:8; 6:2–3, 6 and permits more precise translations of these terms. The translations of these terms for both audiences familiar with horses and those unfamiliar convey their realistic nature. Even though these texts in Zechariah do not explicitly state the significance of the horse colors, their contribution to the visions’ imagery was likely clearer in light of cultural background assumptions at the time. Further work can be done to refine the list of genetically probable horse coat colors in Iron Age Israel and to clarify the use of the color terms in Zech 1:8; 6:2–3, 6.

⁴⁹ Clark, “Red and Green Horses?,” 68.

⁵⁰ Eric Meyers, comment in course, 12 October 2011.

A Horse of a Different Colour

The Horses in Zechariah and Revelation

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Whilst there are a very large number of references to horses in the Bible, there are three sections that specifically concern themselves with the colours of the horses under discussion. The sections are Zechariah 1:8 and 6:1–6, and Revelation 6:1–8. These verses have in common that the horses in question are seen in visions, which I will suggest in due course has a relevance that has been missed by some translators and commentators alike. The purpose of this piece is to explore the hypothesis that those biblical translators and commentators knew a great deal more about Hebrew and Greek, and the linguistic skills required for translation, than they did about horses. The result of this has been a series of strained efforts at translation, which have then resulted in various commentators attributing meanings to the text which cannot possibly have been there in the original. The failure of the translators to understand the necessary distinctions between horses seen in a vision and horses seen in real life has led them down the wrong track. If it is understood from the outset that the horses are visionary, little need be said about technical colours. If however a translator wishes to deal with reality, then the help of a horse expert is required.

Colour translations of the horses in Zech 1:8

	1	2	3	4
AV	Red	Red	Speckled	White
RSV	Red	Red	Sorrel	White
NRSV	Red	Red	Sorrel	White
REB	Bay	Bay	Sorrel	White
GNB	Red	Red	Dappled	White

A summary of the problem that is to be approached is given by Joyce Baldwin in *Zechariah* (Tyndale Old Testament Commentaries)

There are . . . puzzling features connected with the horses in the first and eighth visions. (a) The meaning of the adjectives which describe them. (b) Why the colours are not the same in each of the three lists (1:8; 6:2,6,7).

The object here is to examine (a) in detail, and to touch on (b). The first stage of this examination is to compare a selection of the available translations of the verses to see what agreement there is on the translations of the colours. In Zech 1:8 there are four horses, but only three colours are mentioned. The general consensus is that the first two can be translated as 'Red'. An exception is found in the

REB which uses the word 'Bay'. This translation immediately launches a problem. Baldwin says (p.95): 'Red is technically bay'. It is not. A bay horse is brown with black tips to its ears, and other minor dark markings known to the equine world as 'points'. This is a simple technical mistake. If one wishes to travel away from the use of the word 'red' there are two correct equine alternatives depending upon which parts of the English-speaking world one comes from. If one uses native English the correct term for a 'red' horse is 'chestnut'. If one uses American English the term used is 'sorrel'. The Oxford English Dictionary tells us that sorrel was being used in written English in England from c. 1530, and bay since 1535. Unfortunately the OED increases the confusion by suggesting that both terms can refer to a reddish-brown horse. To a horseman, bay is definitely brown albeit in light, mid-, and dark variants. With the English-speaking colonization of the New World went the terms for familiar animals. The term 'sorrel' was exported, and died out in England, leaving the English with chestnut, the colour of the fresh fruit of the Horse Chestnut tree *Aesculus hippocastanum* which was introduced into Britain about 1550.

It inevitably follows that there is a problem with the next colour in the list given as 'sorrel' in RSV, NRSV, and REB, as 'speckled' in the AV, and as 'dappled' in the GNB. Baldwin says that 'speckled' follows the Latin and Syriac versions, whereas 'dappled' follows the Greek. 'Mottled' is a possibility. What is hard to see is why 'sorrel' is the choice of the RSV, NRSV and REB. The principal objection to it is that sorrel is red, as we have already seen, and 'red' was the first colour on the list! From a technical equine point of view one cannot list red and sorrel as different colours, as they are the same thing. Whilst 'speckled' and 'mottled' are not technical horse colours, 'dappled' is. 'Dappled' is a variant of grey in which a horse has light circular patches in a darker background. According to the OED other colours can be 'dappled' but not in the horse world. 'Dappled' only means dappled grey. There are other variants of grey, iron-grey (many dark hairs in a light coat), flea-bitten-grey (tufts of dark hair in a light coat giving a speckled appearance) and light grey (very few dark hairs in a light coat). A possible correct translation would appear to be 'flea-bitten grey', but the objection to this is the RV translation 'grisled' in 6:3 which could be the same coat configuration. 'Grizzled' (or 'grisled') derived from the French *gris* (grey) is not used in English equine circles.

Next on the list is 'white', but the problem here is that there is no such thing as a white horse to the horse world. They are all described as 'grey' because unless a horse is a genetic albino, it always has some darker hairs, no matter how few. However, as all translations agree that white is correct, it seems fair that it should be allowed to stand without too technical an objection from the equine scientists.

Colour translations of the horses in Zech 6:1-6

	1	2	3	4
AV	Red	Black	White	Grisled/(Bay)
RSV	Red	Black	White	Dappled Grey
NRSV	Red	Black	White	Dappled Grey
REB	Bay/Roan	Black	White	Dappled
GNB	Red	Black	White	Dappled

When one moves on to Zechariah 6:1–6, it seems that all the versions are still happy with ‘red’ except the REB which continues with the incorrect ‘bay’, and, as if to reinforce the error, adds a ‘roan’ horse travelling east, to deal with a supposed lacuna in the original. A roan horse is a horse of any single basic colour, but with white hairs throughout its coat. Very dark horses with this feature are known as ‘blue roans’, a lighter one may be ‘strawberry roan’ (chestnut and white). The justification for inserting any roan in the text escapes the writer entirely, as indeed do W. D. McHardy’s efforts to insert a yellow horse, quoted by Baldwin. The objection is not based on the mere use of ‘yellow’ as will be seen in due course. It is based on agreement with Baldwin where she says

... we need to beware of assuming that the ancient writer had to have every detail co-ordinated as if for a scientific thesis. We have no means of knowing whether the colours of the horses stood for different countries, as many ancient commentators thought, or, as seems likely, whether the details were merely background. The text builds nothing on the colours of the horses, and though it is essential to endeavour to discover the exact meaning of the text, we may be wrong in assuming that consistency was intended by the prophet (p. 139).

‘White’ and ‘black’ seem to present no difficulties, but the last horses in the final chariot are variously described as ‘dappled’, ‘dappled grey’, and by the RV ‘grisled and bay’. There is a problem with the Hebrew (J. Rogerson *pers. com.*), the general consensus being that these horses were ‘grey and something’, but it is the something that creates the difficulty. Ideas include ‘strong’, ‘vigorous’ and ‘bay’. There is no answer to this from equine science. That is a truly a matter for the linguists.

Colour translation of the horses in Revelation 6

	1	2	3	4
TYNDALE	white	red	black	green
AV	white	red	black	pale
RSV	white	bright red	black	pale
NRSV	white	bright red	black	pale green
REB	white	red	black	sickly pale
GNB	white	red	black	pale colour
NIV	white	fiery red	black	pale

Moving on to the vision in Revelation 6 the Greek *leukos* (white) seems clear. *Purros* is uniformly translated as ‘red’, although the NIV uses ‘fiery red’ and both RSV and NRSV use ‘bright red’. None use the technical

‘chestnut’ or ‘sorrel’ presumably because the Greek word so clearly means bright red. *Melas* is uniformly ‘black’. The difficult one is *chlōros*. Only William Tyndale’s 1534 New Testament uses the obvious and straightforward translation of ‘green’. The AV, NIV, and RSV translate it as ‘pale’, the REB has ‘sickly pale’, the GNB ‘pale coloured’. Of the modern versions only the NRSV mentions green at all in its use of ‘pale green’. To those of us with a background in science the uniform reluctance by everyone except Tyndale to translate *chlōros* as ‘green’ or perhaps ‘yellowish green’ when we know it so well from chlorophyll, the green constituent of photosynthetic plants, is puzzling. According to R. H. Charles (p. 169) ‘pale yellow’ is required, and indeed chlorine, named by Sir Humphrey Davy in 1810, got the name from the greenish colour of the gas. Many commentators, such as Leon Morris, have suggested that what the writer seeks to imply is the colour of death (p. 104). There may be some equine science in this. Whilst there are no green horses in life, there are in death. When horse meat, and indeed other meat, putrefies it acquires a distinct greenish tinge, and to that extent green is certainly a colour associated with death.

Conclusions

There appear to be three main lessons to be drawn from this examination. Perhaps the first is a firm encouragement to take on board the warnings of John H. Walton in his comments on principles for word studies in *Chronological and Background Charts of the Old Testament* (p.95). Curiously, he quotes an equine example.

To understand the importance of a particular word usage in context, one must know what choices (synonyms) were available, and what is signified by the choice that is made. If one reads ‘mustang’ [a North American feral horse descended from escapees from the Spanish conquistadores] one can draw certain conclusions because the author did not use stallion [an uncastrated male horse], mare [any female horse of above two years of age], steed [a good quality riding horse], or charger [a military officer’s mount].

It must be realized that the original writers of the biblical text probably did not have the variety of developed equine scientific language available to them that we enjoy today. We do not know very much about the relationship of the *habiru* with equines, but we do know that in general in the ancient world the ownership of horses bespoke status. The Greeks were an advanced equestrian nation. Accordingly it is not unreasonable to suppose that they had many words for horse colours. *The crucial factor is that if a writer, be he Hebrew or Hellenistic, did not know much about horses, he was just as likely to be unfamiliar with the terms used by horsemen as the modern translator.* Those translators who have attempted to use modern expressions, in some cases

incorrectly through lack of technical knowledge of the subject, are on a road to nowhere. What they have attempted to do is to use a mixture of 'ordinary' colour terms with 'equine' colour terms. This is improper. For example 'sorrel' was not used as a horse colour until about two thousand years after Zechariah was written, and has since disappeared from native English in that context. Only an American translator would present 'sorrel' as a horse colour.

Secondly, the general reluctance over the use of the word 'green' in Revelation seems to be because translators have worried themselves over much about giving a *visionary* horse a realistic life-like colour. As these horses, and indeed every horse mentioned in this essay, were seen in visions, why should they not be green, pink, purple or any other colour? That is why there is no fundamental objection to McHardy's and Charles's yellow horses, albeit the writer can find no justification for the proposed translation. In view of the possible national symbolisms identified by commentators there could be potential links between colours and countries. It is totally unrealistic for the translators of the REB to suggest that 'roan', or any other colour based on English and American post-sixteenth-century usages, was ever the intention of the original writer. It would be much more realistic to accept that unlikely-sounding colours in the original were given in faith at the time, possibly with a meaning that we will never discern, and possibly with a background intent having no meaning at all.

Thirdly, those involved in theology who wish to explore technical areas within ancient texts would do well to take expert advice from those who have specialist knowledge within those areas. If it is the intention of the translator to describe the horses in correct equine terms, then experts need to be consulted, especially in the light of the fact that different countries which use English Bibles use different terms for the same horse colour. However, if the translator takes the view that the horses are entirely visionary, it may well be more appropriate to go for straightforward colours, rather than dipping into technical equine colours at all. Horses are but one example of various disciplines within bioscience that appear in ancient writing regularly, and about which a good deal of ill-informed commentary can be found with little difficulty.

HORSE

First introduced into the Near East in abundance with the arrival of various Indo-European peoples in the early second millennium B.C., the horse had been known in Mesopotamia at least a thousand years before that. The Indo-Europeans, in particular the Hittite and Hyksos, used horses in the development of the chariot as an instrument of war. The chariot was subsequently used by the Egyptians (Exod 14:9, 23; 15:1, 19, 21) and by the armies of David and especially Solomon (2 Sam 8:4; 1 Kgs 5:6, 10:26). To judge by what we read in Scripture, the horse was mainly an animal of war and was seldom used in agriculture.

For Solomon, the possession of horses for war was one of his symbols of power and prestige; he claimed to have forty thousand stalls for horses (1 Kgs 4:26) and twelve thousand horsemen, and chariot cities such as Megiddo had extensive facilities for horses (1 Kgs 10:26). After Solomon, the kingdom declined, and by Hezekiah's time the cavalry was minimal: the Rabshakeh of Assyria sneeringly offered to give Judah two thousand horses—if King Hezekiah could find enough riders for them (2 Kgs 18:23; Isa 36:8).

Cavalry did play a role on the battlefield, especially from the time of the Assyrians, but massed cavalry was not given a priority in tactics until the Greek and Roman periods (cf. Hos 1:7; Ps 20:8, 31:1–3, 33:17). Alexander the Great's use of cavalry—in particular his companions, or hetaroi—became legendary in classical warfare. The Romans utilized auxiliary cavalry units but focused tactical practice on the legions in battle with remarkable success.

In prophetic writings, the horse was a symbol of speed (Isa 63:13) and strength (Job 39:19–25), while in apocalyptic literature the horse usually indicated war or conquest (Zech 6:2–36; Rev 6:2–8; 19:11, 19–21).

The Horses in Zechariah

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Zechariah 1:8 ראיני הלילה והנה-איש רכב על-סוס אדם ואחריו סוסים אדמים שרקים ולבנים:
ibid. 6:2f. במרכבה הראשנה סוסים אדמים ובמרכבה השנית סוסים שחורים:
ibid. 6:6f. במרכבה השלישית סוסים לבנים ובמרכבה הרביעית סוסים ברדים אמצים:
אחריהם והברדים יצאו אל-ארץ התימן: והאמצים יצאו ויבקשו ללכת להתהלך בארץ ויאמר לכו התהלכו בארץ ותתהלכנה בארץ:

The problems posed by those passages present difficulties which, as in so many places in the Old Testament, may never find a satisfactory solution, but the recognition that this is so does not absolve us from continuing the search or from communicating results, which though admittedly tentative and imperfect may suggest to others a line to pursue. This article, then, seeks only to discover what results from following one line of approach to the difficulties in the above passages, though the problems involved are probably such that a more complex explanation will be required.

The ancient translators were not agreed in their renderings of certain of the colours of the horses. Thus at 1:8¹ while the VSS support the meaning 'red' for אדמים and 'white' for לבנים they are less consistent in rendering שרקים, for which the AV has 'speckled' and the RV 'sorrel'. The RV has the support of 'A and the meaning of the root elsewhere in the Old Testament and in the cognate languages, while the AV agrees with the Vulg. and Pesh. and probably also with the Targ. (קוחץ; Jastrow²: 'faint-colored, gray[?]'). It agrees also with the LXX, which has a double translation *ψαροὶ καὶ ποικίλοι*, one a gloss on the other.

Similarly at 6:2f. the VSS support the MT in its descriptions of the first three horses, but there is some diversity in their rendering of the MT's double designation of the fourth group. For ברדים, the adjective used of the sheep and goats at Gen 31:10,12, the LXX has *ποικίλοι* and the Vulg. *varii*, words used by those VSS at 1:8. The

¹ References without mention of a book are to Zechariah. Standard abbreviations are used, e.g. A(uthorized) V(ersion), R(evised) V(ersion), VSS = Versions.

² A Dictionary of the Targumim Midrashic Literature.

Targ. has פציתן and ΣΘ περιδνοί, while the Pesh. has one word ܠܫܬܐ for the two in the MT; cf. RV mg., Smith-Goodspeed. For אמצים the LXX (ψαροί cf. RSV) and Targ. (קִיטְמוֹנִים) give colours, but the Vulg. (fortes) and 'A (καρτεροί) with the RV mg. reflect the ordinary meaning of the אִמָּץ. But clearly only the colour of the horses and not their strength is relevant. To obtain a colour Koehler cites the Arabic اومض 'flash, gleam' (cf. Targ. פציתן 'light-coloured') and translates אִמָּץ as 'piebald'. As suggesting a red colour Perles in JQR³ compares the Aram. אומצא 'raw meat', though Jastrow⁴ gives the definition: 'a thick piece of meat, a piece which can be eaten raw after pressing', connecting the root meaning not with 'red' but with 'press', for he translates אִמָּץ 'to press'; but in a later number of JQR⁵ Perles accepted the suggestions of Löw, Nöldeke and Ginzberg that אומצא is to be connected with חֲמִצָּה 'bit'.

At 6 6f. again there are four classes, and here ברדים and אמצים are separated. The latter is vouched for by the Vulg.'s *robustissimi*, but 'A (πυρροί) and the Pesh. (ܥܥܥܐ ܡܚܠܐ) support the colour red (אדמים).

This survey of the evidence suggests that originally all the adjectives denoted colours, that there were four of these, and that though white is the only colour occurring in all three groups the others should be red, black and 'dappled', each of which appears in two groups. To produce the required regularity of form in these verses various textual emendations have been suggested. Thus at 1 8 Marti would read שחרים in place of שרקים on the basis of 6 2.6, though it may be objected that the unfamiliar has displaced the familiar. At 6 3 where אמצים is the odd term Houbigant suggested צבעים and Ewald חמצים (cf. Is 63 1). These and other emendations may be found in the commentaries.

But in two articles in Textus⁶ G. R. Driver has examined the use of abbreviations in the MT and the part they may play in the recovery of the original text of corrupt passages without emendation. He lays it down that

»only certain categories of terms are subject to abbreviation, namely: terminations, including pronominal elements; independent pronouns; particles; common nouns of frequent occurrence especially those for numbers and measures; other nouns when they have recently been mentioned; names of persons and places which occur often, especially the divine names; occasional sentences, such as formulae and quotations, and expressions recurring frequently in any given book«.

³ NS 2, p. 99.

⁴ Op. cit.

⁵ NS 3, p. 313.

⁶ 1, p. 112-131; 4, p. 76-94; cf. Gesenius-Kautzsch, Heb. Gr., § 30 m

He continues:

»At the same time modern readers must never forget that ancient texts were not written down to be read at sight, for amusement or relaxation. Reading was an esoteric art confined to the learned classes (priests, lawyers, and scribes) who generally knew the text by heart, and the written word was merely a *memoria technica* to be consulted to refresh the memory or look up what had been said if or when it failed«.⁷

On the basis of this second quotation we suggest that in addition to the passages which come under Driver's rules we may reasonably expect the use of abbreviation in places where the context or the form of the sentences are such that only an aide-mémoire is required by the skilled and practised reader. Thus in English the context will immediately make clear whether *R* is to be interpreted as Rabbi, Rex or River.

In the verses before us we have what was originally a stereotyped form, horses of four different colours, a tidy pattern which has become disarranged and untidy. The ordinary vicissitudes to which MSS are prone might of course have brought this about, but the very simplicity of the pattern is against this, while at the same time it suggests that a writer might very well have been tempted to use here a form of shorthand writing. The reading שרקים for שחרים at 18 is then seen to be a misunderstanding of the abbreviation ש', and the objection that שרקים is less familiar than שחרים vanishes if it is recognized that the misunderstanding is due to the presence of the other 'reds', אדם and אדמים.

Turning now to 62f. we find red, black and white followed by the duplicate אמצים ברדים. As there were two terms in 16 with initial א, so in 62f. two begin with א. On our hypothesis ברדים is the outsider, a gloss introduced under the influence of Gen 31 10.12 or an attempt to interpret the unknown אמצים in terms of natural equine appearance, a misguided attempt for ברדים is a pattern, not a colour.

At 63f. black and white, in that order each time, though this pair after occupying the last and middle positions now move to the front, are followed by ברדים and אמצים as separate groups. Here the gloss ברדים has displaced the original אמצים in verse 6, while, as the readings of 'A and the Pesh. show, an original אדמים has been replaced by אמצים. This gives, as in the previous passages, two terms with initial א, and, as in them, one of these terms is an adjective from the root אדם, while the second is the name of a colour other than black, white or red. The word, now lost, must have puzzled the ancient copyist who came to extend the abbreviated symbol, the form of which to distinguish it from א' = אדם may have been אמי.

⁷ Ibid. 4, p. 94.

There are two pieces of evidence to support the view that our postulated **אמ** did not represent a pattern-word such as speckled, dappled, spotted or piebald, but a colour-word. The first is versional: **ΘΣ** represent **ברדים** by *πελιδνοί* 'livid' and the Targ. by **פציהן** 'bright-coloured', while for **אמצים** the Targ. has **קטמנים** 'ashen'. The second comes from the New Testament: the writer of the Apocalypse of St. John, who based his vision in 6 2-8 on Zechariah⁸, describes his fourth horse as *Χλωρός* 'pale, pale yellow, greenish-yellow'⁹. Charles¹⁰, quoting Phavorinus, says pale yellow was the colour of the Nisaeen horses, and claims that this is the colour required by Rev 6 7 and probably also by Zech 1 8. If the fourth group of horses in Zechariah were of this shade the symbol **אמ** might represent the root meaning of **אִמְנָה** for the Greek for this is *Χρυσόροα*¹¹.

If these passages are as stylized as we have suggested then we might look in them for evidence of the further use of abbreviation. Thus at 1 8.10 the divergance of the LXX *ὀρέων* = **ההרים** from the MT's **ההדסים** might point to a confusion due to abbreviation, but a more likely example is to be found at 6 6.7 where there is doubt about the quarters to which the horses go. Just as the points of the compass may be labelled N.S.E.W., so ancient writers used the first letters of words indicating cardinal directions and from them they formed the name ADAM¹².

Clearly the text in 6 6.7 is in some confusion. The words **אל-אחריהם** make dubious sense and a specific direction is expected to match **צפון** and **התימן**. The commentators have put forward various emendations: **אל אחרי הים** 'to the west of the sea', i.e. the far west; **אל אחור** (glossed **הים**); **אל-ארץ הקדם**. This last suggestion, which comes from Wellhausen, shows that he too regarded the passage as stylized, for he inserts **ארץ** to conform with the two directions given in full. Further,

⁸ The writer borrows the symbolism of the horses and their colours, but in his order (white, red, black, yellow) he is independent, just as he is, for example, in the order of the stones in ch. 21.

⁹ That there can be a transition from green-yellow to grey is shown by Delitzsch's note at Ps 68 14 on the root **יִרְק** in his Biblical Commentary on the Psalms. **وَرَقٌ** is a silver coin, and Charles, Revelation of St. John, I p. 169 translates **יִרְקָן** as 'lividness'. cf. **ΣΘ** *πελιδνοί*.

¹⁰ Ibid.

¹¹ The colours recall a note in S. R. Driver's Joel (Camb. Bible), p. 88: 'The Arabs say that there are different kinds of locusts, yellow, white, red, black'. Joel remarks on the likeness of locusts to horses (2 4), and the Book of Revelation compares the noise of their flight to the sound of chariots, of many horses rushing to war (9 9).

¹² Secrets of Enoch 30 13; Sibylline Books 30 24-26; cf. Charles, Apoc. and Pseud., II p. 379, 449.

the beginning of 67 is defective and LXX α·c·b adds ἐπὶ γῆς νότου which Kittel's Bib. Heb.³ renders אל-ארץ התימן, though as Driver¹³ points out νότος represents קדים in nine passages and 'eastwards' may be meant here. It may be added that in several passages where directions are mentioned the text is suspect, e.g. Josh 18¹⁵ I Sam 20⁴¹ Ez 40^{2,20,44} 42¹⁰.

The Hebrews stuck to no fixed or customary order in indicating the four quarters of the world. Thus while at Gen 13¹⁴ we find N.S.E.W., the order familiar to us and used as early as in the description of the winds as Marduk prepared to do battle with Tiamat, elsewhere there occur the clockwise N.E.S.W. (Ez 47^{15ff.}), the anti-clockwise N.W.S.E. (I Kings 7²⁵) and, it seems, every variation. One such is E.N.S.W. which occurs at Rev 21¹³ where it has caused commentators some trouble. Charles¹⁴ has an elaborate note, which may very well provide the ultimate explanation of the order, but Rev 21¹³ probably took over the order as found at I Chr 26¹⁴⁻¹⁶, which describes the appointment of the gatekeepers, and at Ez 42¹⁶⁻¹⁹, where the angel measures the temple area, for the Apocalyptist speaks both of gates and of an angel with a measuring-rod.

In Zech 6^{6.7} only two directions are clearly indicated, the black horses going north, the dappled or yellow going south. Charles¹⁵ writes: 'while the *black* horses rightly go towards the north, the *red* should go to the south and not the spotted, the *white* to the east, and the *yellow* («spotted» in text) to the west; for the four colours of the horses are said to symbolize the four quarters'. He goes on to give this reconstruction of the text:

הסוסים השתרים יצאים אל ארץ צפון והלבנים יצאים אל ארץ הקדם והברדים יצאים (אל ארץ הערב) והאדמים יצאים אל ארץ התימן

It may be noted that in both the suspect terms השתרים and יצאו there is an א, and this may provide the clue to the restoring of the text. אל-אחריהם may be a wrong writing out of מ' אל-א', the abbreviated form of מוצא or מורח. The ending of the word יצאו may have caused some letters to fall out by haplography, and the original text may have been י' יצאו אל-א' i.e. ארץ ימן. The reading התימן, for which Charles substitutes הערב may be explained merely as a mistake for ים.

But not all scholars agree with Charles about the directions in which the horses were dispatched. Thus Wellhausen would read after v 6: 'and the red went forth towards the west country', i.e. י' אל-א' for ים אל-ארץ ים. The order favoured by G. R. Driver¹⁶ is black northwards,

¹³ JTS 39, p. 403; cf. use of ἀψ for 'west' as well as 'south'. Deissmann, Bible Studies, p. 141f.

¹⁴ Revelation of St. John, II p. 166ff.

¹⁵ Ibid., I p. 162n.

¹⁶ Op. cit. 39, p. 403.

white westwards, grised (our 'yellow') southwards, and red eastwards, the scheme accepted also by A. Gelin¹⁷. Though redness may be associated both with the west and the east (cf. Mt 16 2f.), it is with the east that it has been particularly associated¹⁸. The text of 6 7 as it stands gives little help, but it is not sure that we have the original text. The subject of ויבקשו cannot be the last-named group, but the horses in general. The next words look like a dittograph of what follows, and there are variant readings which raise doubts about them for LXX^L Syr.^H omit ללכת, and twelve of Kennicott's MSS read ויהתהלך for להתהלך. The clause may be taken to be an intrusion. If then יצאו is followed by ויאמר, it is possible to see that אל-א' מ' may have been dropped by haplography, and the original text read אנ-ארצ מורה (or מוצא)

The verses may then be rendered:

1 8 I saw last night a man riding a red horse . . . and behind him were yellow, black and white horses.

6 2f. In the first chariot were red horses, in the second black horses, in the third white horses, and in the fourth yellow horses.

6 6f. The one in which are the black horses goes out to the north country, while the whites go out to the west country, the yellows go out to the south country, and the reds go out to the east country. He said, 'Go, patrol the earth', and they patrolled the earth.

¹⁷ La Sainte Bible: Zacharie, 1960³.

¹⁸ See Lewis—Short, A Latin Dictionary, sub Aurora, rubesco, rutilo.

TOVA L. FORTI

Animal Imagery in the Book of Proverbs

SUPPLEMENTS TO VETUS TESTAMENTUM [118]

BRILL

Animal Imagery in the Book of Proverbs

Supplements to the Vetus Testamentum

Edited by the Board of the Quarterly

H.M. BARSTAD — R.P. GORDON — A. HURVITZ — G. KNOPPERS

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By
Tova L. Forti



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*In loving memory of my parents, Shmuel and Sofia Rosenthal,
who imparted to me a love of wisdom*

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PREFACE

This study is the result of a long journey of investigation in the realm of animal imagery, which grew from a master's thesis into a large chapter in my doctoral dissertation, submitted to the Hebrew University of Jerusalem in 2000.

From the beginning I was aware that any treatment of the figurative and symbolic function of animal imagery in biblical literature requires special attention to its contextual meaning and cultural evaluation. I chose to conduct a combined investigation that considers the zoological traits of the animal alongside its literary image in the Bible. The didactic framework of Proverbs and its impressive use of various literary patterns are essential points of reference in any analysis of the image and its rhetorical implications. Philological aspects of the relevant texts were not neglected in the search for the rhetorical implications of the image.

Animal imagery must be evaluated differently than images borrowed from other realms, such as flora and climate. Thus, in addition to observing the dynamics and interrelation between the image and the object to which it is compared, one has to be aware of the ancients' intimate familiarity with the behavior of animals and remember that animals were objects of both admiration and scorn, hence imitated or rejected.

This study has benefited from the proliferation of monographs on fauna in ancient Near Eastern literatures since 2002. These works encouraged me to sharpen my contextual approach and multi-level methodology and to make my work as up-to-date as possible.

Through this long process of research many persons illuminated my path, supporting and encouraging me with advice and deeds. Prof. Moshe Weinfeld was the first to open the door of the treasures of wisdom literature for me. His devoted guidance, together with that of Prof. Shmuel Ahituv, enabled me to complete this study. I would like to express my special gratitude to Prof. Mordechai Cogan, who has provided me with much valuable advice and constructive criticism from my first steps as a student until now.

I would also like to thank my colleagues at the Department of Bible, Archaeology and Ancient Near Eastern studies of Ben-Gurion University of the Negev, and especially professors Zipora Talshir, Victor Hurowitz, and Meir Gruber, who as department chairs enabled me to devote time to research along with teaching.

I would never have been able to complete this study without the love and support of my parents-in-law, my sister Channa, my husband Eli, and my children Efrat, Michal, Tamar, and Nir.

I am most grateful for the financial support of the Memorial Foundation for Jewish Culture and grants from the Faculty of Humanities and Social Sciences at Ben-Gurion University.

I would particularly like to thank Mr. Lenn Schramm, who edited and revised my English.

ABBREVIATIONS AND SHORT REFERENCES

SERIALS, REFERENCE WORKS, PERIODICALS

AB	Anchor Bible
ABD	Anchor Bible Dictionary. Ed. D. N. Freedman. 6 vols. New York, 1992
ABL	<i>Assyrian and Babylonian Letters Belonging to the Kouyunjik Collections of the British Museum</i> . Ed. R. F. Harper. 14 vols. Chicago, 1892–1914
AcOr	<i>Acta Orientalia</i>
AEL	<i>Ancient Egyptian Literature</i> . M. Lichtheim. 3 vols. Berkeley, 1971–1980
AfOB	<i>Archiv für Orientforschung: Beiheft</i>
AHW	<i>Akkadisches Handwörterbuch</i> . W. von Soden. 3 vols. Wiesbaden, 1965–1981
AJSL	<i>American Journal of Semitic Languages and Literature</i>
AKA	E. A. W. Budge and L. W. King, <i>The Annals of the Kings of Assyria</i> . London British Museum, 1902
ANET	<i>Ancient Near Eastern Texts Relating to the Old Testament</i> . Ed. J. B. Pritchard. 3 rd ed. Princeton, 1969
AnOr	Analecta orientalia
AOAT	Alter Orient und Altes Testament
ASAW	Abhandlungen der Sächsischen Akademie der Wissenschaften
BASOR	<i>Bulletin of the American Schools of Oriental Research</i>
BDB	F. Brown, S. R. Driver, and C. A. Briggs. <i>A Hebrew and English Lexicon of the Old Testament</i> . Oxford, 1907
BETL	Bibliotheca ephemeridum theologicarum lovaniensium
BHK	<i>Biblia Hebraica</i> . Ed. R. Kittel. Stuttgart, 1905–1906, 1973 ¹⁶
BHS	<i>Biblia Hebraica Stuttgartensia</i> . Ed. K. Elliger and W. Rudolph. Stuttgart. 1983
Bib	<i>Biblica</i>
BibOr	Biblica et orientalia
BWL	<i>Babylonian Wisdom Literature</i> . W. G. Lambert. Oxford, 1960
BZAW	Beihefte zur Zeitschrift für die alttestamentliche Wissenschaft
CAD	<i>The Assyrian Dictionary of the Oriental Institute of the University of Chicago</i> . 1956–
CAT	<i>The Cuneiform Alphabetic Texts from Ugarit, Ras Ibn Hani and Other Places</i> . Ed. M. Dietrich, O. Loretz, and J. Sanmartín. Münster: Ugarit-Verlag, 1995
CB	Coniectanea Biblica
CBC	Cambridge Bible Commentary
CBQ	<i>Catholic Biblical Quarterly</i>
CTA	<i>Corpus des tablettes en cunéiformes alphabétiques découvertes à Ras Shamra-Ugarit de 1929 à 1939</i> . Ed. A. Herdner. Mission de Ras Shamra 10. Paris, 1963

- EA El-Amarna tablets. According to the edition of J. A. Knudtzon. *Die el-Amarna-Taflen*. Leipzig. 1908–1915. Reprint, Aalen, 1964. Continued in A. F. Rainey, *El-Amarna Tablets*, 359–379. 2nd rev. ed. Kevelaer, 1978
- EM *Encyclopedia Miqra'it* (Encyclopaedia Biblica). 9 vols. Jerusalem: Bialik Institute, 1950–1982
- ErIsr *Eretz-Israel*
- FAT Forschungen zum Alten Testament
- GKC Gesenius' Hebrew Grammar. Ed. E. Kautzsch. Trans. E. Cowley. 2nd ed. Oxford, 1910
- HALOT L. Koehler, W. Baumgartner, and J. J. Stamm, *The Hebrew and Aramaic Lexicon of the Old Testament*. Trans. and ed. under the supervision of M. E. J. Richardson. 4 vols. Leiden, 1994–1999
- HAT Handbuch zum Alten Testament
- HAWANE *A History of Animal World in the Ancient Near East*. Ed. B. J. Collins. Leiden, Boston, and Cologne, 2002
- HdO Handbuch der Orientalistik
- HS Holy Scriptures. New York, 1988
- HTR *Harvard Theological Review*
- HUCA *Hebrew Union College Annual*
- ICC International Critical Commentary
- JANESCU *Journal of the Ancient Near Eastern Society of Columbia University*
- JBL *Journal of Biblical Literature*
- JNES *Journal of Near Eastern Studies*
- JQR *Jewish Quarterly Review*
- JSOTSup *Journal of the Study of the Old Testament: Supplement Series*
- JTS *Journal of Theological Studies*
- KAI *Kanaanäische und aramäische Inschriften*. H. Donner and W. Röllig. 2nd ed. Wiesbaden, 1966–1969
- KAT *Kommentar zum Alten Testament*
- KBL L. Koehler and W. Baumgartner, *Lexicon in Veteris Testamenti libros*
- LCL Loeb Classical Library
- Leš *Lešonénu*
- LUÅ Lunds universitets årsskrift
- LXX Septuagint (ed. Rahlfs)
- LXX^A Septuagint, Codex Alexandrinus
- MSL *Materialien zum sumerischen Lexicon*. Ed. Benno Landsberger
- MVAG Mitteilungen der Vorderasiatisch-ägyptischen Gesellschaft
- NICOT New International Commentary on the Old Testament
- OBO Orbis biblicus et orientalis
- OIP Oriental Institute Publications, University of Chicago Press
- Or *Orientalia*
- OTL Old Testament Library
- OtSt *Oudtestamentische Studiën*
- PEQ *Palestine Exploration Quarterly*
- PTMS Pittsburgh Theological Monograph Series
- RA *Revue d'assyriologie et d'archéologie orientale*
- RB *Revue biblique*
- RS Ras Shamra
- SAA State Archives of Assyria
- SAIW *Studies in Ancient Israelite Wisdom*. Ed. J. L. Crenshaw. New York, 1976
- SANT Studien zum Alten und Neuen Testament

SAOC	Studies in Ancient Oriental Civilizations
SBLDS	Society of Biblical Literature Dissertation Series
SBLSP	<i>Society of Biblical Literature Seminar Papers</i>
SBLWAW	Society of Biblical Literature Writings from the Ancient World
SED	<i>Semitic Etymological Dictionary</i>
SJT	<i>Scottish Journal of Theology</i>
STDJ	<i>Studies on the Texts of the Desert of Judah</i>
SubBi	<i>Subsidia biblica</i>
SVT	Supplements to <i>Vetus Testamentum</i>
TCL	Textes cunéiformes. Musée du Louvre
TGUOS	Transactions of the Glasgow University Oriental Society
TLZ	<i>Theologische Literaturzeitung</i>
UT	<i>Ugaritic Textbook</i> . C. H. Gordon. AnOr 38. Rome, 1965.
VT	<i>Vetus Testamentum</i>
WBC	Word Biblical Commentary
WMANT	Wissenschaftliche Monographien zum Alten und Neuen Testament
WOO	Wiener Offene Orientalistik
ZAW	<i>Zeitschrift für die alttestamentliche Wissenschaft</i>
ZTK	<i>Zeitschrift für Theologie und Kirche</i>

MISHNAH, TALMUD, AND OTHER RABBINIC WORKS

<i>Abot R. Nat.</i>	<i>Abot de Rabbi Nathan</i>	<i>Mek.</i>	<i>Mekilta</i>
<i>b.</i>	Babylonian Talmud	<i>Midr.</i>	<i>Midrash</i>
<i>B. Bat.</i>	<i>Baba Batra</i>	<i>Pirqe R. El.</i>	<i>Pirqe Rabbi Eliezer</i>
<i>B. Qam.</i>	<i>Baba Qamma</i>	<i>Qidd.</i>	<i>Qiddušin</i>
<i>Ber.</i>	<i>Berakot</i>	<i>Rab.</i>	<i>Rabbah</i> (+ biblical book)
‘ <i>Ed.</i>	‘ <i>Eduyyot</i>	Šabb.	Šabbat
<i>Giṭ.</i>	<i>Giṭṭin</i>	<i>Sanh.</i>	<i>Sanhedrin</i>
<i>Ḥul.</i>	<i>Ḥullin</i>	<i>Ta’an.</i>	<i>Ta’anit</i>
<i>Ketub.</i>	<i>Ketubbot</i>	Tg. Neb.	Targum of the Prophets
<i>m.</i>	<i>Mishnah</i>	y.	Jerusalem Talmud
<i>Meg.</i>	<i>Megillah</i>	<i>Yad.</i>	<i>Yadayim</i>

CHAPTER 1

INTRODUCTION

1.1 GENERAL REMARKS

Observation of the environment inspires and enriches authors' literary expression of their daily experiences. The figurative descriptions that result form an integral part of the cultural legacy of authors and their audience.

Ancient wisdom literature spiced its rhetoric with analogies and images inspired by different spheres of life. Those which are related to natural phenomena (climate, flora, and fauna) reflect the impact of such phenomena on a person's emotional and intellectual perception of the world. These images propose a comparison, explicit or implicit, between two disparate objects and challenge us to find the similarities between them.¹ This work of discovery involves both cognitive and emotional processes.

The summary of Solomon's wisdom refers to an accumulation of observations to the point of comprehensive encyclopedic knowledge: "He spoke of trees; from the cedar that is in Lebanon to the hyssop that grows out of the wall; he spoke also of beasts and of birds, and of reptiles and of fish" (1 Kgs v 13).² Admiration of the wisdom discerned in nature and of the unconscious intelligence of beasts, who

¹ See J. Bronowski, *The Origins of Knowledge and Imagination* (New Haven and London, 1978), pp. 10–18; L. Alonso Schökel, *A Manual of Hebrew Poetics* (SubBi 11; Rome, 1988), pp. 95–107; Ch. E. Watanabe, *Animal Symbolism in Mesopotamia: A Contextual Approach* (WOO, vol. 1; Vienna, 2002), pp. 16–21.

² See Albrecht Alt, "Solomonic Wisdom," in J. L. Crenshaw (ed.), *Studies in Ancient Israelite Wisdom*, trans. D. A. Knight (New York, 1976), pp. 102–12 [originally published as "Die Weisheit Salomos," *TLZ* 76 (1951), pp. 139–44]. For a reconsideration of the Onomastica as a wisdom genre, see John Day, "Foreign Semitic Influence on the Wisdom of Israel and its Appropriation in the Book of Proverbs," in J. Day et al. (eds.), *Wisdom in Ancient Israel: Essays in honor of J. A. Emerton* (Cambridge, 1995), pp. 61–62.

share a mysterious and at times esoteric knowledge inaccessible to human beings, is a recurring leitmotif in the hymns of praises to the Creator that are prominent in wisdom traditions: "But ask the beasts, and they will teach you; The birds of the sky, they will tell you; Or speak to the earth, it will teach you; The fish of the sea, they will inform you" (Job xii 7–8). Another facet of this esteem for animals and their behavior is the recognition of their mysterious ability to orient themselves in their natural habitats: "Even the stork in the sky knows her seasons, And the turtledove, swift, and crane Keep the time of their coming" (Jer. viii 7a). Animals move in three different spaces—earth, sky and sea—where they seem to share with God an intimate secret of His creation (Prov. xxx 18–19; cf. Jer. viii 7).³

In the book of Proverbs, which is firmly grounded in the daily fabric of life in biblical times, a variety of models of human behavior are linked to the wisdom teacher's understanding of the order and balance of the natural world.⁴

1.2 SURVEY OF SCHOLARLY APPROACHES

Noteworthy among scholars who investigated animal imagery in ancient Near Eastern literature are the following: Schott's study (1926) of the language of imagery in the Assyrian royal inscriptions⁵; Heimpel's study (1968) on the imagery of animals in Sumerian literature, in which animals are treated as metaphors and similes, and categorized according to the trait emphasized,⁶ and Marcus's investigation of stylistic changes in the *kīma* paradigm indicating the relation between simile and similitude of animal imagery in the Assyrian royal inscriptions.⁷ Black's monograph (1996) focuses exclusively on images of winged creatures in Sumerian poetry. His study analyzes

³ On Prov. xxx 18–20, see §4.2.3.

⁴ See James L. Crenshaw, "The Sage in Proverbs," in J. G. Gammie and L. G. Perdue (eds.), *The Sage in Israel and Ancient Near East* (Winona Lake, IN, 1990), pp. 204–16.

⁵ See A. Schott, *Die Vergleiche in den akkadischen Königsinschriften* (MVAG 30; Leipzig, 1926).

⁶ W. Heimpel, *Tierbilder in der Sumerischen Literatur* (Studia Pohl 2; Rome, 1968).

⁷ David Marcus, "Animal Similes in Assyrian Royal Inscriptions," *Or* 46 (1977), pp. 86–106.

the relation between the image, the imaginary, and the literary sample in expressing the diverse rhetorical function of the image.⁸

Rimbach's comprehensive study on *Animal Imagery in the Old Testament* (1972),⁹ arranges the discussion according to zoological categories, placing special emphasis on conventional features of each animal in the Bible and its parallel perception in ancient Near Eastern literary sources. Rimbach investigated the rhetorical function of the image in light of various poetic types: synonymous, antithetical, and synthetic *parallelismus membrorum*. He did not, however, study the role of the image as a literary model, nor did he examine the conceptual 'locus' of the image within the theoretical framework of his book. For example, in discussing the literary image of the *nešer* 'eagle'/'vulture' in its many occurrences in biblical literature in comparison to its occurrences in Mesopotamian literary sources, Rimbach left out investigating the dynamic reciprocal relations between the literary image of the eagle and its setting within the rhetoric pattern of the admonition speech (Prov. xxiii 4, 5) or that of the Numerical Saying (Prov. xxx 18–20).¹⁰

A contextual approach to interpreting the symbolic role of animals in literary uses and iconography in Mesopotamia is offered by Watanabe in her study of *Animal Symbolism in Mesopotamia* (2002), where she mainly deals with the royal and divine attributes of the lion and the bull from a wide, cultural perspective of textual analysis, art history, and anthropology.¹¹

Riede's anthology *Im Spiegel der Tier* (2002) presents a collection of ten essays concerning the relationship between man and animal in ancient Israel.¹² Riede provides philological and terminological clarifications on the animal's species, nomenclature, habitat, and behavioral aspects. His meticulous approach offers a discussion on idiomatic expressions linked with the animal kingdom as well as with wisdom terminology.

⁸ See Jeremy Black, "The Imagery of Birds in Sumerian Poetry," in M. E. Vogelzang and H. L. J. Vanstiphout (eds.), *Mesopotamian Poetic Language: Sumerian and Akkadian*, vol. 2 (Cuneiform Monographs 6; Groningen, 1996), pp. 23–46.

⁹ J. A. Rimbach, "Animal Imagery in the O.T. Some Aspects of Hebrew Poetics," (Ph.D. dissertation, Johns Hopkins University, 1972).

¹⁰ *Ibid.*, pp. 46ff.

¹¹ Watanabe, *Animal Symbolism in Mesopotamia*.

¹² P. Riede, *Im Spiegel der Tier* (OBO 187; Fribourg and Göttingen, 2002).

Strawn (2005) dedicates a comprehensive monograph entitled: *What Is Stronger than a Lion?* to leonine imagery and metaphors are examined in the Bible and the ancient Near East. His investigation describes naturalistic descriptions of the lion in the Bible, including its anatomic and physiologic traits, and the nature of its habitat. This kind of interpretation anticipates his discussion on positive and negative metaphorical usages “because of the light they cast on the user’s sign-context.”¹³ Strawn adds three appendixes, offering etymological data relating to the lion’s names, predicates, and syntactical relations.

The book with the broadest horizons in the field of fauna in the ancient world is *A History of the Animal World in the Ancient Near East* edited by Billie J. Collins (2002). The book opens with an exhaustive survey of native fauna in the southwestern corner of Asia. The zoogeographic data of domesticated and wild species and the distribution of animals in various climatic and ecological regions are accompanied by archaeozoological studies. Chapters II-IV present artistic, literary, and cultic-religious aspects of fauna in ancient civilizations (Anatolia, Mesopotamia, Egypt, ancient Iran and Syro-Palestine) that reflect the significant impact of ancient human-animal interaction. Despite the title of the book, as its introduction emphasizes, “the volume is not so much a history of the animal world in the ancient Near East as a narrative of human relations with animals told from the human perspective.”¹⁴

1.3 METHODOLOGY

The present study focuses on the zoological, literary, and conceptual aspects of animal images in Proverbs. Our investigation examines the syntactical and thematic setting of animal images within their literary pericopes and clarifies their conceptual linkage to the thematic framework. For each passage, I begin by identifying each animal and its zoological characteristics as they emerge from the literary context, and the specific human traits to which it is related. The discussion of the poetic image as both a stylistic device and a rhetorical vehicle involves a linguistic and stylistic investigation of the elements of the

¹³ B. A. Strawn, *What is Stronger than a Lion?* (OBO 212; Göttingen, 2005), p. 46.

¹⁴ B. J. Collins (ed.), *A History of the Animal World in the Ancient Near East* (HdO 64; Leiden, Boston, and Cologne, 2002), p. xix.

comparison. Finally, I consider the semantic implications of the analogy as a whole.¹⁵

We also consider a number of parallels from ancient Near Eastern literary texts, which employ typological imagery from the animal world.

1.3.1 *The Problem of Zoological Identification*

Anyone who investigates references to animals in ancient literary sources faces the problem of the zoological identification of the animal in question.¹⁶ Philological comparisons with cognate languages do not always solve the problem, because some names have lost their original significance and do not necessarily apply to the same creatures in modern nomenclature as they did in ancient times.¹⁷ Moreover, when ethnic groups migrate to different climates with different fauna they bring with them familiar and well-loved names from their countries of origin and may apply them to animals common in their new country (much as occurs in the migration of other culturally laden words).¹⁸ Nor can the application of two other methods of identification—one based on onomatopoeia, the other on identifying the

¹⁵ See Alonso Schökel, *A Manual of Hebrew Poetics*, pp. 105–107.

¹⁶ Dor defines ten principles for identifying ancient names with modern extant animals. See M. Dor, *Animals in the Days of the Bible, the Mishnah and the Talmud* (Tel Aviv, 1997), pp. 10–11 [Hebrew]; Black (“The Imagery of Birds,” pp. 25, 31) demonstrates the problem of identification through his table presenting the *buru*,¹⁵ *mušen* both as a small bird and as locust. Another example is the problematic identification of the *sur-du* *mušen* with *Falco* as a defined class of raptors, in contrast to the identification with hawk as a general name for predatory birds, excluding the falcon and eagle, based on the type of sacrifice of such birds as mentioned in the image. See also Edwin B. Firmage, “Zoology (Fauna),” in *ABD*, vol. 6, pp. 1144, 1151, and nn. 34–64.

¹⁷ Tristram employed comparative philology, with Arabic as the referent language, to identify animal names in the Bible. See H. B. Tristram, *The Fauna and Flora of Palestine: The Survey of Western Palestine* (London, 1884); idem, *Natural History of the Bible*, (London, 1867). Bodenheimer criticizes the method of comparative philology and etymology across cognate Semitic languages; his example is the Hebrew word *šab* ‘tortoise’, whose Arabic cognate *ḏab* means a large lizard. See: F. S. Bodenheimer, *Animal Life in Biblical Lands I* (Jerusalem, 1950), pp. 19–23 [Hebrew]; David Talshir, “Haššab, Haḥardon Vahaqarpadah,” *Leš* 65 (2003), pp. 351–73.

¹⁸ In addition to climatic shifts, anthropogenic environmental changes caused by the expansion of settlement or industrialization have influenced avian patterns of flight, residence, and breeding. For a recent observation of bird behavior in the Levant (Syria, Lebanon, Jordan and Israel), see Allen S. Gilbert, “The Native Fauna of the Ancient Near East,” *HAWANE*, pp. 32–37 and Table 1.2, p. 62.

animal's characteristics as deduced from the etymology—lead to a clear-cut identification, because many such characteristics are shared by many different animals.¹⁹

For the vast majority of domestic and common wild mammalian species, the Hebrew names are often attested in Semitic cognates that signify the same animal. The identification of birds, fish, reptiles, and insects is not always certain, however.²⁰

In this context we should note Landsberger's *Fauna of Ancient Mesopotamia* (1960–1962), which deals primarily with the identification of the animals named in parallel columns of Sumerian-Akkadian lexical lists of *ura* = *hubullu*. These ancient lists make it easier to identify the animals thanks to their division into several categories: domestic animals, wild animals, reptiles, fish, and fowl.²¹ For biblical literature, we can draw on the comprehensive and pioneering studies by Tristram and Bodenheimer. Tristram based his research on the fauna and flora of Palestine (1867, 1884) on personal observation, which he then checked against relevant passages from biblical literature. He also compared the biblical names with those used in his day by the local Arab population.

Bodenheimer's study of fauna in the Bible lands (1950) draws on archaeological findings and ancient literary sources, including the Bible, New Testament, Hellenistic Jewish literature, rabbinic literature, Aramaic and sources, Arabic literature, and more, with placing special emphasis on religion, folklore, and popular beliefs.²² Other important sources are the zoological studies by I. Aharoni (1923), G. R. Driver (1955), J. Feliks (1954), and M. Dor (1955).

¹⁹ Onomatopoeic names include *tôr* 'turtledove' and *sîs* 'swift'. Identifications based on etymological criteria include *ḏrôr* 'sparrow' (*Passer domesticus*), the bird of "freedom"; *yanšôp/yanšûp* 'owl' (*Asio otus*), derived from the noun *nešep* 'darkness' or verb *nšp* 'blow out, hiss'; *tinšemet* 'barn owl' (*Tyto alba*), from *nšm* 'breath' (also identified with the chameleon in Lev. xi 30: "among the creeping things that creep upon the earth"). See David Talshir, "The Nomenclature of the Fauna in the Samaritan Targum" (Ph.D. dissertation, Hebrew University of Jerusalem, 1981), p. 4 [Hebrew].

²⁰ See the list of biblical animal names and their Semitic cognates in Firmage, "Zoology," Appendix 1, pp. 1152–56; A. Militarev and L. Kogan, *SED*, Vol. II: *Animal Names* (AOAT vol. 278/2; Münster, 2005).

²¹ See B. Landsberger, *Die Fauna des alten Mesopotamien* (Leipzig, 1934), as well as his later study of Tablets 13, 14, and 18 of the *ura* = *hubullu* lists (*The Fauna of Ancient Mesopotamia* [Rome, 1960–1962]). On the problematic criteria for identifying animal names in the Sumerian-Akkadian lexical lists, see Benjamin R. Foster, "Animals in Mesopotamian Literature," *HAWANE*, pp. 272–74.

²² Bodenheimer, *Animal Life in Biblical Lands*.

The present study does not reopen the discussion of these scholars' identifications. Instead, it relies on the existing assumptions of zoological investigations of the native fauna of the Syro-Palestinian region and on etymological comparisons with Semitic cognates. In cases where the animal's name is a *hapax legomenon*—e.g., the *zarzār motnayim* (Prov. xxx 31) and the *s^emāmīt* (Prov. xxx 28)—my conjectured identification is based on a contextual and exegetical approach.

1.3.2 *The Zoological Dimension*

With regard to the zoological aspects of each image, we consider how the animal is perceived throughout the Bible and examine its integration into various rhetorical patterns in Proverbs. We look at how the literary conception of the animal emphasizes the wise teacher's didactic tendencies. For example, the chief characteristic of locusts, as found in the description of the Eighth Plague in Egypt (see Exod. x 4–20; cf. Ps. cv 34–35) and throughout the prophetic literature, is their destructiveness. The damage to crops caused by an invasion of locusts provides a concrete example of the severity of the threatened divine punishment (see Isa. xxxiii 4; Jer. xlvi 23, 51; Joel i 4; ii 2–12; Nah. iii 15–18). But the notion of locusts in Proverbs, “The locust have no king, yet all of them go out in ranks” (xxx 27), gives no hint of their baneful effect.

1.3.3 *The Literary Dimension*

The investigation of the word *māšāl* by Form-Critical study of biblical literature has uncovered a broad range of formal categories within the Wisdom literature. With regard to its various contexts in the Bible and in light of its etymology, a distinction needs to be made between *māšāl* as *popular saying* (*Volksspruch*) and as *wisdom saying* (*Weisheitsspruch*). Scholars who appeal to the semantic range of *māl* in Arabic insist on the sense of *resemblance*; a *māšāl*, for them, is a simile. Others believe that *māšāl* is better understood as *model*, *exemplar*, or *paradigm*.²³ Fox argues that it means “proverbs that are cur-

²³ O. Eissfeldt, *Der Maschal im Alten Testament* (BZAW 24; Berlin and New

rent in public wisdom.”²⁴ Because it is ultimately impossible to define the word *māšāl* based on its semantic development or etymology, and also because it is applied to several literary genres, including allegory (Ezek. xvii 3–12), satire (Isa. xiv 4–23), prophetic vision (e.g., Num. xxiii 7–18), and proverbial sayings (mainly in Proverbs), in each case we must interpret *māšāl* according to the specific context.

Our study analyzes the use of *parallelismus membrorum*, a stylistic feature of biblical poetry that relates the clauses of the verse in some kind of parallel structure (synonymous, antithetic, and synthetic).

The simile is an explicit and concise figure. The relationship between its two terms may be that between the abstract and the concrete, between the general and the individual, and so forth.²⁵ The comparison between two distinct semantic fields challenges readers to search for the underlying analogy/contrast (or similarities or dissimilarities), thereby evoking ideas, feelings, values, and stereotypes.

The use of similes that employ animal imagery to make a statement about human conduct reflects the sage’s educational demands.

Our literary inquiry delves into the interrelationship of three rhetorical elements: the *comparandum* (equivalent to the *tenor* of a metaphor), the *comparatum* or object to which it is compared (the *vehicle* of a metaphor), and the literary form.²⁶

The two terms of the simile or metaphor have some common feature (the *tertium comparationis*) that readers are supposed to discern in order to appreciate the teacher’s lesson. We must note, however, that what this is can be somewhat enigmatic, because the original author and the readers are not necessarily contemporaries and frequently do not share the same cultural sign-context.²⁷

York, 1913), pp. 12–13, 33–51. For the etymology of *māšāl*, see A. R. Johnson, “מָשָׁל,” SVT 3 (1955), pp. 162–69. For a critical survey of methodologies of the study of traditional sayings in the Bible, see C. R. Fontaine, *The Use of the Traditional Saying in the Old Testament* (Sheffield, 1982).

²⁴ M. V. Fox, *Proverbs 1–9* (AB 18A; New York, 2000), pp. 54–55.

²⁵ See Alonso Schökel, *A Manual of Hebrew Poetics*, pp. 96–97.

²⁶ The general format of a metaphor is “Caruso [tenor; Hebrew *nimša*] is an Alpha-Romeo [vehicle; Hebrew *mašal*].” When this is written as a simile, we have “a great singer [comparandum] is like a luxury automobile [comparatum].” The rhetorical style of Proverbs frequently inverts the order of the clauses: e.g., “Like a sparrow wandering from its nest is a man who wanders from his home” (xxvii 8); “like a gold ring in the snout of a pig is a beautiful woman bereft of sense” (xi 22); “a roaring lion and a prowling bear is a wicked man ruling a helpless people” (xxviii 15).

²⁷ See S. J. Brown, *Image and Truth: Studies in the Imagery of the Bible* (Rome, 1955), p. 48; Strawn, *What is Stronger than a Lion?* pp. 12–16. On metaphors and

The aesthetic rules of the literary form in which the animal image appears provides the rhetorical foci of the model; conversely, every deviation from the formal model indicates some variation in the rhetorical emphasis.

For example, an application clause about an adulterous woman (xxx 20) is tacked on to a Numerical-Sequence Saying that consists of four mysterious phenomena (the ways of a vulture, serpent, ship, and maiden). The formal deviation takes place on two levels: on the structural level there is a stylistic shift from the enumerated example to the application clause (a pattern found most often in the admonition); on the thematic level, there is a shift from experience to moralizing.

My hermeneutic and literary discussion of the image in its context is holistic in nature.²⁸ The enlarging focus on words, phrases, images, sentences, sequences, and literary units uncovers the relationship of the whole to its parts, and vice versa.²⁹

1.3.4 *The Conceptual Dimension*

The present study focuses on animal images in the book of Proverbs as a lens through which we can share the teacher's viewpoint. His main concern is not the national history of Israel or the people's fidelity to its covenant with the Lord. Instead, the teacher addresses individuals, urging them to internalize behavioral values to promote integration into the social order. The lessons of Proverbs do not just offer moral advice and guidance for practical conduct; they also raise theological and philosophical issues, such as the Lord as Creator (e.g., iii 19–20), "Fear of the Lord" (e.g., i 7), reward and punishment (e.g., x 6), and human impotence in the face of the Divine will (e.g., xix 21).³⁰

similes, see Watanabe, *Animal Symbolism in Mesopotamia*, pp. 16–21.

²⁸ On the literary approach to Bible studies and especially the hermeneutic principle "unity of form and content," see L. Alonso Schökel, "Hermeneutical Problems of a Literary Study of the Bible," *Congress Volume Edinburgh 1974* (SVT 28; Leiden, 1975), pp. 1–15.

²⁹ For an in-depth survey of the method of Total Interpretation (i.e., *Werkinterpretation*, New Criticism, Close Reading) in the history of the study of literature and its impact on biblical scholarship, see Meir Weiss, "Die Methode der 'Total Interpretation': Von der Notwendigkeit der Struktur-Analyse für das Verständnis der biblischen Dichtung," SVT 22 (1972), pp. 88–112; idem, *The Bible from Within: The Method of Total Interpretation* (Jerusalem, 1984), pp. 1–46.

³⁰ On the theological worldview of Proverbs, see L. Boström, *The God of the*

The teacher's dicta do not claim to have the same authority as the Commandments and the Law of God. Although his precepts are referred to as *mišwâ* 'injunction/teaching' (x 8) and, implicitly, as *leqaḥ* 'internalized teaching' (i 5; x 8), they are counsels (*ēṣā*) rather than categorical injunctions. As Zimmerli noted, wisdom structures such as the admonition and "better-than" saying can be read as reflections of an anthropocentric viewpoint, because they emphasize progressive clarification through reasoning and appeals to common sense and deliberation.³¹

Even though the wise instructions, which concern a broad domain of life, call for human consultation, reflection, and independent decision, they are nevertheless based on a religious perspective, ranging from the dogmas of "fear of the Lord" and divine recompense (iii 5–12) to the pragmatic doctrine known as the *Tat-Ergehen Zusammenhang* or "deed-consequence nexus" (vi 27), which asserts a mechanical association between the quality of the action and the quality of its result.³²

In this study I investigate the animal image as found both in discrete sayings and in extended passages. In the didactic framework of the book of Proverbs—a collection of practical counsels, exhortations, and moralistic admonitions—the animal imagery reinforces the wise man's empirical observations and worldviews, which give meaning and direction to the daily conduct of human beings.

Sages: The Portrayal of God in the Book of Proverbs (CB; Old Testament Series 29; Stockholm, 1990).

³¹ See Walther Zimmerli, "Concerning the Structure of Old Testament Wisdom," in J. L. Crenshaw (ed.), *SAIW* (New York, 1976), pp. 175–207 [= "Zur Struktur der Alttestamentlichen Weisheit," *ZAW* 51 (1933), pp. 178–204]; idem, "The Place and the Limit of the Wisdom in the Framework of Old Testament Theology," in Crenshaw, *SAIW*, pp. 314–26; Roland E. Murphy, "Wisdom—Theses and Hypotheses," in J. G. Gammie et al. (eds.), *Israelite Wisdom: Theological and Literary Essays in Honor of Samuel Terrien* (New York, 1978), pp. 35–42; James L. Crenshaw, "Prolegomenon," in Crenshaw, *SAIW*, pp. 1–60; idem, "Wisdom," in J. H. Hayes (ed.), *Old Testament Form Criticism* (San Antonio, 1977), pp. 225–64; R. N. Whybray, *The Intellectual Tradition in the Old Testament* (BZAW 135; Berlin and New York, 1974), pp. 44–74; Fox, *Proverbs 1–9*, pp. 79–80.

³² On the "concept of built-in and inherent connection between an action and its consequences as the logical paradigm that outlines many proverbs" (p. 61), see Klaus Koch, "Is there a Doctrine of Retribution in the Old Testament," in J. L. Crenshaw (ed.), *Theology in the Old Testament*, trans. T. H. Trapp (Philadelphia, 1983), pp. 57–87 [= *ZTK* 52 (1955), pp. 1–42]. Van Leeuwen raises the contradictory evaluation of wealth in Proverbs as an example of divergent points of view; see Raymond C. Van Leeuwen, "Wealth and Poverty: System and Contradiction in Proverbs," *Hebrew Studies* 33 (1992), pp. 25–36. See also Bruce K. Waltke, *The Book of Proverbs Chapters 1–15* (NICOT; Grand Rapids, MI, and Cambridge, 2004), pp. 73–76.

1.4 THE BOOK OF PROVERBS: INTRODUCTORY REMARKS

The book of Proverbs mentions many members of the animal kingdom. These include birds (sparrow, eagle/vulture, brook-raven), insects (ant, locust), reptiles (serpent, viper), wild mammals (bear, lion, pig, dog, deer, rock-cony), domesticated animals (ox, goat, donkey, horse), and animals whose identification is problematic (e.g., *śēmāmīt* and *zarzār motnayim*).

Although animal imagery is found within most of the separate collections of proverbs (defined by their section headings),³³ there are notable concentrations in several sections, such as chapter 26, which mentions the sparrow, swallow, donkey, horse, dog, and lion (vv. 2, 3, 11, 13, 17), and chapter 30, which refers to the brook-raven, young vultures, ants, the rock-cony, locusts, *śēmāmīt*, the lion, *zarzār motnayim*, and the he-goat (vv. 17, 19, 25–28, 30–31).

As we shall see, the style of the animal images, like that of images drawn from other spheres of life (vegetation, climate, aquatic cycles, metallurgy, and precious stones), conforms to the typical pattern of each collection of proverbs. For example, the parable of the ant and the sluggard (vi 6–11) has the structure of the admonition speech, which is characteristic of the first collection (chs. 1–9). The animal images in the second collection (x 1–xxii 16) are incorporated in a variety of forms characteristic of proverbs and aphorisms, such as comparison and analogy, antithetical couplets, direct speech, metaphorical proverbs, and “better-than” sayings. Similarly, the animal images in the sixth collection (ch. 30) take the form of the Numerical Saying (cf. xxx 18–20, 24–28, 29–31). Animal imagery also appears in the “double sayings” of the second collection (e.g., x 1 = xv 20; x 2 = xi 4), in which a fixed recurrent clause is paired with a variable clause.³⁴

³³ The division of Proverbs into separate collections is based on the titles and arrangement in the Masoretic text. All biblical citations are from the NJPS translation unless otherwise indicated.

³⁴ The phenomena of doubles or repetitions indicate “that the book has been formed by the combination of collections of various dates and origins.” See C. H. Toy, *The Book of Proverbs* (ICC; Edinburgh, 1959 [1899]), vii–viii; D. C. Snell, *Twice-Told Proverbs and the Composition of the Book of Proverbs* (Winona Lake, IN, 1993).

Imagery borrowed from the animal kingdom and from other natural phenomena is presented in a rich variety of rhetorical patterns that offer an empirical perspective aimed at providing guidance concerning the appropriate conduct (practical, legal, or ethical) in diverse life situations. In these similes (explicit and implicit) the relationship between the animal term and the term drawn from human life is one of identity or correspondence, or, alternatively, of antithesis or non-identity. The animal image stimulates the recipient of the admonition—whether boy, idler, fool, simpleton, or hothead—to reflect upon it and to extract relevant, immediate, and personal implications from the figurative expression.

Chapter 1 introduces the combined methodology—zoological, literary, and conceptual—of analyzing animal imagery, and surveys the literary forms in which it is used.

Chapter 2 focuses on what we have been discussing above: the literary and artistic uses of animal imagery.

Chapter 3 juxtaposes animals and humans and their behavioral vices: bear and fool (xvii 12), lion and sluggard (xxii 13; xxvi 13), dog and fool (xxvi 11), dog and meddler (xxvi 17). The comparison of human being and animal evokes reflection, and then mockery and sarcasm.

Chapter 4 considers the notion of animals' qualities as virtues to be emulated in human behavior, both individual and social. For example, the idler is entreated to imitate the ant (vi 6–11). Small creatures—ants, locusts, the rock hyrax, and the *ś^emāmūt* (house gecko?) (xxx 25–28)—are incorporated into a numerical saying and praised highly: “Four are among the tiniest on earth, Yet they are the wisest of the wise” (xxx 24). Animal examples incorporated in numerical patterns reflect the author's encyclopedic knowledge, but readers and hearers are expected to reflect on their didactic implications. The link between the lesson to be learned and the animal image induces cognitive and emotional processes that turn an empirical observation into a moral norm.

The appendices examine two other Wisdom compositions—the dialectical debate of Qoheleth and the didactic and reflective writing of Psalms—employing the same methods as in the body of the book. Zoological, literary, and conceptual aspects introduce the dynamic hermeneutic into the animal image, its literary form, and the conceptual framework of each work.

1.5 LITERARY FORMS

James G. Williams lists three dynamic elements that power the rhetoric of the literary proverb: (1) intensification of the rhetoric through antithetical parallelism and heightening the ambiguity of the opening clause by strengthening or sharpening the second clause (xi 11, xii 11); (2) narration to express a process of acts, events, or experiences in the extremely compact and controlled form of the proverb (xix 24); and (3) metaphoric play within the frames of reference of the referents (abstract and concrete) of each part of the proverb and their combination as a whole (xiv 11; xviii 21).³⁵

The sayings in the book of Proverbs can be classed, roughly speaking, into two types: long and short. My discussion of the short forms—the comparison, the antithesis, direct speech, the “better-than” saying, and the metaphorical saying—examines how their rhetoric concretizes ideas (xi 12; xxvi 11; xxvii 8) and presents didactic messages (xiv 4; xix 12; xx 2; xxvi 2,3; xxviii 1,15) and ethical values (xv 17; xxi 30–31; xxx 17).

The long forms include the admonition and exhortation (e.g., i 10–19), the biographical speech (xxiv 30–34), the numerical saying (xxx 24–28), and the graded numerical sequence (xxx 29–31). In the admonition, the animal image offers a concrete illustration that promotes internalization of virtues and wise counsels such as diligence and efficiency (vi 6–12), avoiding the company of criminals (i 10–19), not going surety for others (vi 1–5), moderation in the pursuit of wealth (xxiii 4–5), and sobriety (cf. xxiii 29–35). Here the animal imagery is found in the motive-argument clause (i 17; xxiii 4–5), the circumstance clause (vi 1–5; vii 22–23) and the result-consequence clause (xxiii 29–35).

³⁵ See James G. Williams, “Proverbs and Ecclesiastes,” in R. Alter and F. Kermode (eds.), *The Literary Guide to the Bible* (Cambridge, MA, 1987), pp. 273–76. On “metaphor,” see Benjamin Hrushovski, “Poetic Metaphor and Frames of Reference,” *Poetics Today* 5 (1984), pp. 5–43.

1.5.1 *Short Forms*

According to many scholars, the folk proverb that express life experiences evolved into sayings of a relatively didactic nature that have undergone clear secondary elaboration of their stylistic and structural components.³⁶ Thus form criticism distinguishes the popular proverb (*Volksspruchwort*), with its clear, prosaic, and concise style, which expresses a generalized truth based on common experience or a particular incident, from the wisdom saying (*Weisheitsspruch*), which employs more sophisticated rhetorical means and syntax, such as *parallelismus membrorum* and intensification and explication. An example of the former is “Like Nimrod a mighty hunter by the grace of the Lord” (Gen. x 9); of the latter, “A scoffer seeks wisdom in vain, but knowledge is easy for a man of understanding” (Prov. xiv 6).³⁷

Gerhard von Rad included practical knowledge in the domain of wisdom and traced the evolution from an early focus on nature and agriculture to the legal and social framework of clan-tribal society and then the royal court.³⁸

William McKane classified the individual sayings in Proverbs according to their moral and religious intention, ignoring their actual order in the text. He defined three stages of development in the Israelite wisdom tradition, from the secular to the sacred:

1. Sayings that draw on ancient wisdom and seek to guide individuals to a successful and harmonious life
2. Sayings that concern the community, rather than the individual, and offer advice on proper conduct that adheres to social norms while avoiding anti-social behavior
3. Sayings taken from ancient wisdom that have been subjected to moralistic Yahwistic reinterpretation. These can be identi-

³⁶ See Robert B. Y. Scott, “Folk Proverbs in the Ancient Near East,” in *SAIW*, pp. 417–26 [=Transactions of the Royal Society of Canada 15 (1961), pp. 47–56]; Fontaine, *Traditional Saying*, pp. 6–41.

³⁷ On folk proverbs and wisdom sayings, see Eissfeldt, *Der Maschal*, pp. 12–13, 43–51; Johnson, “משל,” pp. 162–64; H. J. Hermisson, *Studien zur israelitischen Spruchweisheit* (WMANT 28; Neukirchen and Vluyn, 1968), pp. 36f.

³⁸ G. von Rad, *Old Testament Theology* I, trans. D. M. G. Stalker (Edinburgh, 1962), pp. 418–41.

fied by the presence of the name of God and the use of a moralistic and pietistic vocabulary.³⁹

In opposition to these evolutionary conceptions, other scholars advance thematic and poetic links and the use of catchwords to link adjacent proverbs as signs of the editorial process of combining individual sayings into groups or collections.⁴⁰

1.5.1.1 *The Comparative Saying*

The use of similarity and analogy is the hallmark of the comparative saying. In comparative sayings, the explicit or implicit simile offers a concrete illustration of the message.

Some comparative sayings focus on negative social types such as the sluggard, fool, or quarrelmonger; others describe negative traits of a ruler or host; still others refer to common social values and beliefs, such as the virtues of nomadism and the effectiveness of curses.

Although the two terms of the simile represent different levels of abstraction, the conjunction of different objects and categories stimulates our curiosity and gets us to look closely at the significance of their correspondence.⁴¹

Consider several parabolic proverbs, of which all but the last employ animal imagery:

- a. Like a sparrow wandering from its nest is a man who wanders from his home (xxvii 8).
- b. As a sparrow must flit and a swallow fly, so a gratuitous curse must backfire (xxvi 2).
- c. As a dog returns to its vomit, so a dullard repeats his folly (xxvi 11).
- d. A whip for a horse and a bridle for a donkey, and a rod for the back of dullards (xxvi 3).

³⁹ William McKane, *Proverbs, A New Approach* (OTL; London, 1970), pp. 10–22.

⁴⁰ For comprehensive survey of theories of literary development in Proverbs, see R. C. Van Leeuwen, *Context and Meaning in Proverbs 25–27* (SBLDS 96; Atlanta, GA, 1984), pp. 5–19; R. N. Whybray, *The Book of Proverbs: A Survey of Modern Study* (Leiden, New York, and Cologne, 1995), pp. 54–61.

⁴¹ On the parabolic proverb see F. Delitzsch, *Biblical Commentary on the Proverbs of Solomon I*, trans. M. G. Easton (Grand Rapids, MI, 1960), pp. 7–11; A. Kahana, *Sefer Mishley* (Miqrā' meforash; Tel Aviv, 1968), p. 21. Von Rad explains the distance between parabolic elements as the factor stimulating the reader's noetic function (G. von Rad, *Wisdom in Israel*, trans. J. D. Martin [New York, 1972], p. 120).

e. [Like] a gold ring in the snout of a pig is a beautiful woman bereft of sense (xi 22).

f. A roaring lion and a prowling bear is a wicked man ruling a helpless people (xxviii 15).

g. A passerby who gets embroiled in someone else's quarrel is [like] one who seizes a dog by its ears (xxvi 17).

h. Charcoal for embers and wood for a fire and a contentious man for kindling strife (xxvi 21).

Here we may distinguish several modes of comparison:⁴²

1. The two terms are linked as metaphor—*a* is *b*—without the prosthetic comparative *kāp* 'as, like' introducing the comparatum (d, e, f, and g).
2. The comparative *kāp* introduces the first clause and the adverb *kēn* 'thus, so' introduces the second clause consequential clause of the saying (a and b).
3. In a three-clause comparative saying, the comparative *kāp* precedes the first two clauses and the particle *kēn* introduces the final clause (b again).
4. A two-clause saying in which the comparative *kāp* is missing from the first clause and the second clause is introduced by the comparative *wāw* (*wāw adaequationis*) instead of the particle *kēn* (d, h).

1.5.1.2 *The Antithetical Saying*

The two clauses of the statement may have a contrasting or antithetical relationship. The truth stated in the first clause is emphasized by its contrary in the second clause.⁴³ In one common antithetical pattern,

⁴² The discussion here relates to the syntax of the Hebrew; translations tend to level all these different rhetorical forms into similes, softening, for example, "a beautiful woman is a pig" into "... is *like* a pig."

⁴³ See Delitzsch, *Proverbs of Solomon* I, pp. 7–8. For a careful consideration of the difference between the antithetic parallel and the negative see Moshe Held, "The Action-Result (Factitive-Passive) Sequence of Identical Verbs in Biblical Hebrew and Ugaritic," *JBL* 84 (1965), pp. 275, 282 n.71; Edward L. Greenstein, "Two Variations of Grammatical Parallelism in Canaanite Poetry and their Psycho-Linguistic Background," *JNES* 6 (1974), pp. 96–105; J. L. Kugel, *The Idea of Biblical Poetry* (New Haven and London, 1981), p. 14; W. G. E. Watson, *Classical Hebrew Poetry: A Guide to its Techniques* (JSOTSup 26; Sheffield, 1983), pp. 214–21; A. Berlin, *The Dynamics of Biblical Parallelism* (Bloomington, 1985), pp. 56–57; Chaim Cohen,

the prepositional *bet* prefixes the negative particle *ʔên* in the opening clause, while the adversative *wāw* and the prepositional *bet* are prefixed to the adjectival *rōb* ‘many’ in the second clause (cf. v 23; xi 14; xv 22).

There are several stylistic variations here:

1. The negative *b^eʔên* ‘in the absence of’ can be delayed to the second half of the first clause (xv 22), or *b^erōb* can be displaced to the second half of the second clause (xi 14).
2. *B^erōb* may stand at the beginning of the saying (xiv 28), with the negative *b^eʔên* replaced by its poetic synonym *b^eʔepes* at the start of the second clause.

1.5.1.3 The “Better-Than” Saying

The “better-than” saying or “*ṭōb*-proverb” is a formal variant of the comparative saying. In the “better-than” saying, the item in clause A is stated to be qualitatively superior to the item in clause B. For example: “My fruit is better than gold, fine gold, and my produce [is better] than choice silver” (Prov. viii 19).

In the simplest form, the combination of the initial *ṭōb*, which functions as a predicative, and the *mēm* of comparison prefixed to the second noun creates the analogical relation between the two terms⁴⁴—one of inequality (see Prov. xv 17; xvii 1, 12; xxii 1; xxvii 5; xxviii 6; and more).

On a higher level of complexity, the inequality is buttressed by a clause or clauses that specify the reason and/or particular circumstances of the greater (or lesser) merit or value; e.g., “Better a meal of vegetables where there is love than a fattened ox where there is hate.” (Prov. xv 17)

The system of arguments enables the listener/reader to consider and re-evaluate the expected relation between the two options. Nevertheless, the absolute conviction with which the saying is formulated corroborates the wisdom teacher’s selection of the appropriate behavior.⁴⁵

“The Phenomenon of Negative Parallelism and its Ramifications for the Study of Biblical Poetry,” *Beer-Sheva* 3 (1988), pp. 69–107 [Hebrew]; B. K. Waltke and M. O’Connor, *An Introduction to Biblical Hebrew Syntax* (Winona Lake, IN, 1990), pp. 130–32.

⁴⁴ For the various functions of the prepositional *mem*, see GKC, §133b; P. Joüon and T. Muraoka, *A Grammar of Biblical Hebrew* I (*SubBi* 14/1; Rome, 1996), §103d.

⁴⁵ See von Rad, *Wisdom in Israel*, p. 115; Glendon E. Bryce, “Better-Proverbs: An

1.5.1.4 *Direct Speech*

Some sayings employ direct speech; e.g., “The lazy man says, ‘There’s a lion in the street; I shall be killed if I step outside’ ” (Prov. xxii 13; cf. xxvi 13). The simple speech attributed to a particular social type adds a ring of authenticity for listeners/ readers, while placing the statement in the mouth of a negative character produces a sense of disbelief, similar to the reaction to the trickster’s lame declaration, “I was only joking” (Prov. xxvi 19).

1.5.1.5 *The Metaphorical Saying*

In the metaphorical saying the two terms merge, thereby creating a single conceptual picture. The metaphor functions within the aphoristic language by employing the various referents (concrete or abstract) of the comparative components as mutual frame of references.⁴⁶ For example, in “The eye that mocks a father and disdains the homage due a mother—the ravens of the brook will gouge it out, young eagles will devour it” (Prov. xxx 17), the synechdochal eye that represents filial scorn of parents merges with the implicit real eye of the second clause, creating a symbolic illustration of the retribution visited on wayward children (cf. Prov. xix 24 and xx 5).

1.5.2 *Long Forms*

1.5.2.1 *Admonition and Exhortation Speech*

The instructional speeches (*Lehrreden*) in the prophetic and legal literature of the Bible have several essential rhetorical elements. The speaker may use the imperative to instruct his audience in the behavior appropriate to the societal and cultural norms of the times, or

Historical and Structural Study,” *SBLSP* 108, 2 (1972), pp. 343–54; Graham S. Ogden, “The ‘Better’ Proverb (Tôb-Spruch), Rhetorical Criticism and Qoheleth,” *JBL* 96 (1977), pp. 489–505.

⁴⁶ See Hrushovski, “Poetic Metaphor,” pp. 5–43. See also Alonso Schökel, *A Manual of Hebrew Poetics*, pp. 108–109. For a critical historical survey of the change in definition of “metaphor,” see Ch. Perelman, *L’empire rhétorique-rhétorique et argumentation* (Paris, 1977), pp. 95–96 (ch. 10).

admonitory and prohibitive forms to exhort them to avoid wrongdoing.⁴⁷

Wolfgang Richter points to the literary pattern of apodictic biblical laws and links the admonition “workshop” of Proverbs with the courts.⁴⁸ John Bright compares the development of the admonition pattern with that of apodictic laws and notes the main difference between them: the role in the admonition speech of the motivation clause, which is not part of apodictic laws. He discusses the use of the prohibitive *ʿal* as a warning, guidance, and directive, unlike the one-time prohibition of apodictic laws (e.g., Prov. xx 13; xxii 24, 26).⁴⁹ The didactic admonitions in Proverbs, too, employ the imperative or jussive in positive and asseverative formulations, and the vetitive or prohibitive in negative formulations.

Walther Zimmerli maintains that the wisdom exhortation is anthropocentric, whereas the prophetic exhortation is theocentric. This can be seen in the frequent inclusion in the former of a motive clause derived from practical experience.⁵⁰ The invocation of experience to ground the injunction reflects the essentially human context. Human beings and society, not the Lord, are the focus of the admonition, and the emphasis is on satiety, wealth, security, and honor. The exhortatory pattern suggests a definite mode of behavior to the listener, probably formed by the authoritative figure of the father or the wisdom teacher in the context of court or school.⁵¹

The admonitions in Proverbs (e.g., i 10–19; vi 1–5, 6–11; xxiii 4–5, 6–8, 29–35) employ a sophisticated style in which a father or teacher

⁴⁷ On the varied forms of the jussive and the imperative vs. the prohibitive or vetitive, see Roland E. Murphy, “Form Criticism and Wisdom Literature,” *CBQ* 31 (1969), pp. 475–83.

⁴⁸ W. Richter, *Recht und Ethos: Versuch einer Ortung des Weisheitlichen Mahnspruches* (SANT 15; Munich, 1966), pp. 68ff.

⁴⁹ John Bright, “The Apodictic Prohibition: Some Observations,” *JBL* 92 (1973), pp. 189–201.

⁵⁰ See Zimmerli, “Concerning the Structure,” pp. 182–87.

⁵¹ See André Lemaire, “The Sage in School and Temple,” in J. G. Gammie and L. G. Perdue (eds.), *The Sage in Israel and the Ancient Near East* (Winona Lake, IN, 1990), pp. 165–81. Perdue suggests the term “liminality,” meaning the stage in which “the ‘son’ is leaving his former status and is to be reincorporated into society at an elevated status” (Leo G. Perdue, “Liminality as a Social Setting for Wisdom Instructions,” *ZAW* 93 [1981], p. 125). For a summary of scholarly debate of the existence of schools in Israel, see Michael V. Fox, “The Social Location of the Book of Proverbs,” in M. V. Fox and V. A. Hurowitz et al. (eds.), *Texts, Temples, and Traditions: A Tribute to Menahem Haran* (Winona Lake, IN, 1996), pp. 227–39.

preaches to his son or pupil.⁵² Although the length and extent of the admonition varies, it comprises two essential rhetorical elements: the direct speech and the motive clause. The syntax of the latter determines the formal structure of the exhortation. It may be phrased as a protasis that introduces the rhetorical unit (see vi 2), or as a consequence of the conduct to be avoided (xxiii 21). The motive clause is frequently introduced by the particle *kî* (i 16, 17), but it may be phrased asyndetically. The addition of other elements to the basic jussive/imperative and motive clauses expands the exhortation into a literary unit and sometimes into a larger unit composed of smaller blocks.

The stylistic markers of the admonition include direct address ("my son"), terms of prohibition ("do not," "cease," "avoid"), cautionary words ("if," "lest," "for," "so as to"), logical connectives ("for," "because," "in order to" followed by the infinitive), the interrogative *heh* and other interrogative patterns ("how long," "when," "to whom"), and final (simple or compound) prepositions or conjunctions ("for the sake of," "until").⁵³

Animal imagery may appear in any part of an admonition. The image often illustrates the addressee's concrete predicament at the time, as in the case of the lad who follows the loose woman: "Suddenly he follows her, like an ox going to the slaughter" (Prov. vii 22a). More often, however, the figure is used to describe the likely consequences of an action that contravenes decorum and order: "Its end is like a serpent that bites, and like a viper that secretes [venom]" (Prov. xxiii 32). In the didactic relationship of teacher and student, the motive clause seeks to improve the addressee—lad, sluggard, dullard, or fool; all the structural devices of the admonition are employed to help him internalize the teacher's message.⁵⁴

⁵² For a comparative study of Egyptian wisdom teachings/counsels and the admonitory pattern in Proverbs 1–9, see Crista Kayatz, *Studien zu Proverbien 1–9* (WMANT 22; Neukirchen and Vluyn, 1966), pp. 15–75.

⁵³ See McKane, *Proverbs*, p. 11. Philip Nel uses the term "ethos" to define the close relation between the structure and interpretation of the admonitions in Proverbs. He examines the syntactical link between the admonition and motive clauses and concludes that they should be defined not as genres (*Gattungen*) but as structural options. See P. J. Nel, *The Structure and Ethos of the Wisdom Admonitions in Proverbs* (BZAW 158; Berlin and New York, 1982), pp. 3–7.

⁵⁴ On the "deed-consequence nexus" (*Tun-Ergehen Zusammenhang*) as an expression of dogmatic thinking, which shapes the application and result clauses in the admonition speech, see John A. Emerton, "Wisdom," in G. W. Anderson (ed.), *Tradi-*

1.5.2.2 *First-Person Narrative*

In the first-person narrative, the speaker states his opinion as the fruit of his own experience (Prov. vii 1–27; xxiv 30–34; Ps. xxxvii 25, 35; Sir. li 13–16). This immediacy lends authority to the statement, as in, “I observed and took it to heart; I saw it and learned a lesson” (Prov. xxiv 32). Sometimes the speaker contemplates his past and draws conclusions from childhood to arouse the listener’s sympathy and convince him of the truth of his position: “I have been young and now am old, but I have not seen a righteous man abandoned, or his children seeking bread” (Ps. xxxvii 25); “when I was young and innocent, I kept seeking wisdom. She came to me in her beauty, and until the end I will cultivate her. ... For from earliest youth I was familiar with her” (Sir. li 13–16). At other times, the speaker acts as an eyewitness and vividly records his observations in the first person. In the wisdom teacher’s admonition against the seductive wives of the “strange woman,” he peers out the lattice-window of his home and describes what he sees in bold, unmediated strokes of color (Prov. vii 6–23). The chronological descriptive report is occasionally replaced by the teacher’s personal evaluation of the object’s behavior as in the case of the adulterous woman: “She sways him with her eloquence, turns him aside with her smooth talk” (vii 21).

1.5.2.3 *The Numerical Saying*

A numerical saying consists of a heading followed by a list of phenomena drawn from various categories. The heading enumerates the number of phenomena or elements and specifies the trait they have in common.⁵⁵

The development of this pattern may be associated with the tendency to improve instructional methods by referring to models drawn

tion and Interpretation: Essays by Members of the Society for Old Testament Study (Oxford, 1979), pp. 216–221. Zimmerli (“Concerning the Structure,” pp. 178–184) claims that a wisdom admonition does not have an authoritative character and does not make a categorical demand; instead it stimulates reflection and independent decision.

⁵⁵ W. M. W. Roth, *Numerical Sayings in the Old Testament* (SVT 13; Leiden, 1965), pp. 5–9.

from natural science and empirical knowledge. The number in the heading makes it easier for students to remember the lesson.⁵⁶

1.5.2.4 *The Graded Numerical Sequence*

The Graded Numerical Sequence, widespread in the literature of the ancient Near East and found in both the poetry and prose of the Bible,⁵⁷ employs binary parallelism. The two sequential numbers are assigned to the two halves of a verse in increasing order, first x and then $x+1$.⁵⁸

The relationship between the two halves of the verse can be expressed through contents, syntax, or rhythm (alone or in combination). Kugel reevaluates this relationship as following: “B always comes after A, not simultaneously; so B always completes, comments on, or explains, particularizes, or as here, ‘goes one better’”⁵⁹ (see Prov. xxx 18–19; 21–23).

In the graded numerical sequence of Prov. vi 16–19, the second number is relevant to the examples: “Six things there are that the Lord hates, seven his soul does loath: (1) arrogant eyes, (2) a lying tongue, (3) hands that spill innocent blood, (4) a heart that crafts wicked plans, (5) feet that hasten to run to evil, (6) a lying witness who breathes deceit, and (7) a fomenter of strife among brothers.” Thus “seven” represents the true number of examples⁶⁰ or emphasizes the climactic seventh item, which is the most severe crime of all.⁶¹

⁵⁶ On the mnemotechnic role of the number in Proverbs and Ben Sira, see William B. Stevenson, “A Mnemonic Use of Numbers in Proverbs and Ben Sira,” *TGUOS* 9 (1938/39), pp. 26–38. For numbers as mnemonic devices used in rabbinic traditions, see Roth, *Numerical Sayings*, p. 72.

⁵⁷ See Y. Zakovitch, “The Pattern of the Numerical Sequence Three-Four in the Bible,” (Ph.D. dissertation, Hebrew University of Jerusalem, 1979), pp. 3, 29 [Hebrew].

⁵⁸ The graded numerical sequence occurs 38 times in the Bible and Ben Sira; see Wolfgang M. W. Roth, “The Numerical Sequence $X/X+1$ in the Old Testament,” *VT* 12 (1962), pp. 301–307. See the pattern 6/7 in Prov. vi 16–19 and 3/4 in Prov. xxx 15b–16; 18–20; 21–23; 29–31. On the roots of 2/3 and 7/8 in Ugaritic literature, see U. Cassuto, “Biblical and Canaanite Literature,” in *Biblical and Oriental Studies* 2, trans. I. Abrahams (Jerusalem, 1975), pp. 16–59. On the use of paired sequences as a regular poetic schema in the Bible, in Ugaritic poetry, the *Maqlû* tablets, and the Gilgamesh epic, see S. Gevirtz, *Patterns in the Early Poetry of Israel* (SAOC 32; Chicago, 1963), pp. 15–25.

⁵⁹ Kugel, *The Idea of Biblical Poetry*, pp. 52–54.

⁶⁰ Haran termed the second number “the corrector of the first,” as if it displaces the first number and leaves it with no role other than the essence of the lyrical experience. See Menachem Haran, “Biblical Categories, the Pattern of the Numerical Sequence,

The heading of another graded numerical sequence in Proverbs, “Three things are beyond my comprehension, four I do not understand” (xxx 18),⁶² uses the $x/x+1$ pattern to juxtapose two natural phenomena from the animal kingdom—“The way of a vulture in the sky” and “the way of a serpent on a rock”—with two phenomena of human civilization—“the way of a ship on the high seas” and “the way of a man with a maiden.” Here too the four examples match the second number and the number pair is best understood as a word pair distributed between parallel lines.⁶³

its Forms and Relations to the Formal Types of Parallelism,” *Tarbiz* 29 (1970), pp. 109–136 [Hebrew]; idem, “The Graded Numerical Sequence and the Phenomenon of ‘Automatism’ in Biblical Poetry,” *SVT* 22 (1972), pp. 238–67.

⁶¹ Weiss proposes considering the “three” and “four” sequence in the prophecies of Amos as a unique stylistic element found only in that book. He holds that “three plus four” equals the typologically complete number seven. The stylized use of two sequential numbers undoubtedly stems from the frequent Northwest Semitic poetic technique of parallelism, in which the same thought is doubled by being stated in two ways. See Meir Weiss, “On Three ... and on Four,” *Scriptures in their own Light: Collected Essays* (Jerusalem, 1987), pp. 24–25; *ibid.*, *The Book of Amos I* (Jerusalem, 1992), pp. 21–25 [Hebrew].

⁶² In the Septuagint, the header to Proverbs xxx gives the first number as a cardinal number and the second as an ordinal: “Moreover there are three things impossible for me to comprehend, and the fourth I know not” (xxx 18b; cf. 29b). Scholars hypothesize that this pattern attests the original formula in the Hebrew text. See Roth, “The Numerical Sequence,” p. 302 n. 1.

⁶³ For a broader discussion of Prov. xxx 18–20, see §4.2.3. Lindblom asserts that the numerical pattern is grounded “in the teaching of ‘the wise’ ” (Johannes Lindblom, “Wisdom in the Old Testament Prophets,” *SVT* 3 [1960], pp. 202–203).

CHAPTER 2

ANIMAL IMAGERY AS A LITERARY AND ARTISTIC DEVICE

2.1 ADMONITIONS

2.1.1 *Animal Imagery as a Concretizing Device in the Motive Clause*

2.1.1.1 *Ba'al Kānāp 'Winged Creature'*

My son, if sinners entice you, do not consent; If they say, “Come with us, let us lie in wait for blood; let us wantonly ambush the innocent; like Sheol let us swallow them alive and whole, like those who go down to the Pit. We shall obtain every precious treasure; we shall fill our houses with booty. Throw in your lot among us; we will all have one purse.” My son, do not walk in their way, keep your foot from their paths; for their feet run to evil, and they hurry to shed blood. For in the eyes of every winged creature the net is outspread in vain; but they lie in wait for their own lives. Such are the ways of all who are greedy for gain; it takes the life of its possessor. (Prov. i 10–19; free translation)

The Animal

The Bible uses various terms to designate flying creatures: *‘ôp kânāp* ‘winged birds’ (Gen. i 21; Ps. lxxviii 27); *šippôr kânāp* ‘winged bird’ (Deut. iv 17); *‘ôp hārîm* ‘bird of the mountains’ (Ps. l 11); and, the most frequent term (36 occurrences), *‘ôp haššāmayim* ‘birds of the sky’ (e.g. 1 Sam. xvii 44). The collocation *ba'al kânāp* ‘winged creature’ (lit. “possessor of a wing”) occurs only once in the Bible. The similar construction *ba'al k'nāpayim* (Qere) (“possessor of wings”) is found in Qoheleth x 20, where it parallels *‘ôp haššāmayim*. The noun phrase in Prov. i 17b, *kōl ba'al kânāp*, is an inclusive designation for birds, similar to *kōl šippôr kōl kânāp* (Gen. vii 14). These inclusive terms for winged creatures are part of the basic classification of the

animals of earth, air, and water—fish of the sea, beasts of the field, cattle, and reptiles.¹

The Text

Proverbs i 10–19, in which sinners tempt a young man, coincides with the didactic purpose announced in the opening verses of the book; namely, that these Proverbs are meant “for endowing the simple with shrewdness, the young with knowledge and foresight” (i 4). The structural and stylistic components of this passage are typical of admonitions: The speaker employs direct address, “My son,” and begins with a hypothetical scenario: “if sinners entice you” (v. 10). The exhortation is expressed by a blunt prohibition: *ʔal tōbēʔ* ‘do not consent’, appropriate to his authoritative standing.²

In the second conditional clause (vv. 11–14), the criminals’ plans are described in vivid detail, with boastful verbiage enunciating both the fate of their victims and the rich loot they expect to share among themselves.³

The speaker uses the vocative “my son” a second time in v. 15, where he repeats his opening admonition that the youth not “walk in their way” and follow the evildoers’ wicked path.

The last section of the passage offers two motives for heeding the speaker’s admonition. One proposes a moral reason for not joining the sinners’ company: “For their feet run to evil, they hurry to shed blood” (v. 16; cf. Isa. lix 7). The second explains their ultimate failure: “For in the eyes of every winged creature the net is outspread in vain; but they lie in wait for their own lives.” (vv. 17–18).⁴

The passage concludes with a result clause that invokes the principle of divine retribution: “Such are the ways of all who are greedy

¹ The use of *baʿal* as the nomen regens of *kānāp* reflects Aramaic influence. See Avi Hurvitz, “Studies in the Language of the Book of Proverbs: Concerning the use of the Construct Pattern *baʿal* x,” *Tarbiz* 55 (1986), p. 12 [Hebrew].

² BHK³ reads the problematic MT *ʔl tbʔ (tōbēʔ)* as the initials of *ʔal tēlēk bʿderek ʔittām* “do not walk in the way with them” [RSV: v.15]. Fox (*Proverbs 1–9*, p. 85) explains the MT *tbʔ (tōbēʔ)* as an apocopated form of *ʔbh (tōʔbeh)*, from *ʔ-b-h* ‘be willing’, with elision of the *aleph*. The writing of the final vowel with *-ē* is apparently an Aramaism (cf. *yôreʔ* in Prov. xi 25; see GKC §75*hh*.).

³ On casting lots or throwing dice to divide up loot and inheritance, cf. Prov. i 14 with Joel iv 2–3. For the biblical meaning of *kīs* ‘purse’ (Prov. xvi 11; Deut. xxv 13; Mic. vi 11; Isa. xlvi 6), cf. Akk. *kīsu(m)* II, *CAD* K, pp. 431–32.

⁴ Richard Clifford claims that v. 16, which appears also in Isa. lix 7, is a late interpolation by a copyist of Proverbs who did not understand v. 17. See R. J. Clifford, *Proverbs* (OTL; London and Leiden, 1999), p. 39.

for gain; it takes away the life of its possessor" (v. 19); i.e., the life of the perpetrator.

The animal image in v. 17 grounds the motive of the admonition in this passage. At first glance, the image of winged creature and net seems to interrupt the syntactic and conceptual flow between v. 16, "For their feet run to evil, and they hurry to shed blood," and v. 18, "but they lie in ambush for their own blood," since the latter completes the former with the principle of divine retribution.⁵

But the image of the bird that is oblivious to its peril in v. 17, clearly inserted as a motive for eschewing the sinner's evil ways, challenges readers to understand the complex relation between the image and its symbolic meaning or moral lesson. There are two possibilities: the net laid for the winged creature may represent the trap set for innocent victims; or the criminals may be thought of as falling victim to their own evil plot.⁶

In order to understand the enigmatic parable and the interrelations between the image and its moral, we must first clarify the sense of the phrase *m^ezōrâ hārešet* 'the outspread net'. The outspread net is a frequent metaphor for the attempt to entrap a designated victim. The verbal component is usually from the root *p-r-ś*, as in "I will spread My net over him and he shall be caught in My snare ... for the trespass which he committed against Me" (Ezek. xvii 20; cf. xii 13, xix 8, xxxii 3; Hos. vii 12); or the root *ṭ-m-n* (Ps. ix 16, xxxi 5, xxxv 7). The use of *m^ezōrâ* here is a hapax. Reading *m^ezōrâ* as an active participle of the secondary root *m-z-r*, derived from *z-w-r/z-r-r* 'tighten, shrink', is not plausible, because the action—which would be that of fastening the net on the victim—is described as a possible deterrent to it; and this action is said to be *hinnām* 'in vain'. In other words, the hunted creature is not conscious of the possibility that the net will close in on it.⁷ If, accordingly, we take *m^ezōrâ* to refer to spreading out the net,

⁵ See Kahana, *Mishley*, p. 5; David W. Thomas, "Textual and Philological Notes on Some Passages in the Book of Proverbs," SVT 3 (1955), p. 282 n. 3; B. Gemser, *Sprüche Salomos* (HAT 16; Tübingen, 1963), p. 20; McKane, *Proverbs*, pp. 270–71.

⁶ Delitzsch (*Proverbs of Solomon* I, pp. 65–66) explores the solution of the *applicatio similitudinis* of the birds and the net parable: "The net leads us to think only either of the net of the malicious designs, or the net of the alluring deceptions." He concludes that those who are warned should apply the image and stay away from evildoers, just as the bird flees the net. The application of "for the net is outspread in vain (*hinnām*)" is to avoid their ensnarement.

⁷ Driver vocalizes the word as *mūzārâ* (*hop'al* participle of *z-w-r* or *qal* passive participle of *m-z-r*), glossing both roots as "tighten, constrict" (cf. *z-w-r* (*z-r-r*) 'com-

from the root *z-r-h* or *m-z-r*, as in the vocalized verb *m^ezūrāh* ‘stretched out’, the bird still does not perceive the net as a threat.

The motive clause, “For in the eyes of every winged creature the net is outspread in vain,” might refer to the behavior of killers: because nothing deters them from their wicked deeds, the warning addressed to them is in vain (cf. Ps. xxxv 7; Lam. iii 52; Job ii 3). Rashi interprets *m^ezōrā* as meaning both baiting the net with grain and spreading it out as a snare. He clarifies the puzzling *hinnām* through reference to parable about the innocence of fish that do not discern the hook as a trap, but perceive the bait as food and swallow it to their ruin.⁸ Just as the winged creatures are victims of their own hunger, the highwaymen’s appetite for plunder causes them to fling caution to the winds and fall into the very snare they set for others.⁹ Rashi’s comment reflects a realistic approach, based on empirical observation of the behavior of birds, which often remain oblivious of the dangers of the net and the trapper’s cunning. This simpleminded behavior of birds is reflected in the wilderness stories of the Israelites, in which quail alighting on land after a long sea journey were probably caught in nets (Num. xi 31–32; Exod. xvi 13; Ps. lxxviii 26–28).¹⁰ It seems, then, that the net here will ensnare the sinners who lie in wait for the youth and threaten his innocence. The young man is exhorted to avoid the company of sinners, saving himself from their fate and thereby saving his own life.

Here the LXX is phrased in the negative, as if the Hebrew were *kī lō’ ʔhinnām*: οὐ γὰρ ἀδίκως ἐκτείνεται δίκτυα πτερωτοῖς (“nets are not without cause [*lit.* unjustly] spread for birds.” In this reading, the folly of the lad, if he allows himself to be seduced by the criminals, is compared to the innocence of the victimized winged creature.¹¹ The young man is called on to act with caution and avoid the immediate

press’, as in “he squeezed the fleece” [Judg. vi 38]). See Godfrey R. Driver, “Problems in the Hebrew Text of Proverbs,” *Bib* 32 (1951), p. 173. Cf. BDB, *z-w-r* III, pp. 266–67.

⁸ *Midrash Shohar Tov on Proverbs* (Jerusalem: Midrash Publishing, n.d.), 5. For the synonyms *z-r-h* (*z-w-r*) and *p-ṣ-h* (*p-w-ṣ*) ‘scatter’ see Ezek. xxii 15, xxix 12.

⁹ Most modern scholars reject Rashi’s “strewn [with seed]” (Thomas, “Textual and Philological Notes”, pp. 281–82), because there is no mention of grain in the text. See Delitzsch, *Proverbs of Solomon I*, p. 65; Fox, *Proverbs 1–9*, pp. 88–89.

¹⁰ See also Isa. xix 8. For an illustration of the mechanism of netting birds, see O. Keel, *The Symbolism of the Biblical World: Ancient Near Eastern Iconography and the Book of Psalms*, trans. T. J. Hallett (Winona Lake, IN, 1997), pp. 89–95.

¹¹ See Isaac Arama in his commentary on Proverbs, in I. Freimann (ed.), *Yad Avshalom* (Leipzig, 1858–59), p. 8.

danger to himself. His situation is precisely that of the lad who follows the adulterous woman, who is “like a bird rushing into a trap, not knowing his life is at stake” (Prov. vii 23b).

We find a similar stylistic and conceptual pattern in Ps. xxxv 7:

Ps. xxxv 7	Prov. i 17a
<i>kî ḥinnām ṭām^enû lî šaḥat riš^etām</i> <i>ḥinnām ḥāp^rru l^rnapšî</i>	<i>kî ḥinnām m^ezōrâ harešet b^eênêy</i> <i>bā'al kânāp</i>
For in vain they hid a net to trap me, in vain they dug a pit for me.	For in the eyes of every winged creature the net is outspread in vain.

In Psalms, the adverb *ḥinnām* appears as an anaphora in both clauses of the synonymous parallelism to emphasize the vain striving of the evildoers. Here *ḥinnām* has a double meaning: their plots are both unjustified and in vain—the victim is innocent and will come through unscathed. In Proverbs, too, the text speaks of the casting of the net over the innocent victims *nāqî ḥinnām* (v. 11c) of the evildoers (although, as we shall soon see, it does so ironically).

In Proverbs i 10–19 the key word *nepeš* ‘life’ is transferred from the innocent victim to the perpetrator of violence, shaping a circular conception of the principle of retribution. The ensnared victim is, in fact, the evildoers caught in their own web: “They lie in wait for their own lives” [*l^rnapšōtām*] (v. 18b) and their way “takes the life of its possessor” [*nefeš b^eālāyw*] (v. 19b). The same idea of the “sophisticated” net that turns from its target and traps the ensnarer instead of the victim appears in the Psalm just referred to: “For in vain they hid a net to trap me [*lî*], for in vain they dug a pit for my life [*l^rnapšî*]” (Ps. xxxv 7). The bird as a metaphor for the trapped soul is found in another psalm, too: “We are like a bird escaped from the fowler’s trap; the trap broke and we escaped” (cxxxiv 7).¹² The similarity of the stylistic components in Psalms helps us understand the figure in Proverbs i 17.

In the didactic rhetoric of the admonitory speech, the metaphor of trapping birds has turned into a moral lesson that offers the honest victim an escape route, while the wicked man is ensnared by the trap that he himself has set. The image of the outspread net makes the dangers that attend the lad tangible and is transformed into a figurative illustration of the principle of retribution.¹³

¹² On the circular perception of divine retribution, see Ps. ix 16; xxxv 8; lxxvii 7; Job xviii 8; Prov. i 24–33; ii 21–22; iii 7–11.

¹³ On retribution and character-consequence nexus in Proverbs, see Waltke, *The Book of Proverbs Chapters 1–15*, pp. 73–76, 197.

2.1.1.2 *Nešer* ‘Vulture’

Do not toil to gain wealth; Have the sense to desist. You see it, then it is gone; it grows wings and flies away, like a vulture, heavenward. (Prov. xxiii 4–5)

The Animal

The noun *nešer* occurs in various Semitic languages: e.g., Ugaritic *nšr* ‘bird of prey’, conventionally rendered “eagle” or “falcon,” widely attested in the Aqhat Legend;¹⁴ *nešrā* in various Aramaic dialects; Arabic *nasrum*; Ethiopian *nesr*. In Akkadian, *zību* is vulture and *erû* is eagle. Only once is *našru* given as a gloss to *erû* in the Sumerian-Akkadian lexical lists *ura=hubullu* (Tablet XVIII).¹⁵

The *nešer* is mentioned 28 times in the Bible, more than any other impure bird. The references and images of the *nešer* in biblical sources seem to indicate the griffon vulture (*Gyps fulvus*), rather than the eagle (*Aquila spp.*) The book of Micah invokes the *nešer*’s bald neck in a powerful image of exile and desolation: “Shear off your hair and make yourself bald, for the children you once delighted in; make yourself as bald as a *nešer*, for they have been banished from you” (Mic. i 16).¹⁶ In Job, too, the *nešer* is described as a carrion-eater, peering down from its aerie at the battlefield in search of food: “From there he spies out his food; From afar his eyes see it. His young gulp blood; Where the slain are, there is he” (xxxix 29–30; cf. Prov. xxx 17; Hab. i 8).¹⁷

¹⁴ In Ugaritic, *nšr* occurs in parallel with *diy* (hawk) or in pl. *nšrm*/[*hbl d*]/*iy*m ‘eagles/a flock of kites’ (Aqhat, CAT 1.18, Tab. II, Col. IV, lines 17–18, 19–21), but the contexts offer no hint as to its specific identity. See Simon B. Parker, *Ugaritic Narrative Poetry* (SBLWAW 9; Atlanta, 1997), pp. 65–66. See also the discussion of *nšr* in the Aqhat legend by Militarev and Kogan, *SED*, No. 166.

¹⁵ *Našru* (Hg. C I 26, in MSL 8/2 172) is probably a late replacement for *erû* ‘eagle’, borrowed from the Northwest Semitic languages. See CAD N/2, p. 79.

¹⁶ The attempt to link *nešer* with the root *n-š-r* ‘fall off’, explained by the bird’s bald neck and head mentioned by Micah, is incompatible with the original *šin* of the Semitic root of *nešer*; if derived from *nešîrâ* ‘falling out’ the *šin* would be transcribed as a *tāw*.

¹⁷ The motif of birds of prey feeding on dead warriors on the battlefield is frequent in ancient Near Eastern literature, related to the sanctity of corpses and the importance of proper burial. Cf. 1 Sam. xvii 44–46; Ps. lxxix 2–3 and the Ugaritic story of Aqhat, in which a flock of hawks circles over the slain body of Dan’îl (CTA 19.1: 32–33). The motif of unburied corpses is echoed in the biblical curses against violators of the

The *nešer* comes first in the lists of impure birds in Lev. xi 13–19 and Deut. xiv 12–18. Following the principle that the most important and widespread item is the first to be listed in any category, we should identify *nešer* as the vulture, which is one of the most common birds of prey in the region of Israel.¹⁸

The biblical references to the *nešer* allude to its impressive qualities that aroused admiration among the ancients. Its large size and wingspan are mentioned in an allegorical passage of Ezekiel: “The great *nešer* with the great wings and the long pinions” (xvii 3; cf. Jer. xlix 22). The *nešer* glides lightly despite its weight (Deut. xxviii 49; Isa. xl 31; Jer. iv 13, xlviii 40, xlix 15, 22; Ezek. xvii 3, 7; Lam. iv 19; Prov. xxx 18–19; Job xxxix 26). The way it soars easily and freely symbolizes the renewal of youthful strength (2 Sam. i 23; Isa. xl 31; Jer. iv 13; Hab. i 8; Lam. iv 19; Ps. ciii 5). The vulture builds its nest high up in the crannies of cliffs: “Building his nest high, dwelling in the rock, lodging upon the fastness of a jutting rock” (Job xxxix 27–28; cf. Jer. xlix 16; Obad. 4), whereas the eagle nests on trees. The *nešer* is also depicted as especially devoted to its young and providing its young with food (Hab. i 8; Job ix 25). The image of the *nešer* carrying its young on its wings, instead of holding them in its claws (cf. Exod. xix 4), however, should be regarded as folklore and without foundation in reality.¹⁹

The Text

Structurally and stylistically, Prov. xxiii 4–5 is an admonition.²⁰ The unit is introduced by two prohibitions: “Do not toil to gain wealth; Have the sense to desist.” The warning against acquiring wealth is followed by an appeal to act deliberately and intelligently when com-

Covenant (Deut. xxviii 26; 1 Kgs xiv 11; xvi 4; xxi 24; Jer. xvi 4; xix 7; xxxiv 20, et passim), see M. Weinfeld, *Deuteronomy and the Deuteronomistic School* (Oxford, 1972), pp. 129, 132–140. Cf. the Maqlû curses, G. Meier, *Die Assyrische Beschwörungssammlung Maqlû*, AfOB 2 (1937), 56, Col. VIII, 85; D. R. Hillers, *Treaty Curses and the Old Testament Prophets* (BibOr 16; Rome, 1964), pp. 54–56.

¹⁸ See Godfrey R. Driver, “Birds in the Old Testament,” *PEQ* 86 (1955), p. 8. On *nešer* = vulture see: Tristram, *The Natural History of the Bible*, pp. 95–96, 172–79, 182–86; Y. Feliks, *Animals in the Bible* (Tel Aviv, 1954), p. 66 [Hebrew]; Menahem Dor, “Hannešer Veba‘ayit,” *Leš* 27–28 (1963/4), pp. 290–92 [Hebrew]; David Talshir, “The Semantic Shift of *Nesher ‘Ayit* and *Dayah* in Hebrew,” *Leš* 62 (1999), pp. 107–27 [Hebrew].

¹⁹ See *Mekilta de Rabbi Yišmael, Beḥodesh Yitro* 2, ed. H. S. Horowitz and I. A. Rabin (Frankfurt, 1928), pp. 207–8; *b. B. Bat.* 16b.

²⁰ On the admonition pattern, see §1.5.2.1.

plying with this warning. The passage concludes with a simile that equates riches with a bird: “It grows wings and flies away, like a vulture heavenward.”

This admonition warns against striving excessively for wealth: “Do not toil to gain wealth.”²¹ Such an effort is perceived as conduct that is contrary to the ideal ethos of the sage as well as incompatible with the righteous and the faithful believer in God: “He who trusts in his wealth shall fall, but the righteous shall flourish like foliage” (Prov. xi 28; cf. xiii 7, xxii 1, xxviii 11, 20; Qoh. ix 11). Exertion in pursuit of wisdom is valued to the same extent as that in pursuit of riches: “The ornament of the wise is their wealth” (Prov. xiv 24a). But striving in vain and for no concrete achievement characterizes the fool: “A fool’s exertions tire him out, for he doesn’t know how to get to a town” (Qoh. x 15).

The chiasmic placement of the prohibitive forms *ʾal* ‘do not’ and *ḥādāl* ‘desist’ sets up a paradoxical link between the exhortation to abstain from pursuing riches, a negative value, and that to draw back from understanding, a positive value. The asyndeton does not clarify the association of ideas. The best way to resolve the paradox is to merge the two terms of prohibition into a single syntactical and conceptual clause: Do not toil; desist from using your intelligence in order to gain wealth—hence rendering the *mem* as instrumental rather than as privative.²²

The rhetorical question, *ḥātāʾip* (Q) *ʿênêkā bô w^eʿênennû*, rendered as a conditional clause, “[If] you see it, then it is gone” (xxiii 5a), provides logical justification for the prohibition.²³

Rashi glosses *ḥātāʾip* as “doubling the eye,” i.e., blinking rapidly: riches pass away in the blink of an eye. This is a plausible interpretation, because in Job the same idiom is applied to the transience of life:

²¹ The root of *tīgāʿ*, *y-g-ʿ* ‘toil, be fatigued’, is a synonym of *ʿ-y-p* (see Deut. xxv 18; Isa. xl 28). The LXX reads “If you are poor, do not measure yourself against a rich man,” rendering the infinitive *ʾhāʿāšīr* ‘to acquire wealth’ as if it were *ʾheʿāšīr* ‘to the rich man’. Hitzig reconstructs a conjectural Hebrew *ʾal tīgāʿ ʾheʿāšīr* ‘Do not approach the rich man’ (cf. Tg). See A. J. Baumgartner, *Etude critique sur l’état du texte du Livre des Proverbes* (Leipzig, 1890), p. 205.

²² Ibn Ezra merges the two prohibitions into one consecutive idea: “Cease using your intelligence for the purpose of gaining wealth.”

²³ The interrogative particle *hā-* can be understood as introducing a rhetorical question that expresses surprise—“[if] you see it”—or as an idiomatic expression, “you blink your eyes at it and it is gone.”

“The eye that gazes on me will not see me: your eye will seek me, but I shall be gone” (Job vii 8).²⁴

The Qere *hātāʾīp* is addressed to the hearer, with “your eyes” the object of the verb. Toy holds that the text is corrupt and that *hātāʾūp/hātāʾīp* in the first clause is a scribal insertion from the nearly identical *yaʾūp* (Q) in the second clause; restoring the original text, without it, yields “your eye [is] on it, and it is gone” (cf. Job vii 8). He also emends the reduplication of the root ʿ-š-h, correcting ʿāšoh to ʿōšer ‘wealth’; i.e., “... wealth grows wings and flies away.” McKane understands *tāʾīp ʿênêkā* as “cast a glance.”²⁵

The simile that winds up the passage, “like a vulture it flies (*yaʾūp* [Qere]) heavenward” (v. 5c),²⁶ illustrates the notion that riches may vanish as fast as a vulture soaring aloft. The rhetorical impact of the simile is reinforced by the word play of *hātāʾīp* and *kēnāpayim*, which foreshadow, phonetically and pictorially, the vulture that soars heavenward and vanishes. However, the object pronouns *bô* (v. 5a) and *lô* (v. 5b) draw attention to the main issue of wealth, introduced in v. 4.

Except for the fact that the bird depicted here is a predator, a Sumerian adage presents a similar notion of the fickleness of wealth and material possessions: “Possessions are small birds flying around, unable to find a place to settle.”²⁷ The biblical passage also has a close parallel in the instructions of *Amenemope*:

²⁴ Ibn Ezra assumes that *tāʾīp* derives from the hapax *tāʾūpā* “lights up” (3rd fem. sg., according to the Masoretic pointing), and interprets the clause: “If you light up your eyes by gazing on riches,” (cf. “You will shine, you will be like the morning,” Job xi 17). Other commentators compare *tāʾīp* to ʿēpātā (Job x 22) or ʿēpā (Amos iv 13) as a semantic antonym of “light” i.e., “darkness,” synonym of ʿēpātā and ʾōpel. See E. Dhorme, *A Commentary on the Book of Job* (trans. H. Knight; Leiden, 1967), pp. 157, 165–66, and for the semantic antonym of *tāʾīp* in Proverbs see R. Menachem ben Shelomo Hameʾiri, *Pêrûš Hameʾiri ʿal Seper Mišley*. ed. Menachem Mendel Meshi-Zahav (Jerusalem, 1969), p. 222; A. B. Ehrlich, *Psalmen, Sprüche und Hiob in Randglossen zur hebräischen Bibel* (Leipzig, 1913; repr. Berlin, 1968), pp. 51, 56.

²⁵ Toy, *Proverbs*, p. 429; McKane, *Proverbs*, pp. 382–83.

²⁶ The Qere *yaʾūp* is attested also by the Targumic version. The reading *wʿēp* appears in a few Hebrew MSS. See *BHS*.

²⁷ This translation is that of Black, “The Imagery of Birds in Sumerian Poetry,” pp. 35–36; see Heimpel, *Tierbilder*, pp. 451–52; Gordon translates: “possessions are migratory flocks of birds, unable to find a place to stay.” E. I. Gordon, *Sumerian Proverbs: Glimpses of Everyday Life in Ancient Mesopotamia* (Museum Monographs; Philadelphia, 1959), p. 50 Coll. 1.18. Landsberger (*Die Fauna des Alten Mesopotamien*, pp. 18, 122) rendered *buru*⁵ as *eribu*, “locusts.” Lambert renders *buru*⁵ *mušen* as “sparrows”. Maurice Lambert, “Le signe *bur*₅ et sa signification ‘moineau,’” *RA* 48 (1954), pp. 29–32.

IX (10) Cast not thy heart in pursuit of riches,
 (For) there is no ignoring Fate and Fortune.
 Place not thy heart upon externals,
 (For) every man belongs to his (appointed) hour.
 Do not strain to seek an excess,
(15) When thy needs are safe for thee.
(16) If riches are brought to thee by robbery,
(17) They will not spend the night with thee;
(18) At day break they are not in thy house:
 Their places may be seen, but they are not.
 The ground has opened its mouth...that it might swallow them up,
X (1) And might sink them into the underground.
 (Or) they have made themselves a great breach of their (own) size and
 are sunken down in the storehouse.
 (Or) they have made themselves wings like geese
(5) And are flown away to the heavens.²⁸

In both the biblical and the Egyptian admonitions, wealth is pictured as a winged creature that flies away—the vulture in Proverbs, and geese, common in Egypt, in *Amenemope*.²⁹

Both the biblical and Egyptian sayings are clearly framed as admonitions, in direct address, with imperatives, motive clauses, and a consequential clause. Both perceive wealth as something negative that humans should not tax themselves to achieve. But whereas the Egyptian text warns against becoming rich through crime, for Proverbs the ways of acquiring wealth are irrelevant. *Amenemope* invokes up “Fate and Fortune” as a theological argument: “Every man belongs to his (appointed) hour.” Thus fate and fortune are not in human hands.

Egyptian Wisdom literature associated its teachings with the goddess Ma’at, who played an important role in the Egyptian perception of life. Ma’at was the central concept behind the cosmic and social order; thus living in harmony with Ma’at meant obeying the laws of the land and fulfilling human destiny.³⁰ In the didactic speech of biblical Wisdom literature, on the other hand, we may discern the individual’s

²⁸ *Amenemope*, Chapter 7, ix, lines 10–18; x, lines 1–5, in *ANET*, p. 422; see McKane, *Proverbs*, pp. 6, 103, 382–83.

²⁹ Egyptian artists often portray geese. See, e.g., the humoristic drawing on the ostrakon from Deir el-Medina, in Patrick F. Houlihan, “Animals in Egyptian Art and Hieroglyphs,” *HAWANE*, p. 125.

³⁰ H. H. Schmid, *Wesen und Geschichte der Weisheit* (BZAW 101; Berlin, 1966), p. 17; Kayatz, *Studien zu Proverbien* 1–9, pp. 15–75. For a summary of the difference between Ma’at and the biblical concept of Wisdom, see Whybray, *The Book of Proverbs*, pp. 65, 130.

cautious efforts to make use of his own powers of observation and understanding. In this setting, wealth is not considered to be the main goal toward which individuals should strive and true stability comes from wisdom: “A house is built by wisdom, and is established by understanding; by knowledge are its rooms filled with all precious and beautiful things” (Prov. xxiv 3–4).

Thus despite their different worldviews and conceptual backgrounds, both texts use birds to illustrate the ephemeral condition of those who exhaust themselves to acquire wealth and the transience of riches.

The Book of Proverbs challenges the teacher’s competence by his capacity to discern the appropriate opportunities for using his intellect and refraining from using it in certain cases: “Trust in the Lord with all your heart, and do not rely on your own understanding” (Prov. iii 5). Other sayings recommend marshalling all one’s mental faculties in pursuit of wisdom: “The beginning of wisdom is—acquire wisdom; with all your acquisitions, acquire discernment” (Prov. iv 7).³¹

2.1.2 *Animal Imagery in the Consequence Clause*

2.1.2.1 *Nāḥāš ‘Serpent’ and Šip’ônî ‘Viper’ in a Satirical Poem*

Who has woe? Who has sorrow? Who has strife? Who has complaining? Who has wounds without cause? Who has redness of eyes?

Those who tarry long over wine, those who go to try mixed wine.

Do not look at wine when it is red, when it sparkles in the cup and goes down smoothly.

Its end is like a serpent that bites, and like a viper that secretes [venom].

Your eyes will see strange things, and your mind utter perverse things.

You will be like one who lies down in the midst of the sea, like one who lies on the top of a mast.

“They struck me,” you will say, “but I was not hurt; they beat me, but I did not feel it. When shall I awake? I will seek another drink.”³² (Prov. xxiii 29–35)

³¹ *Bînâ* can mean both the contemplative faculty and the intellectual ability to discern and deduce. The root *b-y-n* designates careful observation, as in “When you sit down to dine with a ruler, consider well (*bîn tābîn*) who is before you” (Prov. xxiii 1). See Fox, *Proverbs 1–9*, p. 30.

³² The translation follows the RSV, except for a free rendering of v. 32.

The Animal

Ṣipʿônî represents the entire family Viperidae; the *ṣepaʿ* has been identified with *Vipera palestinae*, a yellow poisonous snake prevalent in Israel.³³ The viper lives near human habitats and its bite is considered dangerous. Its hollow fangs inject its victims with the venom secreted by the poison glands, as indicated here by the verb *p-r-š* ‘secrete’ (Prov. xxiii 32b).

Ṣipʿônî occurs in biblical literature parallel to *peten* ‘asp, viper’, which presumably represents the family Elapidae (Isa. xi 8), as well as to the general term *nāḥāš* ‘snake’ (Prov. xxiii 32; Isa. xiv 29). The plural *ṣipʿônîm* appears as an adjective modifying *nēḥāšîm* (Jer. viii 17), thus indicating its use as a generic term.

Biblical sources tell us that the *ṣipʿônî* lives in a den (Isa. xi 8) and bites its victims (Jer. viii 17; Prov. xxiii 32). Isaiah’s portrayal of the *ṣipʿônî* as an egg-layer (lix 5a) is consistent with the behavior of *Vipera palestinae* and of most snakes in Israel, although in Europe the members of the family Viperidae are ovoviviparous, giving birth to live young after the eggs develop within the mother’s body.³⁴

The identification of snake names according to particular characteristics is problematic. The ancient translators were not sure about the identification of these snakes. The Aramaic translations use the same equivalent *ḥūrmānāʾ* for *ṣipʿônî* (Prov. xxiii 32), *šēpīpōn* (Gen. xlix 17), *hanēḥāšîm hasērāpîm* (Num. xxi 6), and *ʿepʿeh* (Job xx 16).

In folklore, the snake has been the enemy of humankind since time immemorial, as in the divine chastisement of the serpent in Eden: “They shall strike at your head, and you shall strike at their heel” (Gen. iii 15; cf. Ps. xci 13). Snakes are sworn enemies of human beings, lying in ambush for them on the road (Gen. xlix 17). Hence snakes’ venom symbolizes the malicious intentions of evildoers and is turned against them in retribution: “His food in his bowels turns into asps’ venom within him” (Job xx 14).

³³ See Tristram, *Natural History*, pp. 275–76; Feliks, *Animals in the Bible*, p. 104; R. G. Murison, “The Serpent in the Old Testament,” *AJSL* 21 (1905), p. 119; I. Löw, *Fauna und Mineralien der Juden* (Hildesheim, 1969), p. 33. Dor (*Animals in the Days of the Bible, the Mishnah and the Talmud*, p. 159) identifies the *ṣipʿônî* with the viper, i.e., the *ṣepaʿ* (*Vipera xanthina palestinae*).

³⁴ See Dor, *Animals in the Days of the Bible, the Mishnah and the Talmud*, p. 160; Karen R. Joines, “The Serpent in the Old Testament” (Ph.D. diss., Southern Baptist Theological Seminary, 1966), p. 10.

The Text

Proverbs xxiii 29–35 is an exhortation against drunkenness and the drunkard's bad habits. The passage opens with a string of six short rhetorical questions, linked by the anaphoric interrogative *lēmî* 'to whom?' or 'who has?' In the Hebrew these questions constitute a rapid-fire staccato pattern: the first four questioned are two words each; the last two, three words each. The onomatopoeic expressions of grief and despair, *ʾôy* 'woe' and *ʾăbôy* 'sorrow', are borrowed from the lament *Gattung*;³⁵ "strife," "complaining,"³⁶ and "wounds" are terms taken from the semantic field of quarrel and dispute.

The noun *mādôn* occurs frequently in Proverbs (18 of its 22 occurrences in the Bible) as a synonym for *rîb* 'strife, conflict' (xv 18; xxvi 21).³⁷ A tendency to provoke quarrels is perceived as characteristic of mischief-makers, whose malevolent intentions are to cause strife and separate friends (see Prov. vi 14; xvi 28). The drunkard is considered to be a potential quarrelmonger. Proverbs warns against the company of hot-tempered persons who are quick to provoke fights (cf. Prov. xv 18, xxviii 25, xxix 22), causing physical confrontations and injuries for no purpose. The solution to the riddle is provided by the final question: "Who has redness of eyes?" (v. 29d). The idiom *ḥaklîlût ʿênāyim* alludes to the dark red wine.³⁸ The sense of *ḥaklîlût ʿênāyim* is picked up later in the poem, in connection with wine itself: "Do not look at wine when it is red, when it sparkles in the cup and goes down smoothly" (v. 31).

An explicit answer to the barrage of questions is provided by two clauses introduced by the attributive *lamed*: "Those who tarry long over wine, those who go to try mixed wine" (v. 30). These two answers portray the typical behavior of the drunkard, as described elsewhere by Isaiah: "Ah, Those who chase liquor from early in the morning, and till late in the evening are inflamed by wine!" (Isa. v 11; cf. v. 22).

³⁵ *ʾôy* 'woe' appears in laments (Jer. iv 13, xiii 27, xv 10; Lam. v 16). *ʾăbôy* is a hapax, probably formed to rhyme with *ʾôy*.

³⁶ For *śîaḥ* as "complaint" see 1 Sam. i 16 and Job xxiii 2.

³⁷ The plural *midyānim* also occurs in Prov. vi 14 [Qere].

³⁸ Rashi and Ibn Ezra interpreted *ḥaklîlût ʿênāyim* (here and in Gen. xlix 12) as redness of eye, usually linked with wine-drinkers. The Targum uses the root *s-m-k* 'be red'. Compare Akkadian *ekēlu* 'be(come) dark' applied to the sun or mood (see *CAD*, E, p. 64 iv). See McKane, *Proverbs*, p. 393.

The sarcastic description of the drunkard is molded by words borrowed from lexicon of the sage. In Wisdom Literature, the infinitive *laḥqōr* ‘to search, examine’ (v. 30) refers to the mysteries of creation and its wonders (see Job xxviii 27) or to human intellectual discernment (see Prov. xxviii 11); here it mocks the intellectual effort invested in mixing intoxicating beverages.

In v. 31 the speaker makes the transition from posing riddles to the direct-address style of the exhortation, but he continues to employ figures of speech that maintain the ironic overtone: “Do not look at wine when it is red, when it sparkles in the cup and goes down smoothly.”

The adverbial *mêšārîm* (v. 31d), contextually interpreted “smoothly,” often comes in combination with *šedeq* ‘justice’ (Prov. i 3, ii 9; Isa. xi 4, xxxiii 15, xlv 19) to convey the idea of a moral path. Here *mêšārîm* is associated ironically with the smooth passage of wine over the palate (v. 31b), similar to the description of the loving wife in the love poem: “And your mouth like choicest wine, let it flow (*l’mêšārîm*) to my beloved as new wine gliding over the lips of sleepers” (Song vii 10).

The drunkard’s ultimate destiny is dramatized by two separate images: one exemplifies the consequences of drinking wine as like the sensation of the bite of a poisonous viper; the other compares him to a man sleeping in mid-ocean on the top of a mast during a violent storm.

The consequential clause of the warning employs the term *’aḥārit*, which does not necessarily indicate the end of life or even the future in general,³⁹ but rather “aftereffect”—the effect of drinking wine to the point of intoxication. The simile of “like a viper that secretes” is defective; the Septuagint and Vulgate insert the accusative “venom” as the object of the verb. It is certainly possible that *rōš* or *rōš* ‘venom’ has dropped out by haplography, due to the proximity of *yapriš*.⁴⁰

The other image evokes what the drunk feels, which is compared to the experience of someone who sleeps on a wildly rocking vessel or atop a mast (cf. Ps. cvii 23, 27). The hapax legomenon *hibbēl* ‘mast’

³⁹ Cf. Prov. xxiii 18; xxiv 14. See Fox, *Proverbs 1–9*, p. 197.

⁴⁰ *Rōš/rōš* occurs in various compounds; see Deut. xxxii 32c, 33b. Rashi glosses *yapriš* as “sting” or as from the root *p-r-š* ‘separate [from life]’. Gemser (*Sprüche Salomos*, p. 88) understands the verb as meaning “puncture and inject.” McKane (*Proverbs*, p. 395) opts for “prick, puncture,” by analogy to Arabic *paraṭa* ‘wound in the liver or stomach’.

(v. 34)—a noun rather than a verb in the *piʿel*—is derived from *hebel* ‘rope’, and probably refers to the ropes tied to the masthead.⁴¹

The images of snake and viper are ironically related to the interpretation of the term *ʾaḥārīt*. The moral retribution awaiting the drunkard is articulated in the conceptual paradigm of the wrong and right ways of conducting life in Proverbs: “A road may seem right to a man, but in the end (*ʾaḥārīt*) it is a road to death” (Prov. xiv 12, xvi 25).⁴² However, the sarcasm about the toper does not end with the sage’s rebuke and moral lesson, but with the pathetic confession of the drunkard himself, who, sobering up, says: “They struck me, but I was not hurt; they beat me, but I did not feel it” (v. 35). This conclusion deviates from the standard pattern of the admonition, which usually offers its moral in the final clause, as in: “Such is the fate of all who pursue unjust gain; It takes the life of its possessor.” (i 19; cf. vi 11, ix 36, xxiii 5). We may conjecture, then, that the direct warning (vv. 31, 33–34) and ultimate consequence (v. 32), stylistic components of the admonitory speech, were deliberately interpolated into a satire on those who drink excessively (cf. Isa. v 21–22, lxv 11), like the New Kingdom Instruction of Ani, which uses the exhortation pattern rather than satire.

Don’t indulge in drinking beer, / lest you utter evil speech / And don’t know what you are saying. / If you fall and hurt your body, / None holds out a hand to you: / Your companions in the drinking / Stand up saying: “Out with the drunk!” / If one comes to seek you and talk with you, / One finds you lying on the ground, / As if you were a little child (4.7–10).⁴³

⁴¹ The Septuagint renders verse 34b “as a sailor in a great wave,” reading *hōbēl* (cf. Ezek. xxvii 8, 29; Jonah i 6).

⁴² *ʾAḥārītō* is also mentioned with hope (Prov. xxiii 18; xxiv 14; Jer. xxxi 17). *ʾAḥārītō* is either an accusative adverb (“at the last” [RSV]) or is a noun clause to which the following clause functions as virtual predicate: “Its end is: like a serpent it bites” (cf. the same syntactic relation in Prov. xxix 21). See Delitzsch, *Proverbs of Solomon* II, pp. 122–123, 255–256. The frequency of biblical warnings against intoxicating wine proves the existence of a widely known literary tradition cautioning against wine (cf. Isa. v 11; xxviii 7–8).

⁴³ See “The Instruction of Ani” IV 6–11, in A. Erman, *The Literature of the Ancient Egyptians*, tr. A. M. Blackman (New York, 1927), p. 236; Nili Shupak, “The Sitz im Leben of the Book of Proverbs in the Light of a Comparison of Biblical and Egyptian Wisdom Literature,” *RB* 94 (1987), pp. 98–119; Clifford, *Proverbs*, p. 214. Ben Sira (xxxi 25–31) condemns excessive intoxication and recommends drinking wine in moderation.

The exhortation against drunkenness in the ancient Egyptian wisdom literature employs the stylistic elements of the admonition (direct speech, imperatives, conditional clause, and comparative clause), whereas the biblical passage is a mixed genre. The alternating mode of address, from a direct appeal to the drunkard to third-person speech and back again to the second person creates a dynamic movement suitable to the drunkard's unsteadiness. It changes again, switching from direct address to the drunkard, "You will be like one who lies down in the midst of the sea, like one who lies on the top of a mast" (v. 34), to a confession placed in his mouth: "'They struck me,' you will say, 'but I was not hurt; they beat me, but I did not feel it. When shall I awake? I will seek another drink'" (v. 35). His pathetic confession heightens the sense of his absurdity and lack of reliability.⁴⁴

2.1.3 *Animal Imagery as an Exemplification in a Situational Clause*

2.1.3.1 *š^ebī 'Deer' and šippôr 'Bird'*

My son, if you have stood surety for your fellow, given your hand for another, You have been trapped by the words of your mouth, snared by the words of your mouth. Do this, then, my son, to extricate yourself, for you have come into the power of your fellow: Go grovel—and badger your fellow; give your eyes no sleep, your pupils no slumber. Save yourself like a deer out of the hand [of a hunter], like a bird out of the hand of a fowler[’s trap]. (Prov. vi 1–5)

The Animals

The noun *š^ebī* 'deer' is attested in other Semitic languages: Akkadian *šabītu*, Ugaritic *šby*, Aramaic and Syriac *šabyā*, Arabic *daby*.⁴⁵ The

⁴⁴ Parallel to "'They struck me,' you will say, 'but I was not hurt'" (v. 35a) is "You have struck them, but they sensed no pain" (Jer. v 3b). Rather than "hurt" or "illness," Driver explains *ḥālītī* on the analogy of Ethiopic *ḥallaya* 'look out for, be concerned' (cf. 1 Sam. xxii 8). See Godfrey R. Driver, "Some Hebrew Words," *JTS* 29 (1928), p. 392; McKane, *Proverbs*, p. 396.

⁴⁵ The Hebrew spelling with *š*, from an etymological *t*, is a common shift (see Militarev and Kogan, *SED*, No. 242). Pace medieval commentators like David Qimhi, *š^ebī* 'deer' derives from the proto-Semitic *t-b-y* and is not related to the *š-b-y* that connotes beauty or the precious and desirable (see Isa. xxviii 5; Jer. iii 19), as in "the land of *š^ebī*" (Dan. xi 16, 41), an epithet for the Land of Israel. See Elqanah Billig and Shmuel E. Loewenstamm, "*š^ebī*," *EM* 6: 661–63 [Hebrew].

local species (mountain gazelle, Dorcas gazelle) probably roamed freely during the biblical period, before large tracts of wooded land had been ravaged by domestic ruminants.⁴⁶

The *ṣēbī* is a clean animal that may be eaten (Deut. xii 15, xiv 5, xv 22), but it is not acceptable as a sacrifice. It appears as part of the menu in Solomon's household (1 Kgs v 3 [RSV iv 23]).⁴⁷

In the Bible, the *ṣēbī* and *ṣēbīyyā* are symbols of grace, beauty, and erotic love (Song iv 5; vii 4). The deer's noble appearance inspired the poet of the Song of Songs (cf. ii 9, 17; viii 14), while its supple body and fleet-footedness provided a perfect image of swiftness: "Asahel was swift of foot, like a gazelle in the open field" (2 Sam. ii 18; 1 Chr. xii 8).⁴⁸

Ṣippôr 'bird' is a collective noun for fowl (see Gen. vii 14; Deut. iv 17, xiv 11). It appears as the *nomen rectum* governed by *ʿayīt* to indicate the zoological category of the latter: "and I will give you as food to carrion birds (*ʿēṭ ṣippôr*) of every sort and to the beasts of the field" (Ezek. xxxix 4b). It also appears as a general noun in parallel with a particular species or category, such as *bēnôt haššîr* 'daughters of song' (Qoh. xii 4), *d'rôr* (Ps. lxxxiv 4), and *yônâ* (Hos. xi 11).

The Text

This passage is a warning against going surety for another. *Tēkṣat kap* 'striking the hand' (Prov. vi 1; xvii 18; xxii 26) or *yād lēyād* 'hand to hand' (Prov. xi 21)—a handshake—is a conventional gesture for ratifying an agreement. The verbal phrase *ʿārabtā lē-* generally indicates accepting responsibility (cf. Gen. xliii 9; Ps. cxix 122), but here this is specifically responsibility for the repayment of a loan in the event of default, either "giving surety to" the lender or "going surety for" the borrower. The identity of the two parties to the loan, the *rēā* 'fellow, neighbor' and the *zār* 'another, stranger', and their legal status is crucial for an understanding of the socioeconomic background of the verse. Who are they?

Here *zār* does not necessarily mean an alien or a stranger, but rather designates a person more distant than the *rēā*. According to one

⁴⁶ Firmage, "Zoology (Fauna)," pp. 1141–1142.

⁴⁷ On further discussion of clean animals in relation to cultic sacrifice, see Oded Borowski, "Animals in the Religions of Syria-Palestine," *HAWANE*, p. 412.

⁴⁸ Cf. *CAD* L, p. 105a, *lusma kīma ṣabīti* 'swift like a gazelle' (Köcher BAM 248 iv 2).

approach, the case is of going surety for a friend or neighbor who is the borrower; that is, of providing a guarantee to the “foreign” lender. In the other reading, it is a case of guaranteeing to one’s friend, who is the lender, that the “foreign” borrower will pay his debt. The guarantor is told to go importune his neighbor: “Do this, then, my son, to extricate yourself, for you have come into the power of your fellow: Go grovel—and badger your fellow” (v. 3). Whether the *rēaʿ* is the borrower or the lender, the victim is always the person who pledges to pay someone else’s debts.⁴⁹

The admonition opens with the formula “my son,” which indicates a teacher-pupil relationship and not necessarily a true father-son relationship.

The conditional clause refers to taking on a particular legal and financial obligation: “My son, if you have stood surety for your fellow, given your hand for another” (vi 1).⁵⁰ This practical business-like statement leads into a metaphor borrowed from the world of the hunt: “You have been trapped by the words of your mouth, snared by the words of your mouth” (v. 2).⁵¹ The addressee is described as a naïf whose own words have caused him to fall into the trap of assuming the obligation of guarantor. Furthermore, as a result of this rash *lʿkʿat kap* ‘handshake’, he is told, *bāʾtā bʿkap rēʿekā*—“you have come into the hand [i.e. power] of your fellow” (v. 3), an echo of the expression *bʿkap ʾōyēb* ‘into the hands of the enemy’ (Judg. vi 13; Jer. xii 7). The multiple repetitions of terms related to entrapment —“the words of your mouth” (v. 2a, b), “save yourself” (vv. 3, 5), “your hand,” “the

⁴⁹ Delitzsch (*Proverbs of Solomon* I, pp. 135–36) claims that *zār* and *rēaʿ* are synonyms (see Prov. xi 15) that refer to the same person; *zār* is equivalent to *ʾaḥēr* and means some third party (see Prov. v 10; xx 16); *rēaʿ* is not a friend, but one who stands in any kind of relation, including legal or judicial (Prov. xxiv 28). The phrase *ʿarab lʿ* is problematic unless the *lāmed* is *dative commodi*, with the meaning “giving surety for anyone” (cf. Prov. xvii 18; xxii 26). The customary usages are *ʿarab bʿad* (cf. Prov. xx 16; xxvii 13) and *ʿarab miyyād* (Gen. xliii 9). Snijders’ view that *zār* means not foreigner but “outsider” (i.e., one who does not follow the normative rules of society) is linked to his theory of the “strange woman”; see L. A. Snijders, “The Meaning of *zār* in the Old Testament: an exegetical Study,” *OtSt* 10 (1954), pp. 82–84. Boström (cited by McKane) opts for *zār* = “foreigner” to support his theory. For different interpretations of *zār* and *rēaʿ* as legal terms, see: McKane, *Proverbs*, pp. 321–22; Fox, *Proverbs 1–9*, pp. 211–212; Waltke, *Proverbs 1–15*, pp. 331–33.

⁵⁰ The gesture of *lʿkʿat kap* or *yād* ‘shaking hands’ denotes a legal undertaking of providing surety (Prov. xvii 18, xxii 26; Job xvii 3). Gemser (*Sprüche Salomos*, p. 36) mentions “give me your hand” (2 Kgs x 15) said by Jehu to Jehonadab son of Rechab, as referring to surety for fulfilling a promise.

⁵¹ For the pair “trapped” and “snared” see Isa. xviii 15 and Jer. l 24.

hand of your friend” (vv. 1, 3), “from the hand” (v. 5a, b)—create a dramatic atmosphere of the crisis in which the young man finds himself.

The speaker urges his listener to action through his repeated calls to “save yourself.” The first time this immediately follows the description of the young man’s situation: “Do this, then, my son, to extricate yourself” (v. 3). The second time it appears in the simile that follows the series of staccato imperatives: “Do this,” “Extricate yourself,” “Go,” “Grovel,” “Badger your fellow,” “Give your eyes no sleep, Your pupils no slumber” (vv. 3, 4).

The speech closes with hunt imagery to illustrate the seriousness of the guarantor’s situation and persuade him to act as quickly as possible. This sense of urgency is enacted phonetically in the voiceless velar sibilant *ṣādê* that is repeated in rapid-fire succession in the words *hināṣṣēl*, *ṣ^ebî*, and *ṣippôr* (v. 5).

The synonymous parallelism in v. 5 proposes a conceptual link between the deer and the bird, both of them targeted by the hunter. But whereas the method employed (a snare) is specified in the case of the bird, no details are provided about the deer hunt.

The first clause, *hināṣṣēl kiṣ^ebî miyyād*, “Save yourself like a deer out of the hand” (v. 5a) lacks the *nomen regens* that should be governed by “out of the hand,” leaving hanging the question of whose hand is meant. Early translations attest to a reading *mimmāṣōd* ‘from a snare’, which would have fallen out of MT by a double haplography: *mem-mem* and *ṣade-yod* (in the archaic Hebrew script). Nahmias suggests supplying a missing word: *hināṣṣēl kiṣ^ebî miyyād [ṣayyād]*, “Save yourself like a deer out of the hand of [a hunter]” (v. 5a).⁵² Perles proposes a lesser corruption: the MT’s *miyyād* as the relic of an original *miṣṣayyād* ‘from the hunter’.⁵³

⁵² Quoted by Fox, *Proverbs* 1–9, p. 214. The figure of hunter appears many times in the Bible; e.g., “a skillful hunter, a man of the outdoors” (Gen. xxv 27); “if any Israelite or any stranger ... hunts down an animal or a bird that may be eaten” (Lev. xvii 13).

⁵³ F. Perles, *Analekten zur Textkritik des Alten Testaments* (Leipzig, 1922), p. 52. LXX reads ἐκ βρόχων = “from meshes [of the net].” For a recent discussion of the Septuagint variant to Prov. vi 5, see Michael V. Fox, “LXX-Proverbs as a Text-Critical Resource,” *Textus* 22 (2005), pp. 106–107. The Aramaic and Syriac agree with the conjectural Greek variant, filling in the indirect accusative *min nišbā* ‘from a snare’. Delitzsch (following Hitzig) supports the reading of *hināṣṣēl miyyād* as a complete predicate with the sense of entrapment (cf. 1 Kgs xx 42). See Delitzsch, *Proverbs of Solomon* 1, p. 139; McKane, *Proverbs*, p. 323; R. E. Murphy, *Proverbs* (WBC 22; Nashville, 1998), p. 34.

The second clause, with its image of the bird (v. 5b), repeats *miyyād* and attaches it to the passive participle *yāqûš* ‘ensnared, trapped’—syntactically problematic. In Hosea we find the form *yāqôš*, a gerund with the sense of the noun “fowler,” modifying the noun *paḥ*: “Fowlers’ snares are on all his paths” (Hos. ix 8; the collocation of *paḥ* with the verb is also found in Ps. xci 3, civ 7, and ci 9). It thus seems preferable to read here *k’šippôr miyyād paḥ yāqôš* ‘like a bird out of the hand of a fowler’ or to take the MT as an elliptic expression that omits the nomen regens *paḥ* ‘snare’.⁵⁴

The use of imagery borrowed from hunting emphasizes the grave condition of a person who goes surety for another, because he may well become the hapless victim of both creditor and debtor.

Ben Sira employs the same image of the hunted birds and deer, but uses their escape as a simile for the irretrievable damage caused by betraying the confidence of a good friend.

Whoever betrays a secret destroys confidence; he will never find an intimate friend. ... Like a bird released from the hand, you have let your friend go and you cannot recapture him. Follow him not, for he is far away; he has escaped like a gazelle from the snare (xxvii 16–21).⁵⁵

2.1.3.2 Šôr ‘Bull, Ox’ and Šippôr ‘Bird’ in a First-Person Narrative

She sways him with her eloquence, turns him aside with her smooth talk. Suddenly he follows her, like an ox going to the slaughter, like a stag being bound to the stocks, until the arrow pierces his liver; he is like a bird rushing into a trap, not knowing his life is at stake. (Prov. vii 21–23; free translation)

*The Animal*⁵⁶

Šôr denotes a single bovine (as distinct from the collective *bāqār*), but is also a general term for “oxen” (cf. Gen. xxxii 6).⁵⁷ The noun is

⁵⁴ For the compound *paḥ yāqôš* (Hos. ix 8) or *paḥ yāqûš* (Ps. xci 3), see GKC, §72r. On hunting terminology in the Bible see Aaron Kampinski, “Hunting and Fishing,” *EM* 6:716–17 [Hebrew].

⁵⁵ Alexander A. Di Lella, *The Wisdom of Ben Sira*, trans. P. W. Skehan (AB 39; New York, 1987), pp. 354, 357–58. Cf. the admonitions in Proverbs against gossip, garrulity, and revealing intimate secrets by those who are incapable of holding their tongue (xx 19; xxv 9–10); cf. *Amenemope*, chapter 21, xxii, *ANET*, p. 424. See McKane, *Proverbs*, pp. 537–38.

⁵⁶ For a discussion of birds, see §2.1.3.1.

⁵⁷ Militarev and Kogan (*SED*, No. 341) define *šor* as a *nomen unitatis*. If so, the

attested in cognate Semitic languages: *šūrum* in Akkadian, *tr* in Ugaritic; *tōrāʾ* in Jewish Aramaic, *tawrā* in Syriac, and *tawr* in Arabic. *Šôr* appears in the Bible three times parallel to *r^ʿēm* ‘aurochs’ (*Bos primigenius*), a frequent symbol of divine power and strength (cf. Ps. xcii 11).⁵⁸

Among the common domestic livestock of biblical times, oxen were employed for various agricultural tasks such as plowing and threshing (see Deut. xxii 10, xxv 4; Hos. x 11). The ox was also employed as a beast of burden and harnessed to carts (see Num. vii 3; 1 Sam. vi 7; 1 Chr. xii 41; Prov. xiv 4). Cattle might be led out to pasture for grazing (see Num. xxii 4) or fed hay, straw, and mixed fodder in the manger (cf. Prov. xiv 4; Isa. xi 7; xxx 24; Job vi 5, xl 15).

The Text

Proverbs vii 1–4 calls on the youth to internalize the precepts of wisdom as part of the process of developing the appropriate approach to life. The common formula “my son”⁵⁹ and the sequence of imperatives—“keep,” “store,” “bind,” and “write”—emphasize the didactic authority of the sage. The specific concrete exhortation against seduction by a strange woman is introduced in verse 5 by the infinitive *lišmōrkā* ‘to guard you’, followed by the conjunction *kî* ‘for’ in verse 6, thus linking the admonition with the first-person narrative that follows. Here the formal structure of the admonition is interrupted by a vivid report of an erotic encounter, a nocturnal tryst that the sage saw when he looked out his window.⁶⁰ He shares with his readers his impressions, whose moral is the goal of his teaching and is strikingly similar to another first-person monologue in Proverbs: “I passed by the field of a lazy man, by the vineyard of a man lacking sense” (xxiv 30). The first-person narrative ultimately yields a moral lesson: “I

plural form *š^ʿwārīm* in Hos. xii 12 is not usual and probably due to textual corruption.

⁵⁸ See Borowski, “Animals in the Literatures of Syria-Palestine,” *HAWANE*, pp. 299–300.

⁵⁹ On the formulas “my son” or “sons” applying to pupils in the Bible and in Egyptian didactic literature, see Gemser, *Sprüche Salomos*, p. 21. Cf. Sir. ii 1; iii 7, 11, 16; iv 1; the Syriac Ahiqar ii 23. For the relationship between teacher and pupil as that of father and son in Proverbs and ancient Near Eastern wisdom literature, see: Wilfred G. Lambert, “Counsels of Wisdom,” *Babylonian Wisdom Literature* (Oxford, 1960), p. 96; M. Weinfeld, *Deuteronomy and the Deuteronomistic School*, p. 305 n. 3.

⁶⁰ The LXX renders the verbs and the suffixes of the possessive pronouns in vv. 6–7 in the third instead of the first person (“she looks ... out of her house”) of the MT.

observed and took it to heart, I saw it and learned a lesson” (xxiv 32).⁶¹

The framework in which the passage is set (vii 1–5 and 24–27) calls on the youth to internalize the teachings of wisdom for use as a weapon against the allures of the seductive woman.

The narrator spurs the reader’s imagination with a finely etched tableau. We are introduced to the adulterous woman as she lures on the foolish youth with her seductive actions and words of enticement. The narrative interweaves details of the woman’s fine bedcovers of dyed Egyptian linen, the hushed voices of courting, and perfumed spices (myrrh, aloes, and cinnamon).⁶²

The youth who consorts with the strange woman is described as following her “suddenly” (*piṭōm*); in the context, “impulsively” might be a better rendering. In Proverbs, the adverb *piṭōm* is associated with unexpected disaster that falls upon the evildoer: “You will not fear sudden terror or the disaster that comes upon the wicked” (Prov. iii 25; cf. vi 15, xxiv 22). Here, though, the person involved is a thoughtless youth rather than an evildoer. In fact, the ancient versions render the term as if related to the Hebrew *petî* ‘simpleton’ or the plural *p^etā’îm* (v. 7) or *p^etayût* ‘in a naive manner’ (Prov. ix 13).⁶³ The biblical writers seem to pun on *piṭōm* and synonyms of *petî*. Examples are *tām* ‘innocent’ and *piṭōm* in Psalms lxiv 5 (RSV 4): “To shoot from hiding at the blameless man; they shoot him suddenly and without fear”; *’ēwîl* ‘fool’ and *piṭōm* in Job v 3: “I myself saw a fool who had struck roots, impulsively, I cursed his home.” Our verse may similarly be playing *piṭōm* against *p^etā’îm* in v. 7.

⁶¹ See Tova Forti and Zipora Talshir, “Proverbs 7 in MT and LXX: Form and Content,” *Textus* 22 (2005), pp. 142–44. On the autobiographical narrative style of Prov. iv 3–4; xxiv 30–34; Ps. xxxvii 25, 35; Sir. li 13–16 (cf. xxxiii 16–19), see Von Rad, *Wisdom in Israel*, pp. 37–38.

⁶² Some scholars have adopted the LXX version (above, n. 60) to support their hypothesis that the strange woman is a cult prostitute of the fertility goddess Ishtar. For a summary of the various proposals (Albright, Snijders, Boström) see McKane, *Proverbs*, pp. 334–36. On the motif of the queen peering through the lattice in ancient Near Eastern literature, see M. Cogan and H. Tadmor, *II Kings* (AB 11; New York, 1988), pp. 111–12.

⁶³ The LXX renders the conjectured *p^etā’îm* by the peculiar κερφωθεῖς ‘bird-brained’: hence “he followed her being easily cajoled” (cf. Job xxxi 9). On the Greek idiom, see Fox, *Proverbs* 1–9, p. 406; D. M. d’Hamonville, *La Bible d’Alexandrie: Les Proverbes* (Paris, 2000), p. 203. The Aramaic version has “he goes after her without paying attention” (i.e., without concern or worry); the Syriac has “like a lad.”

The youth walking after her is compared to an ox *yābō* ‘[that] will go’—i.e., “is going”—to the slaughter. The ancient versions render this in the passive, similar to the description of the sacrificial lamb in the prophetic literature, “like a sheep (*yûbāl*) being led to slaughter” (Isa. liii 7b) or “like a docile lamb led (*yûbal*) to the slaughter” (Jer. xi 19a).⁶⁴

The second simile, *ûkēkes ʿel mûsar ʿēwîl* (“... like a stag being bound to the stocks [?]”), is incomprehensible as it stands. The various attempts to render the enigmatic *ēkes* ‘anklet’ in this context and in relation to the construction *mûsar ʿēwîl* ‘obedience of the fool’ seem forced and implausible. For example, the KJV translates: “or as a fool to the correction of the stocks”; similarly the NJPS: “like a fool to the stocks for punishment.” Both ignore the conceptual background of the passive behavior of the animals being victimized.

The collocation *mûsar ʿēwîl* incorporates the standard didactic term *mûsar*, which refers to obedience and discipline in heeding the instructions of the sage (cf. xvi 22). It expresses the negative traits of immorality and disobedience, as in the adage “A fool spurns the discipline of his father, but one who heeds reproof becomes clever” (Prov. xv 5). But this sense of *mûsar ʿēwîl* does not seem to fit the theme of the seduction of the youth by the adulterous woman.

The sequence of animals in the unit (ox, bird) seems to have led the ancient translators to look for more of them, even at the cost of borrowing from their own cultural milieu. The reading of the LXX, καὶ ὡςπερ κύων ἐπὶ δεσμούςς “and as a dog to bonds,” is based on the reading *môsēr* ‘bond’ (from the root ʿ-s-r) rather than the MT vocalization *mûsar* ‘teaching’.⁶⁵ The enigmatic *ēkes* is turned into a dog, while *ʿēwîl* ‘fool’ metamorphoses into *ʿayyāl* ‘stag’ (a plausible emendation) and is linked to the start of the next verse: “as a hart shot in the liver with an arrow.” The Vulgate renders *ēkes* as “agnus” = lamb.

Revocalizing the noun *kēkes* ‘like an anklet’ as the absolute infinitive *kēkōs* ‘in the state of being bound’ would emphasize how the fool goes towards his *môsēr* ‘bond’ or, better, ‘imprisonment’ (cf. Job xiii 27; xxxiii 11).⁶⁶

⁶⁴ Cf. the compound *šor tābūah* ‘slaughtered ox’ in Deut. xxviii 31. For *tebah* = slaughter, cf. Prov. ix 2; Jer. li 40; Ps. xlv 23; 1 Sam. xxv 11.

⁶⁵ *Mûsar* is frequent in Proverbs (30 occurrences), but occurs only four times in Job and never in Qoheleth. See Whybray, *The Intellectual Tradition*, p. 128.

⁶⁶ This is the reading suggested by Fox (*Proverbs 1–9*, 249–50). *ēkes* ‘anklet’

This string of similes exemplifies both the passive attitude of the young naïf who is led astray by the temptress as well as his anticipated tragic outcome.

Although the result clause introduced by the preposition *ʿad*—“until the arrow pierces his liver” (v. 23a)—might refer to the hunted hart, it does not fit well in the sequence of images that represent the lad’s behavior (vv. 22, 23b); the passivity of the victim does not easily lend itself to the sophistication of hunting methods. If, however, we consider “until the arrow pierces his liver” (v. 23a) in light of the first clause that describes the youth who “suddenly follows her” (v. 22a), and remember that the liver was considered to be the seat of the emotions,⁶⁷ *ʿad* can be understood as denoting the end-result of the process. Thus the image of the arrow closes the cycle of the lad’s seduction.

The bird rushing into a trap (v. 23b), introduced by the comparative *kāp*, adds another simile for the victim’s behavior and should be integrated into the sequence of animal images—all of which are comparative clauses (vv. 22b, 22c, 23b). Moreover, it seems that the sage deliberately accumulates images drawn from the field of trapping and slaughter. The result clause, “until the arrow pierces his liver” (v. 23a), seems to be out of sequence and should follow “suddenly he follows her” (v. 22a), leading to the sage’s reflection, “not knowing his life is at stake” (23c). This establishes a narrative framework (vv. 22a, 23a, 23c) for the sequence of images. The pictures that flash before the reader’s eyes, one after another, evoke a dramatic sensation of unavoidable disaster. In fact, the ancient versions (LXX, Targum, and Peshitta) all have a uniform structure of four independent scenes, ignoring the preposition *ʿad* of the result clause and presenting a

appears in the plural in Isa. iii 18 as an ornamental accessory worn on the leg (see Gersonides). The denominative verb *ʿakkēs* occurs two verses earlier and is usually interpreted as “shaking bangles, rattling, tinkling.” In *Sefer Hashorashim*, David Qimḥi explains *ʿakkēs* as “the way that women sway and clack with their bracelets” and the noun *ʿekes* as a chain wound around the leg. See David Qimḥi (Radaq), *Sefer Hashorashim*, ed. J. H. R. Biesenthal and F. Lebrecht, (Berlin, 1847; repr. Jerusalem, 1967). Ibn Ezra (comm. on Prov. vii 22) says that *ʿekes* is a kind of chain. Driver associates *ʿakkēs* with Arabic *ʾākasa* ‘tie (a camel) with a rope’ and understands *ūkʿekes ʾel mūsar ʾwīl* as “and like a hart that is tied to a cord” (Godfrey R. Driver, “Problems in Proverbs,” *ZAW* 50 [1932], p. 143). Later, still referring to Arabic, he suggested “as a hart skips into a noose” (idem, “Hebrew Notes,” *VT* 1 [1951], p. 241). On the Arabic *ʾākasa* see E. W. Lane, *An Arabic-English Lexicon* (London, 1863–1893; repr. 1968), Book I, 5:2121.

⁶⁷ Cf. Lam. ii 11.

different animal in each image. In free translation, we can harmonize all three as follows:

- (22b) As an ox led to the slaughter
- (22c) As a dog to bonds
- (23a) As a hart shot in the liver with an arrow
- (23b) As a bird rushing into a trap

The last image of “a bird rushing into a trap” emphasizes the rapidity of the victim’s capture. The bird is depicted as a creature that does not fall into its fate passively, but rather actively assists its own downfall. Similarly, the youth’s innocence contributes to his own undoing, “not knowing his life is at stake,”⁶⁸ and leads him to Sheol.

The image of the innocent and unsuspecting creature that hastens its own end takes the place of the warning and threat usually found in the admonition. The sequence of images designating the fate of those who associate with the strange woman evokes the urgency of internalizing the moral lesson. The inexperienced addressee is repeatedly warned against rushing headlong into the net spread out around him.⁶⁹

After this sequence of images, which exemplify the dismal fate to which the lad devoid of sense is running heedlessly, the sage reverts to the admonition pattern, combining a general appeal to heed his advice with a concrete exhortation to stay away from the strange woman whose house leads to Sheol (vv. 24–27).

2.2 PROVERBIAL SAYINGS

2.2.1 *Animal Imagery to Exemplify an Idea*

2.2.1.1 *Ḥāzîr ‘Pig’ in a Simile*

Like a gold ring in the snout of a pig is a beautiful woman bereft of sense. (Prov. xi 22)

⁶⁸ The preposition in *b^enapšô* is the *bêt* of price; i.e., he pays “with his life.” cf. “if broaching this matter does not cost Adonijah his life!” (1 Kgs ii 23b).

⁶⁹ The image of entrapped birds crops up frequently (e.g., Amos iii 5; Ps. cxxiv 7; Qoh. ix 12; Lam. iii 52), as does that of birds escaping from the snare (e.g., Prov. i 17; vi 5b; Ps. xci 3; cxxiv 3, 7).

The Animal

The noun *ḥāzîr* has cognates in other Semitic languages: Ugaritic *ḥzr*,⁷⁰ Akkadian *ḥuzîrum* (*šeḥû*), Aramaic *ḥāzîrā*, and Arabic *ḥinzîrun*.

In Psalms we find *ḥāzîr miyāʿar* (Ps. lxxx 14 [RSV 13]) ‘boar from the forest’, evidently meaning the wild boar (*Sus scrofa*) and its natural habitat. It gnaws indiscriminately, trampling and destroying cultivated lands: “wild boars gnaw at it, and creatures of the field feed on it” (ibid.).⁷¹ Wild boars were abundant in forests and marshes and even in the bare desert.⁷² The Mishnah (Ḥul. 9:2) refers to both wild and domesticated swine.

Ancient Near Eastern cultures differed in their attitude to swine.⁷³ Hittite religious practice, for instance, prescribed the sacrifice of piglets (and dogs) in rites of atonement and purification.⁷⁴ But Hittite instructions for temple officials also instruct the kitchen staff to keep dogs and pigs away from the sacrificial utensils so as to avoid contamination of the gods’ food.⁷⁵ Evidence of pigs and dogs scavenging in the streets comes from Babylonian literature and Esarhaddon’s revenge on the murderers of Sennacherib: “I fed their corpses, cut into small pieces, to dogs, pigs, *zîbu*-birds, vultures, the birds of the sky and (also) to the fish of the ocean.”⁷⁶

In two loci the Septuagint interpolates pigs where they are not found in the MT. Pigs, and not only dogs, lick the blood of the corpse in Elijah’s curse of Ahab and its fulfillment (1 Kgs xxi [xx in the LXX] 19 and xxii 38). In 2 Sam. xvii 8, a wild boar is added to the bereaved bear of Hushai’s metaphor for David’s desperation.⁷⁷

⁷⁰ Militarev and Kogan (*SED*, No. 111) argue that “*ḥnzr* and *ḥzr* do not denote an animal but rather a profession or an administrative function.”

⁷¹ Several commentators emend the text to *ḥāzîr miyyāʿôr* ‘the boar of the Nile’ and associate the enemy with Egypt (e.g., Charles A. Briggs and Emilie G. Briggs, *The Book of Psalms* II [ICC; Edinburgh, 1976 (1907¹)], p. 206).

⁷² See Tristram, *Natural History of the Bible*, pp. 54, 145; Firmage, “Zoology,” p. 1130.

⁷³ The pig is depicted as a submissive and obedient creature in Sargon’s annals (Winckler, *Sar*. 56:336). See Marcus, “Animal Similes in Assyrian Royal Inscriptions,” pp. 91–92.

⁷⁴ Firmage, “Zoology,” pp. 1131–32.

⁷⁵ See *ANET*, p. 209 (14.65); G. McMahon, “Instructions to Priests and Temple Officials,” in W. W. Hallo (ed.), *The Context of Scripture, Volume 1: Canonical Compositions from the Biblical World* (Leiden, 1997), p. 220.

⁷⁶ See *ANET*, p. 288 (iv 65–82).

⁷⁷ The pig is also added when the NT cites the proverbial saying about the dog

The biblical dietary laws define two characteristics for distinguishing clean from unclean mammals: “Every animal that parts the hoof and has the hoof cloven in two, and chews the cud, among the animals, you may eat” (RSV; Deut. xiv 6; Lev. xi 3). The biblical list of impure animals that may not be eaten (Leviticus xi; Deut. xiv 3–21), which includes birds of prey and scavengers, explicitly lists the pig among the unclean mammals, because it is not a ruminant and does not chew its cud (Lev. xi 7; Deut. xiv 8). There is no distinction between wild and domesticated pig. Isaiah denounces the eating of pork an abomination: “...who eat the flesh of swine, with broth of unclean things in their bowls” (lxv 4b; cf. lxvi 17). He also lists breaking a dog’s neck and offering swine’s blood as examples of loathsome rituals associated with idol worship (lxvi 3).⁷⁸

The Text

This comparative saying⁷⁹ consists of two clauses in which concepts from different semantic fields are equated, but without the comparative *kāp* and applicative particle *kēn*. The same “stripped down” syntax is found in “a roaring lion and a prowling bear is a wicked man ruling a helpless people” (xxviii 15; cf. xxvi 17). To extricate the author’s meaning we must identify the common denominator of the two images—the direct or indirect association between them.

The first clause presents a curious association: a gold ring and a pig’s snout. The image is absurd, because a *nezem* ‘nose ring’ is an ornament worn by women (Gen. xxiv 22, 47; Judg. viii 24; Isa. iii 21; Ezek. xvi 12; Job xlii 11). The contrast between a woman’s fine jewelry and the ungainly garbage-eater, with its bristles and snout, produces ridicule and astonishment.

Of all animals, the swine seems to have been chosen because of its repulsive habits, such as its wallowing in mud and thriving on scraps of vegetable and flesh. But the use of the pig in the simile depends primarily on the cultic-religious tradition that reflects a longstanding aversion to swine.⁸⁰

(Prov. xxvi 11a): “As a dog returns to his vomit and the sow that was washed to her wallowing in the mire” (2 Pet. ii 22 [KJV]). See further below, §3.3

⁷⁸ On religious rituals that employ pigs, and the prohibition of pork in Israel, see: Firmage, “Zoology,” pp. 1124–1125, 1130–1135; Billie J. Collins, “Animals in the Religions of Ancient Anatolia,” *HAWANE*, pp. 322–23.

⁷⁹ On the comparative saying, see §1.5.1.1.

⁸⁰ In addition to the biblical references given above, see 1 Macc. i 44–50; b. *Soṭah*

Here the comparandum or tenor is the beautiful woman who lacks *ṭāʿam* ‘taste, sense’. In this context *ṭāʿam* does not indicate the sense of taste (cf. Job xii 11) but mental discernment, as in “Teach me good sense and knowledge” (Ps. cxix 66; cf. Prov. xxvi 16); *ṭāʿam* also denotes practical understanding, as in David’s praise of Abigail’s conduct: “Blessed be your good sense (*ṭāʿmēk*)” (1 Sam. xxv 33).⁸¹ A similar appreciation of a woman’s practical intelligence is echoed in the panegyric of the Woman of Valor: “She perceives (*ṭāʿmā*) that her merchandise is profitable” (Prov. xxxi 18; NRV); “Her mouth is full of wisdom, Her tongue with kindly teaching.” She is also lauded for her wisdom and moral judgment: “Grace is deceptive; beauty is illusory; it is for her fear of the Lord that a woman is to be praised” (xxxii 30).⁸²

We may therefore consider the saying in Proverbs to be a moral statement about the advantage of intellect over beauty. Beauty in a woman who lacks the additional qualities of intelligence, discernment, and understanding, is a combination as ridiculous as a golden nose-ring in a pig’s snout.

2.2.1.2 Šippôr ‘Sparrow’ in a Comparative Saying⁸³

Like a sparrow wandering from its nest is a man who wanders from his home. (Prov. xxvii 8)

This saying compares a man’s wandering from his home to a bird’s wandering from its nest. The Bible applies the root *n-d-d* to both human beings and animals. Some of its occurrences refer to destruction and exile, which cause people to wander, and are best rendered as *flight*: “For they have fled (*nâdâdû*) before swords, before the whetted

49b; b. B. Qam. 82b.

⁸¹ On the semantic development of *ṭāʿam* from palatal sensation to aesthetic taste and thence to prudent wisdom and intelligence, see Gemser, *Sprüche Salomos*, p. 56; McKane, *Proverbs*, p. 430; Murphy, *Proverbs*, p. 83.

⁸² The LXX renders Prov. xxxi 30 “Charms are false, and woman’s beauty is vain: for it is a wise woman that is blessed, and let her praise the fear of the Lord” (Eng. translation follows Brenton), thus adding the epithet “wise” to the ideal of woman. See Alexander Rofé, “The Valiant Woman, γυνή συνετή, and the Redaction of the Book of Proverbs,” in *Festschrift Rudolf Smend*, ed. Ch. Bultmann et al. (Göttingen, 2002), pp. 145–155. Cf. Syriac Aḥiqar, II.19: “A woman of wisdom is the one to be praised” (free translation).

⁸³ On *šippôr*, see §2.1.3.1.

sword, before the bow that was drawn, before the stress of war” (Isa. xxi 15). The depiction of wandering often involves famine, whereas permanent settlement is associated with satiety: “Some lost their way in the wilderness ... hungry and thirsty. ... He showed them a direct way to reach a settled place. ... For He has satisfied the thirsty, filled the hungry with all good things” (Ps. cvii 4–9). In Jeremiah’s vivid depiction of the Day of Judgment, the migration of birds is identified with the hasty abandonment of the country by the inhabitants of the land: “I look: no man is left, and all the birds of the sky have fled” (Jer. iv 25). The victims of exile, a punishment imposed by the Lord, are compared to birds driven from their nest: “Like the fugitive (*nôded*) birds, like nestlings driven away, Moab’s villagers linger at the fords of the Arnon” (Isa. xvi 2). In Jeremiah’s lament on the exile, the national catastrophe extends to animals as well: “Birds of the sky and beasts as well have fled (*nâd^e dû*) and are gone” (Jer. ix 9).⁸⁴

The hermeneutic tradition associated with our verse from Proverbs reflects the influence of the prophetic literary tradition just surveyed, in which birds that leave their nest and flee are metaphors for the desolation of the land.⁸⁵ This exegetical bent tries to reconstruct the circumstances of the wanderer, including war, exile, destruction, and hunger (cf. Gen. xii 10; Ps. cvii 4–7; Job xv 23). In our verse, however, there are no hints of any socio-historical background or sermons, as in the prophetic literature. The image of the bird’s flight is not used to depict destruction as punishment for sin (cf. Jer. iv 25; Isa. xvi 2). The saying does not offer a detailed description of individual or societal circumstances that compel a person to leave his home.⁸⁶ Nevertheless, the concluding *mimm^e qômô* ‘from his place’, where *mâqôm*

⁸⁴ Cf. the use of the stem *n-d-d* for the exile of the Ephraimites (Hos. vii 13; ix 17) and in the prophecy of the destruction of the Ammonites (Jer. xlix 6). *N-d-d* is also used of insomnia (see Esth. vi 1; Gen. xxxi 40).

⁸⁵ Rashi glosses *nôded/et* ‘wandering’ as a state of being dragged from place to place. Ibn Ezra explains that bird and man wander “in search of sustenance.” Isaac Arama understands *nôdedet* as the bird’s being driven out of the nest and forced to wander the wide world to seek its own prey. Delitzsch (*Proverbs of Solomon* I, pp. 203–204) understands *nôdedet* as roaming without any direction and goal, similar to the idiom *nâ^e wânâd* of Cain’s destiny as “a ceaseless wanderer on earth” (Gen. iv 12b), and not as migration to warmer countries. LXX renders *n-d-d* differently in the two stichs and adds the notion of human slavery: “As when a bird flies down from its own nest, so a man is brought into bondage whenever he estranges himself from his own place.”

⁸⁶ Gemser (*Sprüche Salomos*, p. 96) posits sociocultural circumstances for traveling, such as trade or a search for knowledge (cf. Sir. xxix 24; xxxix 5).

means “home and family” (cf. 1 Sam. ii 20) or “homeland” (cf. Gen. xviii 33, xxx 25; Judg. xi 19; Ezek. xii 3), may indicate the attitude of the wise towards the phenomena of wandering, similar to abandoning one’s secure habitat. The general formulation of the saying presents a universal perception of the phenomenon of wandering in a person’s life, which is similar to a bird’s urge to migrate.

The various phenomena drawn from the avian world that appear in the Bible reflect daily experience of and familiarity with their lives and habits; for example, “Even the stork in the sky knows her seasons, and the turtledove, swift and crane keep the time of their coming” (Jer. viii 7). Here we see how people in ancient times were attuned to birds’ seasonal migration. The Song of Songs notes the species associated with the seasons of the year: “For now the winter is past, the rains are over and gone. The blossoms have appeared in the land, the time of pruning has come; the song of the turtledove is heard in our land” (Song ii 11–12). In Job we encounter the ancients’ knowledge that birds migrate to warmer lands: “Is it by your wisdom that the hawk grows pinions, spreads his wings to the south?” (Job xxxix 26).

To sum up, in the equation bird = human being and driven from the nest = leaving one’s home, the accent is on wandering in the bird’s life and human migration, without particular attention to personal or societal circumstances. The concision of the saying scarcely allows us to divine the teacher’s own evaluation of wandering (e.g., Prov. xxiii 4–5, xxvi 2). But the two locatives, “from its nest” and “from the home,” do suggest that wandering is perceived as especially evocative of uprootedness and alienation from home.⁸⁷

⁸⁷ McKane (*Proverbs*, p. 612) interprets this wandering as a metaphor not only for transience and insecurity, but also for rootlessness and loss of identity, which prevent a person from integrating in society. Murphy (*Proverbs*, p. 207) raises the possibility of interpreting the wandering bird “as a symbol of the fluctuations and inconsistencies in human existence.”

2.2.2 *Animal Imagery as a Rhetorical Device in the Moral of an Instruction*

2.2.2.1 *ʾĀlāpîm ‘Oxen, Cattle’ and Šôr ‘Ox’ in an Antithetical Saying*⁸⁸

Without oxen, there is no grain; [but] a rich harvest comes through the strength of an ox. (Prov. xiv 4)

*The Animals*⁸⁹

The singular noun *ʾelep*, which is not found in the Bible, is attested in Ugaritic *ʾalp* ‘[head of] cattle, bullock, yearling calf’; in Phoenician *ʾelep* ‘ox, bull’, and in Akkadian *alpu* ‘bull, ox, beef’.⁹⁰

The plural *ʾālāpîm* indicates livestock, cattle, as in the verse “as for the cattle and the asses that till the soil they shall partake of salted fodder” (Isa. xxx 24), and, in poetry, as the governed noun in a construct, “the calving of your herd” in parallel with “the lambing of your flock,” i.e., offspring of your large and small cattle (Deut. vii 13; cf. xxviii 4, 18, 51).⁹¹

The Text

Some of the sayings in the book of Proverbs encourage farmers to be diligent; for example, “He who tills his land shall have food in plenty, but he who pursues vanities is devoid of sense” (xii 11). The teacher praises the clever herdsman who knows how to make fullest use of his herds: “Mind well the looks of your flock, pay attention to your herds. ... The lambs will provide you with clothing, the he-goats the price of a field. The goats’ milk will suffice for your food” (xxvii 23–27). He

⁸⁸ On the structure of the antithetical saying, see §1.5.1.2.

⁸⁹ On *šôr* ‘ox’ see §2.1.3.2.

⁹⁰ See Militarev-Kogan, *SED*, No. 4.

⁹¹ See BDB, *ʾelep*, p. 48. The collocation *kebeš ʾallûp* ‘docile (?) lamb’ (Jer. xi 19; cf. xiii 21) means the bellwether. The technical term *ʾallûp* may have been borrowed from the semantic field of domesticated animals to indicate the head of the family or chief of the tribe, as in Gen. xxxvi 15: “These are the chiefs of the sons of Esau” (RSV). Militarev-Kogan (*SED*, No.4) claim that *ʾallûp* = “cow, bull” (Ps. cxliv 14; Sir. xxxviii 25) “is probably rebuilt after a secondary derivational pattern” and should not be related to the proto-Semitic root *ʾlp* ‘domesticate’ and Hebrew *ʾlp* ‘learn, teach’, since the noun is much more widely attested in Semitic languages than the verb.

also praises the wise farmer who knows how to make best use of the vegetation on his plot throughout the seasons of the year: "Grass vanishes, new grass appears, and the herbage of the hills is gathered in" (xxvii 25). Economic planning to take maximum advantage of the productive capacity of one's land and livestock merit the sage's praise as guarantors of the farmer's prosperity. In contrast, the lazy man is denounced for not being bright enough to take proper care of his vineyard and obtain a proper vintage from it (xxiv 30–32).

Our saying, which extols planning ahead and maintaining a balance between consumption and production, is formulated as the antithetical juxtaposition of two economic options: The rendering of the word *bār* is crucial for understanding this adage. If it is understood to mean "grain," as in Gen. xli 35 and Prov. xi 26, the first clause means that the absence of cattle explains why the granary remains full, while the second clause proposes a direct relation between the strength of the ox and the size of the harvest.⁹²

Read this way the statement is enigmatic. What profit can the owner gain from a crib full of grain because he has no cattle, if without oxen he will have no harvest?

To get around this, the ancient versions and some medieval commentaries understand *bār* to mean, not "grain" but "clean," from the root *b-r-r* (cf. Job xi 4; Ps. xxiv 4) in the sense of "emptiness."⁹³ This resolves the logical difficulty, in that we now have antithetical circumstances that produce antithetical results: without oxen the crib is *empty*, but it takes the strength of only one ox to *fill it*. This contrast of depletion and plenitude highlights the advantage of the second option. But *bār* 'clean, pure' is a strange adjective to apply to an empty crib.⁹⁴

Gersonides, who took *bār* to mean "grain," read the verse as presenting two different pictures of agricultural life. In the first, the granary remains full because of a lack of oxen; in the second, the strength

⁹² Compare ʿēbûs with the Akkadian *abûsu* 'storehouse, crib' [*CAD* A, p. 92]). For occurrences of ʿēbûs 'crib', see Jer. l 26; Isa. i 3; Job xxxix 9. *Bar* can mean "grain" as opposed to straw (see Jer. xxiii 28). Stored-up grain indicates prosperity and blessing (cf. Gen. xli 49; Amos viii 6; Ps. lxxv 14; lxxii 16); a shortage of grain is considered to be a curse (see Prov. xi 26).

⁹³ See *HALOT* 1:153, s.v. II *bar*.

⁹⁴ Ibn Ezra holds that the solution lies in the distinction between "the crib is clean" in singular, and "rich harvest" in plural. Many commentators follow the sense of *bar* as "empty," see e.g., Gemser, *Sprüche Salomos*, p. 66; Toy, *Proverbs*, pp. 282–83; Murphy, *Proverbs*, p. 103.

of the oxen increases the supply of grain. According to Gersonides, we must distinguish between cattle that are being readied for slaughter and remain in their stalls from draft animals that graze in the field. Our saying describes a situation of the first type that enables the farmer to enjoy the second type, where the strength of the work ox increases his harvest.⁹⁵

Yosef Ibn Kaspi resolves the difficulty of the first clause in a different way. He proposes emending the text and replacing the *yôd* of *b^eên* with a *wāw*, yielding *b^eôn* ‘with the strength’ (cf. Gen. xlix 3); as he puts it, “through the strength of the oxen a man acquires a crib of grain.”⁹⁶ This turns the verse into a chiasmic synonymous parallelism:

Through the strength [*b^eôn*] of oxen **there is a crib of grain**



And a rich harvest comes through the strength [*b^ekōah*] of the ox.⁹⁷

This interpretation, attractive as it is on its own, does not suit the larger context of the chapter, which consists almost entirely of verses based on antithetic parallelism (xiv 1–35, except for vv. 17, 19, 26, 27).

Another suggested emendation, of *ʿēbûs* to *ʿepes*, seems plausible, and preserves the antithetical relation between the two clauses: without oxen, there is no (*ʿepes*) grain; [but] a rich harvest comes through the strength of an ox. Such a contrast between *ʿepes* and *rōb* is found in “A numerous [*b^erob*] people is the glory of a king; without [*b^eepes*] a nation a ruler is ruined” (Prov. xiv 28).⁹⁸

2.2.2.2 *K^epîr* ‘Lion’ in an Antithetical Saying

The rage of a king is like the roar of a lion; his favor is like dew upon the grass. (Prov. xix 12)

⁹⁵ Ad loc. in Gersonides, Commentary, in *Mikra’ot gedolot*.

⁹⁶ Yosef Ibn Kaspi, *Ḥāṣoṣ^erot Kesep* (Trumpets of Silver), in *ʿĀšārâ K^elê Kesep* (Ten Instruments of Silver), ed. Isaac Last (Pressburg, 1903; repr. Jerusalem, 1969/70).

⁹⁷ Cf. Kahana, *Mishley*, p. 64; N. H. Tur Sinai, *Pešuto šel Miqra’* 4/1 (Jerusalem, 1967), p. 98.

⁹⁸ Cf. *ʿepes* in Isa. xli 12 and the emended reading of *ʿapa^c* to *ʿepes* in v. 24 (BHS; cf. v. 29). For the proposed emendation of *ʿēbûs* to *ʿepes*, see Toy, *Proverbs*, p. 282; BHS ad loc.

The Animal

The consensus among medieval Jewish grammarians, based on contextual exegetics, is that *kēpîr* is ‘ûl *yāmîm* ‘infant’; that is, a young lion larger than a cub and to be distinguished from the other words for lion: ‘aryēh (‘ārî), *layiš*, *lābî*, and *šahāl*. *Kēpîr* occurs as the nomen regens in *kēpîr* ‘ārāyôt ‘young lion of lions’ (Judg. xiv 5), a construction similar to *gēdî* ‘izzîm ‘kid of she-goats’. It also occurs in parallel to lion cubs: “Like lions (*kakkēpîrîm*), they roar together, they growl like lion cubs” (Jer. li 38). The main source for this meaning, however, is the verse “And she brought up one of her whelps; he became a young lion, and he learned to catch prey; he devoured men” (RSV; Ezek. xix 3).⁹⁹ It is hard to interpret *kēpîr* as a young lion in other contexts where it is parallel to ‘aryēh, *šahāl*, and *lābî* (see Job iv 10; xxxviii 39), but that can be understood as poetic license.

The image of the lion, monarch of the animal kingdom, was commonly utilized to represent human kings. The lion’s roar appears three times in the Book of Proverbs (xix 12, xx 2, xxviii 15), introduced in two of these cases by the comparative *kāp*. The first two occurrences involve the simile “like the roar of a lion” occurs twice, likened respectively to a king’s rage and the dread caused by him.

The literary image of the lion’s roar is often associated with its hunger: it roars before it leaps on its prey: “Their roaring is like a lion’s, they roar like the great beasts; When they growl and seize a prey, they carry it off and none can recover it” (Isa. v 29). Intense cruelty characterizes the hungry lion, while the verb “roar” is used metaphorically for human mental distress: “I roar because of the turmoil in my mind” (Ps. xxxviii 9b).¹⁰⁰

The Text

Our present saying compares two regal creatures: the lion, “king of the beasts” and the ruler of a human society. The lion’s roar and the king’s rage symbolize the temperament of rulers who react angrily to

⁹⁹ See: David Qimḥi, *Sefer Hashorashim*, s.v. *k-p-r*; BDB, p. 498. In *kēpîr* ‘ārāyôt (Judg. xiv 5), Tur-Sinai proposes emending *kēpîr* to *kabbîr* ‘great’ (*bêt* replacing the *pê*), indicating the lion’s large size rather than young age (*Halašon vehasefer* I [Jerusalem, 1948], pp. 380–82).

¹⁰⁰ The noun *naham* ‘growl, roar, moan’ also pertains to bears (Isa. lix 11), waves (Isa. v 30), and human voices in distress (Prov. v 11; Ezek. xxiv 23).

their subjects, whom they seek to keep under their control. Because the ruler's policy and decisions are unpredictable, the king's subjects must act with extreme caution so as not to arouse his fury and seal their fate: "The terror of a king is like the roar of a lion; he who provokes his anger risks his life" (Prov. xx 2).

Kings are likened to beasts of prey from whom it is difficult to escape: "A roaring lion and a prowling bear is a wicked man ruling a helpless people" (Prov. xxviii 15; cf. Hos. xiii 8). It follows that the ability to pacify an enraged king is highly valued: "The king's wrath is a messenger of death but a wise man can appease it" (Prov. xvi 14).

The second clause of our saying, "his favor is like dew upon the grass," conveys an ideal pastoral scene: "his favor" means the king's grace and good will toward his subjects.¹⁰¹ The phrase "the king's favor" recurs in Proverbs (xiv 35, xvi 13) with precisely this meaning and is similar to the use of *rāṣôn* 'favor' with regard to God, in the prayers of the righteous: "A good man earns the favor of the Lord" (Prov. xii 2); "The prayer of the upright pleases Him" (Prov. xv 8).¹⁰²

The "dew upon the grass" to which the king's favor is compared is an image of natural renewal, used several times in the Bible as a simile for divine grace and blessing—"like dew from the Lord, like droplets on grass" (Mic. v 6b; cf. Hos. xiv 6a; Zech. viii 12). The withholding of dew is a curse: "That is why the skies above you have withheld [their] moisture and the earth has withheld its yield" (Hag. i 10).

A parallel simile compares the king's favor to a "rain cloud in spring" (Prov. xvi 15). The verse describes the sunny countenance of the king, whose face shines like a farmer's rejoicing at the sight of the clouds that augur the coming of the first rain. Similarly, the expression on the king's face makes his subjects happy.

Returning to our verse, the conjunction of lion and king in the first stich, where the king is angry, with the image of "dew upon the grass" in the second stich, where he is not, presents some difficulty. To

¹⁰¹ Delitzsch (*Proverbs of Solomon* II, p. 27) interprets *rāṣôn* as a mental disposition toward kindness, opposed to *zā'ap* "ill-humor," based on the LXX τὸ ἰλαρόν 'favor, cheerfulness'. Hame'iri (*Proverbs*, p. 188) interprets *rāṣôn* as placating the king.

¹⁰² On the wisdom of doing what pleases God, a behavior typical of the righteous, cf. Prov. x 32; xv 8; Ps. xix 15. Ibn Ezra draws a circular argument of retribution: the king's rage rewards those who make him angry, while his goodwill rewards those who please him, in the same way that grass thirsts for the dew.

create thematic unity between them, Arnold Ehrlich would emend *kakkēpîr* ‘like a lion’ to *kikēpôr* ‘like frost’ (cf. Job xxxviii 28–29) and delete *naham* ‘roar’ as a secondary interpolation influenced by the common idiom *naham kakkēpîr* ‘roar like a lion’ (cf. Prov. xx 2). This produces “The rage of a king is like frost; his favor is like dew upon the grass,” with the two poles of the king’s rage and favor balanced by two antithetical natural phenomena—the frost that damages crops and the dew that nourishes them.¹⁰³ In the context of all the “king sayings,” however, Ehrlich’s proposed deletion of *naham* ‘roar’ seems inappropriate. “His favor,” a common idiom in Proverbs, fits the moral of the saying. There is no need to harmonize the different semantic fields, fauna and climate, because each functions as a separate illustration associated with the didactic message.

To sum up, by linking the human monarch with the king of the animals the sage suggests the ideal conditions of good will and peace between subject and ruler. His admonition draws the reader’s attention to the king’s “favor” as opposed to the dire effects of his “rage.”

2.2.2.3 *Kēpîr* ‘Lion’ in a Synthetic Saying¹⁰⁴

The terror of a king is like the roar of a lion; he who provokes his anger risks his life. (Prov. xx 2)

Here the second clause complements the first. The first clause likens dread of a king to a lion’s roar; the second clause explains that a person who provokes the king’s wrath endangers his own life.

This saying is one of those about the norms of conduct between kings and their subjects.

The first clauses of Prov. xix 12 and xx 2 are similar in form and style,¹⁰⁵ except that the royal rage in the former is replaced by terror of him in the latter.¹⁰⁶ The second stich of the latter verse adds the complementary parallelism of the response that awaits one who arouses

¹⁰³ Ehrlich, *Psalmen, Sprüche und Hiob*, p. 110.

¹⁰⁴ On *kēpîr* ‘lion’ see §2.2.2.2.

¹⁰⁵ The LXX^A varies the pattern: instead of ὅμοια ‘is like’ (xix 12a) it has οὐ διαφέρει ‘does not differ from’ (xx 2a).

¹⁰⁶ For the Hebrew *ʾēmā* ‘terror’ (xx 2a) the LXX has ἀπειλή ‘threat’. The Syriac replaces “terror of the king” with “the king’s rage,” similar to the MT *ḥāmat/zaʿap melek* (xvi 14 and xix 12). The BHS proposal to read here *ḥāmat melek* ‘wrath of the king’ (cf. Prov. xvi 14), instead of *ʾēmat melek* (Prov. xx 2), parallel to *zaʿap melek* ‘rage of a king’ (Prov. xix 12) seems plausible, but the MT also suits the context.

the king's wrath, instead of the antithetical relation between the king's wrath and his favor proposed in xix 12b.

Despite the differences, both sayings have the same didactic goal of making courtiers' aware of the royal power and king's capriciousness. The terror inspired by a king, who intimidates his subjects, is exemplified by the impression created by the roars of the "king of the jungle."

The sage discusses the consequences for a courtier who has provoked the king's wrath. The verb *miṣabbēr* 'provoking anger' is in a reflexive conjugation because of the reflexive effect of the doer's action: by arousing the king's wrath he brings harm upon himself.¹⁰⁷ *Miṣabbēr* is a denominative, from *ʿebrâ* 'arrogance, fury' (cf. "raging anger" in Job xl 11). Some would emend *miṣabbēr* by metathesis to *miṣārēb* 'be involved', emphasizing that a subject's intrusion where he does not belong is liable to bring disaster on his own head.¹⁰⁸

The Book of Proverbs instructs readers to conduct themselves carefully and with restraint when in the presence of the king. The short-tempered person is one of the principle targets of the sage's advice: "An impatient man commits folly; A man of intrigues will be hated" (xiv 17; cf. v. 29). The ideal is the calm person who controls himself and reacts carefully, thinking clearly and speaking reasonably. But the hot-tempered man stirs up strife and is soon drawn into situations of conflict and fighting: "A hot-tempered man provokes a quarrel; A patient man calms strife" (xv 18).¹⁰⁹

The sayings that condemn negative behaviors are often marked by the notion of reward and punishment, as in the case of the adulterer: "Only one who would destroy himself does such a thing" (vi 32b). Those who ignore wisdom destroy themselves (viii 36). Here too the courtier who provokes the king's anger "risks his life" (xx 2b).¹¹⁰

¹⁰⁷ The reflexive meaning of the *hitpaʿel* form *miṣabber*, from *ʿ-b-r* II (*HALOT*, 3: 737), refers to a person who brings his anger upon himself. On this aspect of the *hitpaʿel*, see Joüon and Muraoka, *A Grammar of Biblical Hebrew* I, pp. 157–60, §53. Gemser (*Sprüche Salomos*, 112) suggests the reading *miṣabber weḥotē*, explaining the *wāw* of *miṣabberō* as the *wāw adaequationis*; i.e., the irritator of a king is likened to a person who sins against himself.

¹⁰⁸ On the alternative reading *miṣārēb* 'meddling', see below, §3.4. Baumgartner believes that this alternative, attested in LXX^A, represents the interpolation of a marginal note by a later copyist. See Baumgartner, *Etude critique sur l'état du texte du Livre des Proverbes*, p. 183.

¹⁰⁹ On the hot-tempered type see §3.4.

¹¹⁰ Ibn Ezra interprets *ḥotē napšō* (xx 2b) as self-mischief done by a person who does not respect royalty and establishes a link to the word *kābōd* 'honor' in the next verse.

The principle of reward and punishment aims to preserve the social values and the social order. It accentuates the wisdom of obeying authority in its various forms, whether parents or king. A person's ability to control his own drives and to adopt moderate and prudent behavior suited to his social environment is a mechanism that preserves the social order and solidarity (cf. xv 18, 23, 27, 28, xvii 27).

2.2.2.4 ʿĀrî ‘Lion’ and Dōb ‘Bear’ in a Comparative Saying¹¹¹

[Like] a roaring lion and a growling [*or*: prowling] bear is a wicked ruler over a poor people. (Prov. xxviii 15; free translation)

In this analogy (which many translations render as a simile, although the comparative particle is missing in the Hebrew), a bad ruler is equated with two predatory beasts, a lion and bear.¹¹²

The Animals

The noun *dōb* ‘bear’ (*Ursus arctos*) appears in cognate Semitic languages: *dabû* in Akkadian (fem. *dabītu*), *db* in Ugaritic, *dubbāʿ* in Aramaic, *debbā* in Syriac, and *dubbun* in Arabic.

In the Bible, *dōb* indicates both males and females (*dubbāh* ‘she-bear’ is attested only in post-Biblical literature). It is always treated as a masculine noun, even when the context clearly refers to a female—e.g., *dōb šakkûl* ‘a she-bear deprived of her cubs’¹¹³—except for 2 Kgs ii 24, where both the adjective *štayim* and the verbs are in the feminine.¹¹⁴

In the Bible the bear, one of the indigenous carnivores of Palestine, is a paradigm of the dangerous animal from which there is no escape.¹¹⁵ It is frequently mentioned, along with the lion, as a particularly dangerous animal (2 Kgs ii 24; Hos. xiii 8; Lam. iii 10). It is described as a ferocious animal in one of Daniel’s visions (vii 5). It appears among the wild animals in the dramatic scene of the Day of the Lord, as foreseen by the prophet Amos: “Ah, you who wish for the

¹¹¹ On the comparative saying see §1.5.1.1.

¹¹² Instead of a bear, the LXX has λύκος διψῶν ‘a thirsty wolf’. The Vulgate restores the MT animal, but makes him *esuriens* ‘hungry’.

¹¹³ On the idiom *dōb šakkûl*, see §3.1.2.

¹¹⁴ See Joüon-Muraoka, *A Grammar of Biblical Hebrew* II, p. 493, §134.

¹¹⁵ Tristram (*The Fauna and Flora of Palestine*, p. 7) reported seeing a Syrian bear (*Ursus arctos syriacus*) in Wadi Hammam.

day of the Lord! Why should you want the day of the Lord? It shall be darkness, not light! As if a man should run from a lion and be attacked by a bear, or if he got indoors, should lean his hand on the wall and be bitten by a snake!” (v 18–19). The prophet Isaiah, on the other hand, describes the eschatological ideal world of peace and justice in which dangerous animals are no longer a threat: “The wolf shall dwell with the lamb, the leopard lie down with the kid; the calf, the beast of prey, and the fatling together, With a little boy to herd them. The cow and the bear shall graze” (xi 6–7a; cf. lxxv 25).

The copresence of bear and lion in our proverb expresses a danger from which there is no possibility of escape, as in Lamentations: “He is a lurking bear to me, a lion in hiding” (iii 10; cf. Hos. xiii 8). In fact, the confrontation between a human being and lion and bear is considered to be the test of heroism and courage (cf. 1 Sam. xvii 37).

Although *ʾārî/aryēh* is by far the most common term for the lion (*Panthera leo*), the Bible has more names for it than for any other wild animal: *layiš* [Akkadian *nēšu*; Aramaic *lētāʾ*; Arabic *layt*], *lābʾ* [Akkadian *lābum*; Ugaritic *lbī*; Arabic *labuwatun*], *šahāl*, and *kēpîr*. It is difficult to assign different stages of maturity to the different terms, except the construct *gûr ʾaryēh*, which apparently refers to the young lion still nursing from its mother (cf. Deut. xxxiii 22; Jer. li 38), and *kēpîr* ‘young lion’, mentioned in parallel to *gûr* ‘whelp, young’ (Ezek. xix 3).¹¹⁶

The Bible provides information about the lion’s habitat and predatory activity in various parts of Palestine, including the hill country around Bethlehem (1 Sam. xvii 34), the environs of Bethel (1 Kgs xiii 24) and Timnah (Judg. xiv 5), near the headwaters of the Jordan (Jer. xlix 19, l 44), Samaria (2 Kgs xvii 25), Mt. Hermon and the Lebanon (Song iv 8), and the southern Negev on the road to Egypt (Isa. xxx 6).

The lion symbolizes boldness and audacity (cf. Amos iii 8). Human bravery is shown in turn by a man’s willingness to face a lion (cf. Judg. xiv 6, 1 Sam. xvii 34, 2 Sam. xxiii 20).

The prophetic literature employs the folk motif of the lion sent by God to punish those who transgress His laws or disobey Him (1 Kgs xiii 24, xx 36; 2 Kgs xvii 25–26).

¹¹⁶ For more on lions, and specifically the *kēpîr*, see §2.2.2.2.

The lion, king of the beasts, became the symbol of divine kingship.¹¹⁷ Hence, its roar is compared to God's word to his prophets: "A lion has roared, who can but fear? My Lord God has spoken, who can but prophesy?" (Amos iii 8). Prophetic texts associate the Lord's might in his battle against adversaries with the image of the lion (Jer. li 38); in this context the lion's roar and teeth are used as metaphors for the enemy's threat (Isa. v 29 and Joel i 6, respectively).¹¹⁸

Like the bear, the lion will be tamed in the end of the days. Isaiah's juxtaposition of predator and prey, wild beasts and domesticated animals (wolf and lamb, leopard and kid, lion and calf, bear and cow, lion and ox) means that dangerous animals will no longer threaten others and that for Divine providence the preyed upon will have equal status with the strong (see Isa. xi 6–8).

The lion in his supremacy is closely associated with the king's royal status. Solomon's throne was flanked by two lions, while twelve more lions lined the six steps leading up to it (1 Kgs x 19–20). The lion is also one of the animals, along with the cherubim, that decorated the Ark that was Yahweh's symbolic throne in the Temple of Jerusalem (ibid.; cf. Ezek. i 10).¹¹⁹

The Text

The threatening aspects of a bad ruler are conveyed by the reference to a roaring lion. The same pattern appears in two other sayings about kings and rulers that refer to their tyrannical habits and the appropriate conduct in their presence (Prov. xix 12, xx 2; see discussion above).

The epithet attached to the second animal in the first stich, *dōb šōqēq* 'growling (or prowling) bear', is a hapax. The root *š-q-q* has been interpreted as referring to greedy thirst, as in "when a thirsty man dreams he is drinking and awakes faint, with his thirst not quenched" (Isa. xxix 8b [RSV]), where the idiom *nepeš šōqēqâ* (lit. 'pulsating throat') also appears in Psalms: "for He has satisfied the thirsty, filled

¹¹⁷ For Mesopotamia, see Watanabe, *Animal Symbolism in Mesopotamia*, pp. 22–24, 42–53; for Egypt, literature see Emily Teeter, "Animals in Egyptian Literature," *HAWANE*, p. 267.

¹¹⁸ See Keel, *The Symbolism of the Biblical World*, pp. 85–89.

¹¹⁹ On the iconographic and symbolic uses of the lion, see Catherine Breniquet, "Animals in Mesopotamian Art," *HAWANE*, p. 161; Borowski, "Animals in the Religions of Syria-Palestine," *HAWANE*, pp. 405–7; Watanabe, *Animal Symbolism in Mesopotamia*, pp. 112–16.

the hungry with all good things” (Ps. cvii 9).¹²⁰ Another interpretation is that *š-q-q* refers to the sound uttered by the bear about to attack, as suggested by Targum Jonathan’s *dûbā’ masrîāh* ‘a female bear who raises her voice’.¹²¹ Rashi agrees, observing that “*nehîmâ* for a lion and *š’qîqâ* for a bear are both terms of screaming.” This rendering fits better with the image of the roaring lion.

Another possibility is that *š-q-q* means “charging.” In the *hitpalpel* the verb is used to represent the frenzied movement of chariots through plazas—evidently as an onomatopoeic representation of the noise made by the wheels (Nah. ii 5).¹²² Delitzsch combines the two meanings—the passionate desire for prey and the beast running back and forth as it yearns to pounce on its prey.¹²³

These two ferocious beasts, lion and bear, are linked in another metaphor for unavoidable danger: “He is a lurking bear to me, a lion in hiding” (Lam. iii 10).

The saying in Proverbs offers a vivid picture of a lion and a bear hunting for prey. The beast’s behavior is motivated by uncontrollable drives; the unpredictable behavior of the evil ruler resembles these urges. The second stich, “a wicked man ruling over a poor people,” provides the reason for the condemnation of the ruler; namely that he takes advantage of his power and oppresses the poor. The equation of the wicked ruler with “a roaring lion” or a “growling [*or* prowling] bear” emphasizes his unrestrained appetite for power and the cruelty that produce a reign of terror for his subjects.

None of the sayings about kings in the book of Proverbs reflect any expectation of social reform or question their authority. They are, however, critical of the moral flaws of the ruler who exploits his authority to abuse the poor and weak. Ibn Ezra argues that the wickedness of the ruler in this saying is emphasized by its contrast with the

¹²⁰ Gemser (*Sprüche Salomos*, p. 114) supports the meaning “thirsty” from Ethiopian “to strive for, desire” (*š-q-q* II, *HALOT*, 4:1647), and Isa. xxix 8 and Ps. cvii 9.

¹²¹ The Peshitta follows the Targum. For the semantic synonym of *h-m-h* ‘murmur, growl’, see Isa. lix 11; Song v 4; Jer. xxxi 20.

¹²² In tannaitic Hebrew, the *hitpolel* of *š-q-q* means “desire strongly” (e.g., *b. Ketub.* 65a).

¹²³ Delitzsch, *Proverbs of Solomon* II, p. 231. Greenberg asserts a semantic link between *š-q-q* “yearning” and *š-q-q* “noisy,” similar to the use of *‘-r-g* in Joel (i 20a) in association with both animal sounds and thirst. See Moshe Greenberg, “Noisy and Yearning: The Semantics of *š-q-q* and its Congeners,” in M. V. Fox et al. (eds.), *Texts, Temples, and Traditions: A Tribute to Menahem Haran* (Winona Lake, IN, 1996), pp. 339–44.

benevolent ruler in the second half of the next verse: “A prince who lacks understanding is very oppressive; he who spurns ill-gotten gains will live long” (Prov. xxviii 16). He explains that the essence of the ruler’s wickedness is that he is “very oppressive” and loves ill-gotten gains. Nevertheless, this wickedness is not an ingrained trait, but rather the lack of prudence of “he who lacks understanding” (v. 16a). The suffering of a people who groan under the yoke of a tyrant is invoked in the saying, “when the wicked dominate the people groan” (xxix 2b). The opposite of this picture is associated with reward, for “If a king judges the poor with equity, his throne will be established forever” (xxix 14; NRSV).

2.2.2.5 *K^epîr ‘Lion’ in an Antithetical Saying*

The wicked flee though no one gives chase; but the righteous are as confident as a lion.¹²⁴ (Prov. xxviii 1)

The two clauses of this saying constitute an antithetical parallelism of the wicked with the righteous, connected by the adversative *wāw*.

The first stich incorporates a proverbial expression, “flee though no one gives chase,” found in the literary tradition of imprecations: “You shall flee though none pursues” (Lev. xxvi 17b; cf. v. 36 and Deut. xxviii 7, 25). The disagreement in number between the singular subject and plural verb, in the first clause, and between the plural subject and singular verb, in the second clause, as well as the lack of clarity about the syntactical function of “wicked,” require clarification. The early versions tend simply to restore the concord of subject and predicate here.¹²⁵ Another approach notes that the noun *rāšāʿ* ‘wicked’ is displaced to the end of the verbal clause: “[they] flee though no one gives chase—wicked.” This suggests that it is intended as an appositive to the tacit subject of the verb *nāsû* ‘they flee’.¹²⁶

¹²⁴ On *k^epîr* ‘lion’ see above, §2.2.2.2.

¹²⁵ The LXX and Vulgate render the verb *flee* in the singular. *BHS* restores the verb to the singular by conjecturing that the *wāw* of *nāsû* is a dittograph from *w^eʿên*. In the second stich it reads “righteous” in the singular instead of the plural. The Targum renders the whole saying in plural.

¹²⁶ The perfect *nāsû* is not the past historical but a perfect denoting an action that, although completed in the past, extends its influence into the present and even into the future. See GKC, §106g.

The first clause depicts a wicked man who believes himself pursued despite the fact that no one is chasing him. The antithesis of the wicked person haunted by anxieties is the righteous man who is as confident as a lion. The root *b-t-h* occurs in formulas of the righteous man's trust in the Lord: "but he who trusts in the Lord shall be surrounded with favor" (Ps. xxxii 10b; cf. Prov. xvi 20, xxii 19).¹²⁷ The motif of trusting in divine grace is found in several contrasts between good and bad people in Proverbs: e.g., "A greedy man provokes quarrels, but he who trusts the Lord shall enjoy prosperity" (xxviii 25; cf. xxix 25).

The comparison of the righteous with the lion evokes the image of the crouching lion, the symbol of security and complacency. Similarly, the royal image of the lion is found in blessings, including Jacob's of Judah—"he crouches, lies down like a lion, like the king of beasts; who dare rouse them?" (Gen. xlix 9b)—and Balaam's of the Israelites—"They crouch, they lie down like a lion, like the king of beasts; who dare rouse them?" (Num. xxiv 9).

Confidence is also a trait of the mythological Behemoth in the Lord's speech in Job: "He is confident the stream will gush at his command" (Job xl 23b).

The crouching lion is a concrete illustration of the worry-free trust of the righteous man that informs the moral and religious perspective of our verse.¹²⁸ In contrast to the fearless lion and confident righteous man, the wicked man is assimilated to the sinner and the curse that befalls him: "the wicked flee though no one gives chase" (Prov. xxviii 1a). In its concision, the saying does not provide details of the reprehensible deeds committed by the wicked, who put their trust in violence and robbery (see Ps. lxii 11) and lose their faith in the Lord. Nor does it describe their flight as a response to a real pursuit, but rather as an metaphor of the contrast between the wicked and the righteous and their respective punishment and reward.¹²⁹

¹²⁷ For the semantic development of the stem *b-t-h*, from "falling down" (Jer. xii 5) to "having confidence in somebody," see Samuel E. Loewenstamm and Joshua Blau, *Ošar Lešon Miqra'*, vol. II (Jerusalem, 1960), p. 153.

¹²⁸ On the dogmatic teaching of the saying, see McKane, *Proverbs*, p. 621.

¹²⁹ For the moral-religious sphere of this saying, see Hame'iri, *Proverbs*, p. 262. Toy (*Proverbs*, p. 494) argues for the metonymic meaning of wicked and righteous as good conscience and bad.

2.2.2.6 *Dʿrôr* ‘Sparrow’ in a Comparative Saying¹³⁰

Like a bird (*šippôr*) in its flitting, like a sparrow (*dʿrôr*) in its flying, a curse that is causeless does not alight. (Prov. xxvi 2; free translation)

The Animal

Ibn Ezra (Prov. xxvi 2) objects to identifying animal names—birds among them—stating that the identifications of birds offered by the early commentators are “like dreams without solutions.” In fact, there is no consistency in how translators ancient and modern identify *šippôr* and *dʿrôr*. For example, the same pair of *šippôr* and *dʿrôr* is rendered by the Septuagint as “birds” and “sparrows” (in the plural!) in Prov. xxvi 2 and as “sparrow” and “turtle-dove” in Ps. lxxxiv 4. Modern English translators usually render *šippôr* as “sparrow” and *dʿrôr* as “swallow” (e.g., RSV, NJPS and KJV of Ps. lxxxiv 4).¹³¹

For modern scholars, too, the identification of Hebrew words with particular species of birds is problematic, because in only a few cases do they have reliable Semitic cognates.¹³² Nevertheless, it is commonly accepted that the *dʿrôr* is the sparrow (*Domesticus passer*), a permanent resident of Palestine. The *dʿrôr* nests near human habitations, in attics, gutters, windowsills, skylights, caves, crannies in rocks, and trees, but is not easily domesticated.¹³³

The rabbis, who considered the collocation *šippôr-dʿrôr* to be a single noun, gave the second element two meanings derived from folk etymology. The first associated it with *dûr* ‘reside, dwell’, corresponding to the habit of the *šippôr-dʿrôr* to live near human habitations. The second derived it from the abstract noun *dʿrôr* ‘freedom, liberty’, emphasizing the bird’s trait of avoiding human authority (see *b. Bêṣah* 24a).

¹³⁰ On the comparative saying, see §1.5.1.1.

¹³¹ Rashi identifies *dʿrôr* (Prov. xxvi 2) as רוגמלע, i.e. ‘swallow’ (= *sʿnunit* in Hebrew). The ancient versions attach the same identification for other birds, such as *sûs/sis* (e.g., LXX χελιδών and Vulgate *hirundinis/hirundo* in Isa. xxxviii 14; Jer. viii 7). For *šippôr* as a collective noun = “fowl,” see above, §2.2.1.2.

¹³² On the identification of animal names on the basis of Semitic cognates, see Firmage, “Zoology,” pp. 1144, 1151, 1154; Militarev and Kogan, *SED*, No. 71.

¹³³ See Tristram, *Natural History of the Bible*, pp. 201, 204; Bodenheimer, *Animal Life in Biblical Lands* I, pp. 89, 183, 185; idem, *Animal Life in Palestine* (Jerusalem, 1935), pp. 156, 164; E. Smoʿli, *Birds in Israel* (Tel Aviv, 1957), pp. 128, 170–71.

For the psalmist, the motif of the bird nesting near the temple altar is a poetic trope expressing the sense of protection and confidence felt by those who dwell near the Lord: “Even the bird (*šippôr*) has found a home, and the sparrow (*dʾrôr*) a nest for herself” (Ps. lxxxiv 4a [RSV 3a]).¹³⁴

Although *šippôr* and *dʾrôr* appear as separate substantives here and in Psalms lxxxiv 4, in both cases the segregation of the elements of the compound into the parallel clauses is probably meant for poetic effect (cf. Ps. civ 17); thus we should understand both clauses refer to the same species.

In the Bible, the root *n-d-d* is generally applied to the migration of birds (cf. Isa. xvi 2; Prov. xxvii 8a) and the wanderings of human beings (Isa. xxi 15, xxxiii 3; Prov. xxvii 8b).¹³⁵ But the phrase *nōdēd kânāp* denotes also “moving/flapping a wing” (Isa. x 14), referring to movement or the fluttering of wings, and not seasonal migration.¹³⁶ Because the *dʾrôr* is a permanent denizen of Palestine, the infinitive *lānûd* here should be understood as representing instead the root *n-w-d* ‘move about’.¹³⁷

The Text

The saying is composed of two consecutive images linked by the comparative *kāp* to a comparandum introduced by the adverb *kēn*. The second clause, which definitely refers to taking flight, clarifies and intensifies the tentative “flapping” or “flitting” of the preceding clause. This prepares us to find the link between the bird imagery of the first half of the verse and the moral lesson conveyed in its second half.

But what is the fate of the “causeless curse”? The Qere replaces the negative *lōʾ* with the object pronoun *lô*, which means that, instead of

¹³⁴ Cf. Isa. lx 8. For a similar perception among Eastern peoples, see Herodotus, *The Histories*, Book II, § 64.

¹³⁵ On the root *n-d-d*, see §2.2.1.2.

¹³⁶ *N-d-d* as motion is exemplified by *nāʿ wānād* (Gen. iv 12, 14); the same pair of verbs used to describe an earthquake in Isaiah (xxiv 20); and the swaying of a reed in the water (1 Kgs xiv 15).

¹³⁷ For the grammatical and semantic affinity between the geminate form *n-d-d* and *n-w-d* (i.e., נ"נ and נ"ו verbs), see Joüon and Muraoka, *A Grammar of Biblical Hebrew* I, pp. 212–22 (§80a) and 224–33 (§82a). Arama (*Yad Avshalom*, p. 85) distinguishes *lānûd* from *lāʾûp*, emphasizing the forced circumstances of the former, when a bird is thrust out of the nest for good, opposed to *lāʾûp*, which refers to seasonal migration.

harming its target, the curse will boomerang on the person who uttered it. This reading reflects a circular perception of divine retribution in which a vain curse returns to strike the person who utters it. But the bird image that is invoked as similar to the curse supports the Kethib, *lō' tābō'* 'will not arrive': the baseless curse hovers without ever alighting at its destination.¹³⁸

A curse is uttered with the intent of bringing misfortune on its target. In the biblical view, any curse is endowed with magical powers that stalk the target (and his descendants) until it catches up with him; e.g., "All these curses shall befall you; they shall pursue you and overtake you, until you are wiped out. ... They shall serve as signs and proofs against you and your offspring for all time" (Deut. xxviii 45–46). The severity of the biblical punishment for cursing one's parents is evidence of the ancients' belief in the power of a curse: "Whoever curses his father or his mother shall be put to death" (Exod. xxi 17 [RSV]; cf. Lev. xx 9; Prov. xxx 11).

The wisdom context of our saying places curses in practical contexts and not merely in the religious and moral realm. The book of Proverbs warns against passing on to the master gossip about his servant, thus avoiding the latter's curse: "Do not inform on a slave to his master, lest he curse you and you incur guilt" (Prov. xxx 10). This practical advice is meant to reduce the friction between master and servant and to leave responsibility for household affairs (such as treating servants properly and avoiding their insults) to each master.¹³⁹ Qoheleth, too, warns against cursing a king or a rich man, because he will find out and, given his power, the curse will come back to haunt you: "Even in your thought, do not curse the king, nor in your bed-chamber curse the rich; for a bird of the air will carry your voice, or some winged creature tell the matter" (Qoh. x 20 [RSV]).

Curses have real weight; but the authority of the wise may restrain the power of a *qil'lat ḥinnām*, an "unjustified and purposeless curse."¹⁴⁰ The analogy between the avian comparatum or vehicle and the comparandum or tenor, drawn from the ethical and magical sphere

¹³⁸ The ancient translations (LXX, Tg.) follow the Qere, i.e., the negative particle.

¹³⁹ McKane, *Proverbs*, p. 650.

¹⁴⁰ For the use of *ḥinnām* to mean "in vain, groundless," cf. Prov. i 11; iii 30; Ps. xxxv 7. On the potency of curses and blessings, cf. Gen. xxvii 33; Judg. xvii 2.

of life, tells us that just as the birds are in perpetual motion, so too an unjustified curse will not come to rest on its intended victim.¹⁴¹

2.2.2.7 Ḥāmôr ‘Donkey’ and Sûs ‘Horse’ in a Comparative Saying

A whip for a horse and a bridle for a donkey; and a rod for the back of dullards. (Prov. xxvi 3)

The Animals

The noun ḥāmôr ‘donkey’ is attested in other Semitic languages; e.g., *imērum* in Akkadian, ḥmr in Ugaritic,¹⁴² ḥāmārā in Aramaic, ḥ^emārā in Syriac, and ḥimārun in Arabic.

The Bible distinguishes among the male ḥāmôr ‘jackass’, the female ʾātôn ‘jenny’, and the young male ʿayīr, as well as the wild ass or onager (ʿārôd, pere). Donkeys are frequently mentioned in the Bible as beasts of burden and transport¹⁴³ and as work animals performing various agricultural tasks (see Deut. xxii 10; Isa. xxx 24, xxxii 20). The donkey’s value in the ancient world is reflected by the laws that protected owners against the damage caused by its loss or injury.¹⁴⁴ Idioms like “saddle a donkey” (Gen. xxii 3; 1 Kgs xiii 23; 2 Kgs iv 24) and “dismount the donkey” (cf. Judg. i 14) are used to describe its daily use by the ancients; they often mark a turning point in the narrative or a crucial decision taken by the hero. E.g., “So Abraham rose early in the morning, saddled his donkey, and took two of his young men with him, and his son Isaac; he cut the wood for the burnt offering, and set out and went to the place in the distance that God had shown him” (Gen. xxii 3); or in the story of Achsah, Caleb’s

¹⁴¹ On the hermeneutic impact of the Qere lô see Delitzsch, *Proverbs of Solomon* II, pp. 174–75.

¹⁴² Also “load” or a “measure of capacity” (like the Hebrew *homer*). The Akkadian term *imērum* attested in Mari, MA, NA, and Nuzi, denotes too “ass-load”. Firmage, “Zoology,” p. 1156, n.2; Riede, *Im Spiegel der Tier*, p. 175.

¹⁴³ On the donkey as a means of transportation, see Exod. iv 20; Josh. xv 18; Judg. i 14; 1 Sam. xxv 20; 2 Kgs iv 24; as a beast of burden, see Gen. xlv 23; 1 Sam. xxv 18; 2 Sam. xvi 1; Neh. xiii 15. Domestic donkeys were probably present in the Levant during the Chalcolithic period and their remains have been found in Arad, Israel, in the Early Bronze I-II levels. See Brian Hesse and Paula Wapnish, “An Archaeological Perspective on the Cultural Use of Mammals in the Levant,” *HAWANE*, p. 470; Gilbert, “The Native Fauna,” *HAWANE*, pp. 17–18.

¹⁴⁴ See Exod. xxiii 4, 5, 12; Deut. v 13; xxii 1–4, 10. Cf. the Code of Hammurabi in *ANET* (trans. Theophile J. Meek), pp. 163–77, §§7, 8, 244, 269.

daughter: “When she came [to him], she induced him to ask her father for some property. She dismounted from her donkey, and Caleb asked her, “What is the matter?” (Judg. i 14b) A similar pattern appears in the Ugaritic Legend of Aqhat, where “saddling a donkey” is an idiom for starting a journey: the hero’s sister, Pagat, prepares the animal to carry their father to the drought-stricken field: “Weeping, she leads the donkey, weeping, ropes up the ass” (Aqhat, *CAT* 1.19, Tab. III, Col. II, lines 8–9).¹⁴⁵

The donkey’s typical obstinacy is a crucial element of the Balaam pericope (Num. xxii 21–30). His she-ass exemplifies the obedient animal who follows God’s instructions and disobeys her master, as the story vividly depicts: “When the ass now saw the angel of the Lord, she lay down under Balaam; and Balaam was furious and beat the ass with his stick” (Num. xxii 27).

The noun *sûs* ‘horse’ has cognates in the Akkadian *sisûm*, Ugaritic *ššw*, and Aramaic *sûsyā*.¹⁴⁶ Unlike the ox and donkey, which served primarily as beasts of burden, in the Bible the horse is used exclusively by the cavalry and chariots (see 2 Sam. viii 4, 1 Kgs x 26).¹⁴⁷ It is frequently depicted as drawing chariots in warfare (see Exod. xv 1; Isa. xxxi 1; Jer. xlvi 9). Its tackle—harness, bridle, and bit—are frequently invoked in metaphorical senses (Ps. xxxii 9; Isa. xxx 28).¹⁴⁸

The war-horse provided an ideal image for human might and vanity, which lower moral standards and undermine the fear of God (cf. Isa. ii 7–10, xxx 15–17; Hos. xiv 4; Amos ii 15; Mic. v 9; Ps. xxxiii 17; Prov. xxi 31). We encounter close descriptions of the horse in various poetical passages that reflect the Israelites’ familiarity with the animal. Thus the ancients speak with admiration of the horse’s mane, its snorting nostrils, neigh, and beating hoofs, and, especially, its rapid gallop (cf. Job xxxix 17–25, 2 Kgs vii 6; Judg. v 22; Jer. viii 16; Isa. v 28).

¹⁴⁵ See Parker, *Ugaritic Narrative Poetry*, p. 69.

¹⁴⁶ The Sumerian word for horse, ANŠE.KUR.RA ‘donkey of the mountains’, supports the theory that the domesticated horse (*Equus caballus*) was introduced to the ancient Near East from central Asia some time before the fourth millennium. See Gilbert, “The Native Fauna,” *HAWANE*, pp. 16–17.

¹⁴⁷ Firmage, “Zoology,” p. 1136. On the introduction of the horse to Palestine, see Bodenheimer, *Animal Life in Biblical Lands* II, pp. 363–67.

¹⁴⁸ Horse and chariot are metaphors of war (Jer. vi 23; Amos iv 10; Neh. iii 2; Ezek. xxxviii 4, 14; xxxix 20; Zech. x 3); their absence symbolizes the approach of peace (cf. Zech. ix 10).

The swiftness of the horse is likened to and considered even to exceed that of eagles, wolves, and leopards (cf. Jer. iv 13; Hab. i 8).¹⁴⁹

The Text

The analogies in our verse appear in a verbless sentence composed of three noun phrases—two of two words each (in Hebrew), the third of three words—in which the prepositional *lāmed* serves as the copula between each beast and its corrective device. The comparative *kāp* is omitted before the two animal images. The third stich is introduced by the comparative *wāw* (*wāw adaequationis*) instead of the more common adverbial *kēn*, so that the tenor is the applicative clause. The lengthening of the third stich, by breaking the symmetrical structure of the first two, calls attention to the proverb's conclusion.¹⁵⁰

The foolishness of the young and inexperienced boy passes as he matures into a young man. It is consequently crucial to educate him while he is still young so that he will not fall into immoral actions: "If folly settles in the heart of a lad, the rod of discipline will remove it" (Prov. xxii 15). Flogging with a stick is the standard educational method in the Book of Proverbs; in fact, *mūsār* means not only "instruction" but also a disciplinary beating, as in "He who spares the rod hates his son, but he who loves him disciplines him early" (xiii 24). A father must discipline his son to save him from sin: "Do not withhold discipline from a child; if you beat him with a rod he will not die. Beat him with a rod and you will save him from the grave" (xxiii 13–14).¹⁵¹

In contrast to the *ʾiwwelet* 'folly' of the boy, who needs a firm guiding hand because of his youthful gullibility, the *k^esilūt* 'stupidity,

¹⁴⁹ In Egyptian literature, the horse is "swift as a jackal" (*ANET*, p. 477a) and like "falcons in the midst of small birds" (*ibid.*, p. 263a). The prophet Joel compares the invading locusts to horses harnessed to chariots (Joel ii 4).

¹⁵⁰ See Robert Gordis, "al Mibneh Hashirah Ha'ibrit Hakedumah," *Sefer H-shanah Lihude Amerikah* 5693 (New York, 1944), p. 146 [Hebrew].

¹⁵¹ Whipping was perceived as an educational tool in Egyptian Wisdom Literature. The form *sb3y.t*, which semantically parallels *mūsār*, has the double meaning of instruction and corporal punishment. See Nili Shupak, *Where Can Wisdom Be Found?* (OBO 130; Fribourg, 1993), p. 31. On the association between beating with a stick and teaching in the Bible, see Prov. xiii 24; xix 18; xxii 15; xxiii 13; xxix 19; 1 Kgs xii 11; Sir. xxx 1–13; xxxiii 25–30. Three consecutive sayings in the Words of Ahiqar support flogging as a method for educating the young; see Arthur E. Cowley, *Aramaic Papyri of the Fifth Century B.C.* (Oxford, 1967 [1923¹]), pp. 215, 222, col. VI [Sachau, plate 44], lines 80–82). Cf. Bezalel Porten and Ada Yardeni, *Textbook and Aramaic Documents from Ancient Egypt*, Vol. III: Literature, Accounts, Lists (Jerusalem and Winona Lake, IN, 1993), p. 49, Col. 12 [Sachau 53/44], lines 175–77.

foolishness, doltishness' of the *k^esîl* 'fool, dolt, dullard' is a pattern of behavior and thinking that depends on character. The *k^esîl*'s stupidity perverts his moral values.¹⁵² The *k^esîl* lacks intellectual keenness, as indicated by the following saying: "What good is money in the hand of a fool (*k^esîl*) to purchase wisdom, when he has no mind (*w^eleb ʿāyin*)?" (xvii 16; cf. viii 5).¹⁵³ This type of *k^esîl* considers himself to be a wise person; because of his overconfidence he will not listen to reproof or counsel: "A wise man is diffident and shuns evil, But a dullard rushes in confidently" (xiv 16).

Complacency and mental sloth are the main characteristics of the *k^esîl*'s (lack of) judgment (i 32, x 23), thus causing failure (Qoh. ii 14, x 2, 15) and even self-destruction (Qoh. iv 5). The *k^esîl* becomes easily enflamed, invites blows, and picks fights (Prov. xviii 6–7, xix 1). He is unreliable, utters slander and lies (cf. x 18, 23, xiv 8) and hates knowledge (cf. xvii 16, xviii 2).

Because of the *k^esîl*'s destructive influence on those around him, from both a social and legal perspective, he merits corporal punishment, in the hope of educating him: "A rebuke works on an intelligent man more than one hundred blows on a fool" (xvii 10). The same sanction is appropriate to the *ḥāsar lēb*, as in "Wisdom is to be found on the lips of the intelligent, but a rod is ready for the back of the senseless" (x 13; cf. xix 29).

Our saying invokes the technical terms *šōṭ* 'whip' and *meteg* 'bridle', used to curb and train beasts, in the context of the education of the *k^esîl*, thus placing the fool on the level of domestic animals. Strictly speaking, the *meteg* is the piece of metal or chain—the bit—placed in the animal's mouth, to which the reins are attached, e.g., "I will place My hook in your nose and My bit between your jaws; and I will make you go back by the road by which you came" (2 Kgs xix 28b, Isa. xxxvii 29). But it may also stand for the entire bridle, consisting of headstall, bit, and reins. *Meteg* 'bit' is joined to *resen* 'bridle' as means of controlling dumb animals: "Be not like a senseless horse or mule whose movement must be curbed by bit and bridle" (Ps. xxxii 9). The other devices used to train beasts, the *šēbet* 'whip, rod' and its parallel, *šōṭ*, are also appropriate for those lacking in

¹⁵² See Fox, *Proverbs 1–9*, pp. 41–42.

¹⁵³ The biblical idiom *ḥāsar lēb* 'one who lacks sense' and its Egyptian counterpart *iw.ty ḥ3.ty* both reflect the concept of the heart as the seat of thought and mind. See Shupak, *Where Can Wisdom Be Found?* pp. 199–200.

intelligence: “Wisdom is to be found on the lips of the intelligent, but a rod is ready for the back of the senseless” (Prov. x 13b; cf. xix 29).

Despite the existence in Aramaic of *mitgā* ‘bridle’, the Targum has *magl^ebā* ‘rod’ for *meteg*, perhaps in an attempt to strengthen the parallel with the other two means of correction in the verse, *šôṭ* ‘whip’ and *šēbeṭ* ‘rod’. Medieval Jewish commentators understood *meteg* as the bit in the animal’s mouth and also as a whip. David Qimḥi (*Sefer Hashorashim*) suggested unlinking the meanings of *meteg* and *meteg s^epāṭayim* (2 Kgs xix 28): the *meteg*, like the *dorbān* ‘goad’ (cf. 1 Sam. xiii 21), is attached to the end of a wooden stick and used to spur the horse, whereas *meteg s^epāṭayim* is the iron bit placed in the animal’s mouth. Because this is the only locus in the Bible that associates *meteg* with a donkey (Balaam uses a stick on his ass [Num. xxii 27]), some scholars suggest reading *meteg lasûs* and *šôṭ laḥmôr*. Others think that both devices are meant for application to both animals.¹⁵⁴

The teacher uses the same terminology for training fools as for training animals, thus revealing his attitude towards the stupid pupil, who stands in sharp contrast to the gifted student who is aware of his surroundings. Although the teacher uses the terminology of physical control and corporal punishment, which is part of his conventional concept of education, his choice of devices that are primarily designed to control beasts gives the proverb about the *k^esîl* a sarcastic flavor.

2.2.3 *Animal Imagery as an Expression of Ethical Values*

2.2.3.1 *Šôr ʿĀbûs ‘Fattened Ox’ in a “Better-Than” Saying*

Better a meal of vegetables where there is love, than a fattened ox where there is hate. (Prov. xv 17)

This saying employs the “better-than” pattern.¹⁵⁵ Its two parts present an object and its environmental condition—first the positive value and then the inferior one. It can be diagrammed as follows: A + 1 (the condition that makes *A* preferable) is *better than* B + 2 (the condition that make *B* unacceptable).

¹⁵⁴ See, e.g., Delitzsch, *Proverbs of Solomon* II, p. 175.

¹⁵⁵ On the “better-than” saying, see §1.5.1.3.

The saying juxtaposes material values—a simple meal of greens, a feast based on a fattened ox¹⁵⁶—with moral values—love and hate. The moral value of love makes the modest meal of the poor outweigh a banquet accompanied by the unworthy moral value of hatred.

The Egyptian Instruction of Amenemope uses the “better-than” proverb in a similar context:

Better is poverty in the hand of the god, than riches in a storehouse;
Better is bread, when the heart is happy, than riches with sorrow.

Better is praise as one who loves men, than riches in a storehouse;
Better is bread, when the heart is happy, than riches with sorrow.¹⁵⁷

Happiness, even in material poverty, is superior to the sadness of the wealthy. Feasting is perceived as a conducive to hatred and strife, whereas love lives among those who are satisfied with a meal of vegetables.

The phrase *šôr ʾābūs* ‘fattened ox’ does not refer to a crib-fed ox, but is a technical term for a delicacy served at a rich man’s table.¹⁵⁸ It is contrasted to a “meal of vegetables,” which is idiomatic for a poor man’s meal. Indeed, the ancient versions and medieval Jewish commentators interpret this saying as a moral lesson, an appeal to host passers-by cordially and generously, despite a scarcity of food. Hate, associated with the fattened ox, refers to the host’s insulting and scornful attitude.¹⁵⁹

The saying presents a series of contrasting values on three levels, moral, emotional, and material. The “better-than” pattern preaches love and making do with modest means.¹⁶⁰ It is integrated thematically with two other sayings (vv. 16, 18) that speak of the avoidance of strife and the advantage of peaceful relations and modest means: “Better a little with fear of the Lord than great wealth with confusion” (v. 16; cf. xvi 8). The teacher wants his listeners to value domestic peace—“Better a dry crust with peace than a house full of feasting

¹⁵⁶ On the ox, see §2.1.3.2.

¹⁵⁷ Chap. 6, IX; chap. 11, XVI (*ANET*, pp. 422 and 423).

¹⁵⁸ Meat was considered to be food for the wealthy (1 Kgs i 19, 25; v 3 [RSV iv 22]; Neh. v 18). The root ʾ-b-s appears only in the *qal* passive present; for the plural form see 1 Kgs v 3 [RSV iv 22].

¹⁵⁹ The LXX renders ʾārūḥā ‘meal’ as ξενισμός ‘entertainment’. The technical term ʾārūḥat tāmīd ‘a regular allotment of food’ indicates the king’s bounty to privileged subjects (2 Kgs xxv 30; Jer. xlii 34). McKane (*Proverbs*, p. 484) emphasizes the importance of hospitality as the main lesson of the saying.

¹⁶⁰ Murphy, *Proverbs*, p. 113.

with strife” (xvii 1; cf. xxi 9, xxvii 15)—and self-control, and denounces impulsive behavior that sets off strife: “A hot-tempered man provokes a quarrel, a patient man calms strife (xv 18).¹⁶¹

2.2.3.2 *Sûs ‘Horse’ in an Antithetical Saying*

No wisdom, no prudence and no counsel can prevail against the Lord.
The horse is readied for the day of battle, but victory comes from the Lord. (Prov. xxi 30–31)

The first part of the saying is composed of three consecutive short negatives, each introduced by the anaphoric *ʿên*—“no wisdom, no prudence and no counsel”—with the third linked directly to the predicate: “no counsel can prevail against the Lord.” The second part offers a contrast across an adversative *wāw*: “The horse is readied for the day of battle, but victory comes from the Lord.” The first sentence dismisses three intellectual qualities as of no avail against God’s supremacy. The second sentence offers a concrete instance in which the Lord’s strength overcomes the might of animals and His salvation frustrates human plans.

The war-horse symbolizes the vainglory of human striving against God’s supremacy.¹⁶² The human trust in military might, in cavalry and chariots, is perceived as a challenge to faith in God’s power of salvation. This theological and philosophical idea is formulated in prophetic texts as well as in Psalms; for example, “They have put their trust in abundance of chariots, in vast numbers of riders, and they have not turned to the Holy One of Israel” (Isa. xxxi 1; cf. Ps. xx 8, lxxvi 7); “When you take the field against your enemies, and see horses and chariots—forces larger than yours—have no fear of them, for the Lord your God, who brought you from the land of Egypt, is with you” (Deut. xx 1).

The folly of expecting to gain the upper hand in battle by means of horses and chariots is also mentioned in Psalm xxxiii: “Kings are not delivered by a large force; warriors are not saved by great strength; horses are a false hope for deliverance; for all their great power they provide no escape” (vv. 16–17). Proverbs interprets the human skills

¹⁶¹ Note the same use of the prepositional *bêt* in the third-person pronoun *bô*: “where there is hate” (v. 17) “great wealth with confusion” (v. 16).

¹⁶² On the horse, see §2.2.2.7.

applied to planning and waging battle as a heretical questioning of the Lord's might; consequently, human beings are called on to curb their mental prowess in the presence of the Lord. The saying is, in a sense, a statement of the importance of fearing the Lord as the sole source of security, as in "Fear of the Lord is a stronghold, a refuge for a man's children. Fear of the Lord is a fountain of life, enabling one to avoid deadly snares" (Prov. xiv 26–27).

The dismissal of wisdom, prudence, and counsel seems incompatible with the teacher's admonitions to internalize those very qualities, which are normally perceived as vital to a successful life. Von Rad interprets the seeming contradiction as a sign of the teacher's concern about the potentially dangerous implications of empirical human wisdom in opposition to faith, for this saying belongs to a group of maxims (Prov. xvi 9, xix 21, xxi 2, xx 24) that "combines two things—man's confidence in his ability to master life and at the same time, with all the wisdom in the world, an awareness of the frontiers and a preparedness to fail in the sight of God."¹⁶³ McKane explains the different approaches as expressing different stages in the development of wisdom literature. According to him, our anti-intellectual saying belongs with the practical maxims that were reworked and edited in the spirit of a religious faith and emphasize the fear of God.¹⁶⁴ However, noting the contradiction in the sayings does not prove that the text reflects different stages in the development of the wisdom literature. Instead, the inconsistency may be the product of different co-existing schools—the family, the royal court, the prophetic circle—each with its own ethos. In like manner, biblical literature is interspersed with folk proverbs that are not necessarily chronologically linked to an ancient wisdom tradition.¹⁶⁵ In any case, it is difficult to sketch a conceptual line in which empirical wisdom was rewritten or processed into religious-moral wisdom. Moreover, any division between secular and religious wisdom in the ancient period is problematic and unreliable.¹⁶⁶

¹⁶³ Von Rad, *Old Testament Theology* I, p. 440.

¹⁶⁴ McKane, *Proverbs*, pp. 10–22, and Table on p. 12; R. N. Whybray, *The Composition of the Book of Proverbs* (JSOTSup 168; Sheffield, 1994), pp. 21–32.

¹⁶⁵ See Eissfeldt, *Der Maschal*, p. 33.

¹⁶⁶ See Frederick M. Wilson, "Sacred and Profane? The Yahwistic Redaction of Proverbs Reconsidered," *The Listening Heart: Essays in Wisdom and the Psalms in Honor of Roland E. Murphy* (JSOTSup 58; Sheffield, 1987), pp. 313–32.

2.2.3.3 ‘*Ōrēb* ‘Crow, Raven’ and *Nešer* ‘Vulture’ in a Metaphorical Saying

The eye that mocks a father and disdains the homage due a mother –
The ravens of the brook will gouge it out, young vultures will devour it.
(Prov. xxx 17)

The Animals

The noun ‘*ōrēb* ‘crow, raven’ (*Corvus spp.*) is found in other Semitic languages: Akkadian *ā/ēribum*, Aramaic ‘*urbā*, and Arabic *gurābun*. In English, *raven* is an inclusive term for several types of birds, including crows, rooks and jackdaws. Close observation of the raven in nature reveals its cunning behavior in seeking out food and in protecting its young. It is not uncommon to see ravens beating their wings over their nest while making sounds of rage when a stranger approaches.

The expression “all varieties of raven” (Lev. xi 15; cf. Deut. xiv 14) attests to the ancients’ acquaintance with many members of the genus *Corvus*. Some features of the black type (*Corvus corax*) are supported by the description of the lover in the Song of Songs: “His locks are curled and black as a raven” (v 11).¹⁶⁷ The “ravens of the brook” (Prov. xxx 17) may be similar to the ravens of Wadi Cherith, who fed Elijah.¹⁶⁸

The raven serves as a messenger in several episodes in the Bible: in the narrative of the Flood the raven is sent out to see if the waters have receded (cf. Gen. viii 7),¹⁶⁹ and in the story of Elijah mentioned above, the raven is commanded by God to supply bread and meat to the prophet: “You will drink from the wadi, and I have commanded the ravens to feed you there” (1 Kgs xvii 4).

¹⁶⁷ See Firmage, “Zoology,” p. 1158, n. 45; Yair Ahituv, “‘*Ōrēb*,” *EM* 6:362 [Hebrew].

¹⁶⁸ Tristram (*Natural History of the Bible*, pp. 198–201) identified eight types of ravens in Palestine, including the black raven (*Corvus corax*), the brown-neck raven (*C. corax ruficollis*), the grey raven (*C. corone*), the short-tail raven (*C. rhiphidurus*), the *qaʿq* (*C. monedula soemmeringii*), and the seeding raven (*C. frugilegus frugilegus*). See also Ahituv, “‘*Ōrēb*,” *EM* 6:362–64 [Hebrew].

¹⁶⁹ The raven (along with the dove and swallow) appears as a messenger in the Flood Tablet (XI) in the Babylonian Epic of Gilgamesh (*ANET*, pp. 94–95).

Ravens appear along with other predatory birds, with their negative connotations, in several prophetic scenes of desolation; for example, “Jackdaws and owls shall possess it; Great owls and ravens shall dwell there. He shall measure it with a line of chaos and with weights of emptiness” (Isa. xxxiv 11).¹⁷⁰

Among the ancients, the raven as scavenger produced flourishing myth and folklore. Its aggressive behavior¹⁷¹ helped give it the erroneous image of a cruel parent, as exemplified in Job: “Who provides food for the raven when his young cry out to God and wander about without food?” (xxxviii 41; cf. Ps. cxlvii 9).¹⁷² But this misperception is contradicted by the raven’s devotion to its nestlings, which it feeds even in midflight, as described in ancient Greek accounts.¹⁷³

Seeing or hearing a single crow (*Corvus cornix*) was regarded as an ill omen; the raven (*Corax corax*), on the other hand, was regarded as a messenger.¹⁷⁴ Its cunning and predatory qualities made it an easy target for the superstitious and inspired many fables about it.¹⁷⁵

Aristotle described the raven’s habit of assaulting its victims and pecking out the eyes of its prey (as in our verse) in his *Historia animalium*: “It does not confine its attacks solely to the smallest creatures, but assaults even the ass and the bull, alighting on their necks to kill them and peck out their eyes” (IX, 609b5). Aristophanes, too, writes of the threat that crows will peck out the eyes of the flocks and oxen of those who continue to worship the Olympian gods.¹⁷⁶ The same motif turns into a curse in the pseudepigraphic Psalms of Solomon: “Let crows peck out the eyes of hypocrites for they devastated without honor houses of many people and greedily scattered them” (iv 20). Apparently the raven’s habit of plucking out the eyes of its victims is triggered by its attraction to glittering objects—a tropism that has contributed to the common negative perception of the raven as a thief.

¹⁷⁰ In the picture of the desolation of Nineveh (Zeph. ii 14), *hōreb* is a corruption of *‘ōrēb* ‘raven’; the correct text is attested by LXX κόρακες and Vulgate *corvus*. See also Riede, *Im Spiegel der Tier*, pp. 50–51.

¹⁷¹ Breeding ravens react aggressively to any bird of prey that invades their territory. See Smo’li, *Birds in Israel*, p. 45. The Book of Jubilees (xi 11–25) speaks of the farmers’ delivery from ravens that eat the seeds out of their sown fields.

¹⁷² See: *Lev. Rab.* 19:1; *Pirke R. El.* 21 (end).

¹⁷³ See Aristotle, *Historia animalium* VI, 563b11.

¹⁷⁴ John Pollard, *Birds in Greek Life and Myth* (Plymouth, 1977), pp. 127–28, 182.

¹⁷⁵ See, e.g., Aesop’s Fables 204, 206, 212, 312.

¹⁷⁶ Aristophanes, *Birds* 582; cf. *Acharnians* 92.

The *nešer* ‘vulture’¹⁷⁷ is mentioned as a bird that hastens to eat carrion (Hab. i 8) and provides food for its chicks from the carcasses (Job xxxix 27–30; cf. Matt. xxiv 28). The prophet Micah describes its bald neck: “Shear off your hair and make yourself bald for the children you once delighted in; make yourself as bald as a vulture, for they have been banished from you.” (Mic. i 16).

The Text

This metaphorical saying¹⁷⁸ consists of two complementary clauses, each a synonymous parallelism.¹⁷⁹ The link between them is the “mocking eye,” which is the subject of the first half and the object of the second half.

The eye that mocks a father, and disdains the homage due a mother
The ravens of the brook will gouge *it* out, young vultures will devour *it*.

The very same mocking eye is gouged out by the winged predators, the “ravens of the brook” and “young vultures.”

The book of Proverbs contains numerous admonitions to honor one’s parents in the spirit of the biblical precepts (cf. Exod. xx 12; Deut. v 15) and warns against scorning or cursing them: “One who reviles his father or mother, light will fail him when darkness comes” (Prov. xx 20); “There is a breed of men that brings a curse on its fathers and brings no blessing to its mothers” (xxx 11).¹⁸⁰

Our saying uses figurative speech to drive home the importance of honoring one’s parents. Here the son is represented by synecdoche as the mocking eye, recalling the wayward son who reviles his father and mother (Prov. xxx 11).¹⁸¹

In the Bible, the eye as a sensory organ, like the ear, is an organ of instruction, internalization, and obedience: “The ear that hears, the eye that sees—The Lord made them both” (Prov. xx 12). In our saying, however, the eye expresses the son’s scorn for his parents.

¹⁷⁷ On *nešer* ‘vulture’, see §2.1.1.2.

¹⁷⁸ On the metaphorical saying, see §1.5.1.5.

¹⁷⁹ On different criteria for classifying parallelism, see Schökel, *A Manual of Hebrew Poetics*, pp. 52–57.

¹⁸⁰ See also Prov. xxiii 22; xxviii 24 compared with Exod. xxi 17; Deut. xxvii 16. On the educational role of the father and mother in Proverbs, see i 8; iv 3; vi 20; x 1; xv 20; xix 26; and Sir. iii 1–18. On the parental role in Deuteronomy, see Weinfeld, *Deuteronomy and Deuteronomistic School*, pp. 309, 277–78.

¹⁸¹ Kahana (*Sefer Mishley*, p. 142) comments that “the eye stands for the entire person, since it is the part of the body that is the window to the soul.”

The collocation *yiqqāhat ʿēm*, used in parallel with *ʿāb* ‘father’, is interpreted in two different senses: (1) The ancient versions opted for “aged mother.” The same idea appears in a similar admonition that uses the root *z-q-n*: “Do not disdain your mother when she is old” (Prov. xxiii 22b).¹⁸² (2) *Yiqqāhat* combines two meanings in one—“gathering in” (KJV) and “obedience” (RSV), as in *yiqqēhat ʿamīm* (Gen. xlix 10)—interpreted as referring to being gathered together under the discipline and authority of someone. Here in Proverbs this would be the mother’s authority.¹⁸³

Both interpretations show a clear tendency to understand *yiqqāhat* as referring to a mother’s authority and the son’s obligation to honor his parents.

The grammatical switch from the nominative in the synonymous pairs of the opening line to the accusative in the synonymous pairs in the second line shapes the logical pattern of the deed-consequence nexus. This inversion fits with the perception of retribution in the saying: the eye that sinned in the opening strophe is the one being punished at the end. The image of the eye—mocking at first, gouged out and devoured in the end—shapes the circular principle of retribution.¹⁸⁴

This paradigm of “cause and effect” or “deed-consequence nexus,” found in many proverbs (see e.g., xxi 15, 21, 23, 25), argues in favor of complying with the moral principles of the social order.¹⁸⁵ A

¹⁸² The LXX has γῆρας μητρός ‘the old age of a mother’; cf. Tg. *qšišur* and Syr. *sybwṗ*. Driver (“Some Hebrew Words,” p. 394) compares the Ethiopic *lhq* ‘old’. Thomas suggests the root *l-h-q* for the reading of *l’hāqā* or *l’hīqā* (D. Winton Thomas, “A Note on *lyqat* in Prov. xxx.17,” *JTS* 42 [1941], 154–55). Greenfield holds that the ancient versions of 1 Sam. xix 20 and Prov. xxx 17 are based on traditions that recognized the existence of two homonymous roots *l-h-q* in BH, to be divided into **l-h-q* I ‘adhere, join’ (1 Sam. xix 20) and **l-h-q* II ‘be hoary, old’ (LXX of Prov. xxx 17). See Jonas C. Greenfield, “Lexicographical Notes I,” *HUCA* 29 (1958), pp. 212–14.

¹⁸³ Ibn Ezra understands *yiqqāhat ʿēm* as the company of the mother, emphasizing her educational role (cf. Gersonides ad loc.). Rashi manages to merge the two senses by relating “gathering” to the wrinkles on an elderly mother’s face (cf. Hame’iri, *Proverbs*, p. 285). Ibn Janaḥ (*Sepher Haschoraschim*, s.v. *y-q-h*, pp. 202–203), invoking the Arabic root *yqhh*, meaning obedience and obeisance, understands *yiqqāhat ʿēm* as submission to the mother’s educational authority.

¹⁸⁴ On the association between mockery and reviling, cf. “He who mocks the poor affronts his Maker” (Prov. xvii 5). On mockery associated with retribution, cf. “I will laugh at your calamity, and mock when terror comes upon you” (Prov. i 26).

¹⁸⁵ On the “deed-consequence nexus,” see Koch, “Is there a Doctrine of Retribution in the Old Testament,” pp. 57–87; Boström, *The God of the Sages*, pp. 90–96;

scornful and mocking attitude to one's social milieu is imprudent: "He who speaks contemptuously of his fellowman is devoid of sense; a prudent man keeps his peace" (Prov. xi 12). In contrast, he who behaves moderately, with patience and self-control, is to be praised for conducting himself wisely: "A hot-tempered man provokes a quarrel; a patient man calms strife" (xv 18). The topos of the foolish and disgraceful son (x 1, xv 20, xvii 21, xix 13a) includes offensive behavior towards parents as conduct to be condemned.

For the traditional medieval commentators (e.g., Rashi, Ibn Ezra), not only does the raven symbolize the son's punishment, it also stands for ethical and social values. In their readings, the mocking eye links up with the image of the raven and the vulture as associated with the theological notion that the Lord cares for and feeds all his creatures: "who gives the beasts their food, to the raven's brood what they cry for" (Ps. cxlvii 9; cf. Luke xii 24). The same concept, that the nestlings would starve were it not for Lord's help, is found when God speaks out of the whirlwind: "Who provides food for the raven when his young cry out to God and wander about without food?" (Job xxxviii 41). Here the motif of the ravens' cruelty toward their young is employed to illustrate the fate of the son who abuses his parents.

The application of the principle of divine retribution to the son who mocks his parents echoes the familiar curse motif of the desecration of the dead when carrion birds eat their flesh.

The insertion of this image within the sequence of numerical sayings in Prov. xxx 15–33 is problematic. Some scholars associate the son in this saying with the haughty and rebellious "breed of men ... ready to devour the poor of the land" (v. 14), whose conduct suggests the insatiable appetite of the "rebellious son": "This son of ours is disloyal and defiant; he does not heed us. He is a glutton and a drunkard" (Deut. xxi 20). In like manner, the conjunction of drunkard and overeater with mocking scorn and disobedience to one's parents in Prov. xxiii 19–22 provides the thematic unity between our saying and the concise description of insatiable Sheol in the numerical proverb: "Three things are insatiable; four never say, 'Enough!' Sheol, a barren womb, Earth that cannot get enough water, and fire which never says, 'Enough!'" (Prov. xxx 15b–16). Other scholars cite the son's disdain for his parents and propose its thematic continuity with the series of

statements about the generation's moral decline (Prov. xxx 11–14), which includes the denunciation of “the breed of men that brings a curse on its fathers and brings no blessing to its mothers” (v. 11).¹⁸⁶ It seems likely that the inclusion of our proverb in its present context derives from the mention of the vulture both in this saying and in the numerical saying that views the vulture as a wonder of nature: “How the vulture makes its way across the sky” (Prov. xxx 19).

In the book of Proverbs, a common theme or subject (e.g., sayings about the fool, the sluggard, and the evildoer) is frequently the organizing principle. But key words, imagery, language, and even tone also serve to organize it, as here.¹⁸⁷

APPENDIX: HUNTING TECHNIQUES IN BIBLICAL POETRY

The various methods of hunting have inspired biblical poetry and prose. The psalmist employs terms borrowed from various forms of hunting to describe both the distress of the persecuted righteous and the retribution meted out to the evildoer. Thus any investigation of images or metaphors based on this semantic field requires technical analysis.¹⁸⁸

There are at least four technical terms associated with trapping: *Paḥ yôqēšîm* ‘fowler’s trap’, *rešet* ‘net’, *môqēšîm* ‘snares’, and *ḥābālîm* ‘ropes’. There are also three associated methods: hiding traps, spreading cords, and setting nets.

Ps. cxxiv 7: We are like a bird escaped from the fowler’s trap; the trap broke and we escaped.

Ps. cxl 6: The arrogant have hidden a trap for me, and with cords they have spread a net, along the road they have set snares for me. (NRSV)

¹⁸⁶ On thematic association with the rebellious generation, see Ibn Ezra ad loc.; among modern commentators, see: Tur-Sinai, *Mišley Š’lomoh* (Tel Aviv, 1947), p. 384; Toy, *Proverbs*, pp. 529–30; McKane, *Proverbs*, p. 636.

¹⁸⁷ On the organization and redaction principles of Proverbs, see Whybray, *The Composition of the Book of Proverbs*, pp. 62–129. On contiguous themes of the vulture in nearby literary units, see *ibid.*, p. 152.

¹⁸⁸ For a detailed philological discussion of hunting terminology, see Dhorme, *The Book of Job*, pp. 261–62. For iconography of various methods of hunting in antiquity, see Keel, *The Symbolism of the Biblical World*, pp. 89–95.

Several hunting metaphors punctuate the speech of Bildad the Hushite (Job xviii 8–10) to convey the instability of the evildoer's prosperity.

He is led by his feet into the net (*rešet*); he walks into the toils (*šēbākā*).

The trap (*paḥ*) seizes his heel; the noose (*šammîm*) tightens on him.

The rope (*ḥebel*) for him lies hidden on the ground; his snare (*malkōdet*) on the path.

Here we encounter three more technical terms: *šēbākā*, *šammîm*, and *malkōdet*, in synonymous parallelisms that link each with one of the terms we have already looked at: *šēbākā* and *rešet*, *šammîm* and *paḥ*, *malkōdet* and *ḥebel*.¹⁸⁹

The hunting terms in Job xviii 8–10 merit some attention. The terminology discussed below follows their order of occurrence as established by the pattern of poetic parallelism (1^{a-b}, 2^{a-b}, 3^{a-b}).

- 1^a *Rešet* 'net': The net seizes the victim by its legs (Ps. ix 16; xxv 15).
- 1^b *Šēbākā* 'toils, latticework': This term denotes a net¹⁹⁰ stretched over a pit or trench, as described by Ben Sira: "walking over a net" (ix 13).
- 2^a *Paḥ* 'snare': The term *paḥ* denotes a snare for birds (cf. Jer. xlviii 44; Amos iii 5; Ps. cxxiv 7; Prov. vii 22; Qoh. ix 12). It is laid (cf. Jer. xviii 22; Amos iii 5; Ps. cxl 6, cxlii 4) on the path of the intended victim (cf. Hos. ix 8; Ps. cxlii 4; Prov. xxii 5).¹⁹¹
- 2^b *Šammîm* 'trap, noose': This hapax is usually rendered as "net" or "meshwork," but its nature and mode of operation are unclear. The root *š-m-m*, from which *šammâ* 'veil' (see

¹⁸⁹ *Paḥ* is also associated with *ḥābālîm* in Ps. cxl 6 [RSV 7].

¹⁹⁰ Cf. "nets of meshwork" in 1 Kgs vii 17 and 2 Kgs i 2. Dhorme (*The Book of Job*, p. 261) points to the Arabic *šabaka* 'be intertwined', from which are derived *šabakeh* 'net' and *šubbāk* 'net', in support of Hebrew *šēbākā* = "network."

¹⁹¹ Ehrlich provides the real background of Amos' metaphoric question, "Does a trap spring up from the ground unless it has caught something?" (iii 5), with a detailed description of the operation of the trap: "The *paḥ* is concealed in the earth, with its upper surface level with the earth. When the bird treads on the surface, two halves of a trap rise up on each side ... and close in on the bird inside them" (A. B. Ehrlich, *Mikrâ ki-phschutô*, vol. 3 [Berlin, 1901; repr. New York, 1969], pp. 404–405 [Hebrew]).

Isa. xlvii 2; Song iv 1, 3; vi 7) is derived, suggests that this kind of trap, too, may have had the form of a net.¹⁹²

- 3^a *Ḥebel* ‘rope’: The rope is mentioned in connection with the *paḥ* (cf. Ps. cxl 6). Ropes were stretched out or hidden under the ground. The rope, which was apparently wound around the animal’s neck and tightened by means of a special knot (like a lasso) after it was caught, was connected to the trap itself.
- 3^b *Malkōdet* ‘trap’: The hapax *malkōdet* denotes a trap in general. The noun derives from the root *l-k-d* ‘ensnare’. It could be spread both as a means of entrapment or as the lure. The trap is set on the path, much like the net spread near a path (cf. Job xviii 10b and Ps. cxl 6b).

This list of hunting terms reveals the difficulty of identifying some devices and defining how they worked. As we have seen, hunting terminology was frequently invoked in similes and metaphors or used in idioms, in ways that did not necessarily reflect their true use. Frequently a term was selected for its phonetic effects or through delight in word play, as with Jeremiah’s repetition of the syllable *paḥ*: “Terror [*paḥad*] and pit [*wāppaḥat*], and trap [*wāppāḥ*]” (Jer. xlviii 43a); or, with added alliteration of the *pê*, in the following verse: “He who flees from [*mipp^enê*] the terror [*happaḥad*] shall fall [*yippōl*] into the pit [*happaḥat*] and he who climbs out of the pit [*happaḥat*] shall be caught in the trap [*pāḥ*]” (Jer. xlviii 44).

In contrast to the lack of biblical evidence about methods of deer-hunting,¹⁹³ fowling with a *pāḥ* comes up in a wide variety of figurative expressions, such as the aforementioned “We are like a bird escaped from the fowler’s trap; the trap broke and we escaped” (Ps. cxxiv 7), as well as in the image of the entrapment of the foolish lad: “He is like a bird rushing into a trap” (Prov. vii 23b) in the speech cautioning against the adulterous woman.

¹⁹² Driver and Gray translate *šammîm* as “snare.” See S. R. Driver and G. B. Gray, *The Book of Job* (ICC; Edinburgh, 1921), p. 159; see also M. H. Pope, *Job* (AB 15; New York, 1965), p. 134. On *ḥebel* ‘rope’ as a noose, see R. Gordis, *The Book of Job* (New York, 1978), p. 188. Ehrlich (*Psalmen, Sprüche und Hiob*, p. 252) derives *šammîm* from *šinnîm* ‘thorns’ (cf. Prov. xxii 5).

¹⁹³ The idiomatic expression *šebi muddāḥ* ‘a gazelle that is chased’ (Isa. xiii 14) may allude to deer hunting.

CHAPTER 3

PARADOXICAL JUXTAPOSITION OF ANIMAL IMAGERY AND SOCIAL CATEGORIES

3.1 BEAR AND FOOL

Let a man encounter a bereaved she-bear rather than a fool in his folly.
(Prov. xvii 12)

3.1.1 *The “Better-than” Saying*¹

The image of the bereaved bear² is part of a structure that is logically, though not syntactically, related to the “better-than” saying. The formal pattern of that saying combines the initial adverb *ṭôb* ‘better’, which usually functions as a predicative, and the *mêm* of comparison prefixed to the second noun, creating an analogical relation—in this pattern, one of inequality—between the parts of the saying.

Here we have a variant of the “better-than” saying; The absolute infinitive *pāgôš* ‘to meet, encounter’, in the opening stich, and the negative particle *ʾal* ‘do not’ (rendered here, functionally, as “rather”), in the complementary stich give *pāgôš* a cohortative significance. The elliptical structure of the verbless clause “rather than a fool in his folly”³ is completed in a contextual-logical relation between the two lines.

¹ On the “better-than” saying, see §1.5.1.3.

² On the bear, see §2.2.2.4. The passive participle *šakkûl* ‘bereaved’, i.e., deprived of her cubs, is in the masculine, even though the contextual meaning of she-bear requires the feminine. *Dôb*, like *keleb*, designates any individual of the species, regardless of sex, whereas the male and female of some other animals are indicated by distinct nouns (e.g., *tayiš* ‘he-goat’, *ʿēz* ‘she-goat’). See GKC, §§37c, 122e; Joüon and Muraoka, *A Grammar of Biblical Hebrew* II, pp. 493–94, §134c.

³ Cf. the same use of the adversative *wāw* conjoined with the negative particle *ʾal* to form what amounts to a “better-than” saying in Prov. viii 10a: “Accept my disci-

3.1.2 Discussion of the Saying⁴

The warning against the fool's folly employs an idiom found twice in the prophetic literature—the “bereaved she-bear.” Hushai the Archite describes David and his men as being “as desperate as a bear in the wild robbed of her whelps” (2 Sam. xvii 8). The prophet Hosea, speaking for the Lord, threatens that “like a bear robbed of her young I attack them and rip open the casing of their hearts” (Hos. xiii 8a). In both passages, the image of the she-bear bereft of her cubs is intended to illustrate feelings of desperation, rage, and cruelty, as well as to arouse the listener's horror.

The combination of the infinitive absolute *pāgôš* ‘meet’, with the sense of the imperative, with the “bereaved bear” intensifies the impression that the listener is warned about encountering an animal perceived as the archetype of the dangerous beast, difficult to escape, as in “He is a lurking bear to me, a lion in hiding” (Lam. iii 10) and “As if a man should run from a lion and be attacked by a bear” (Amos v 19a).⁵ The mention of the object of the encounter, *ʾîš* ‘a man’,⁶ in the opening clause emphasizes the preference for meeting up with a bereaved bear (e.g., Prov. xii 8, 25, xv 23, xxiv 29) rather than with a fool and his folly.⁷ The fool (*kēsîl*) is the diametrical opposite of the

pline rather than silver.” For the use of the absolute infinitive to govern a noun in the accusative, see, e.g. *ʾākôl dʾbaš* “to eat honey” (Prov. xxv 27; cf. Prov. xiii 20). See GKC, §152g; Joüon and Muraoka, *A Grammar of Biblical Hebrew* II, §123.

⁴ See Tova Forti, “Animal Images in the Book of Proverbs,” *Bib* 77 (1996), pp. 56–57.

⁵ The same paradigm of a “better-than” saying that offers a metaphoric choice between a dangerous animal and the fool is found in Egyptian didactic letters that prefer a known to an unknown evil: “Better is a serpent in the house than a fool who frequents it.” See M. Lichtheim, *Ancient Egyptian Literature* III (Berkeley and Los Angeles, 1973), p. 195.

⁶ *ʾîš* appears as nomen regens in various construct states in Proverbs, denoting a wide range of human types within society; e.g.: “the angry man” (xv 18), “the wise man” (xvi 14), “the lazy man” (xxiv 30), “the wicked man” (xvi 27), “the man who wanders from his place” (xxvii 8), “a man rapid in his work” (xxii 29).

⁷ The LXX of Prov. xvii 12 leaves out the bear, replacing it with μέριμνα ‘care, anxiety’. Lagarde brings Jäger's suggested reconstruction of its Hebrew *Vorlage*: *pāgôš dāʾabah bʾʾîš šēkel* = “Care may befall a man of understanding”—a change in the word order. See P. A. de Lagarde, *Anmerkungen zur griechischen Übersetzung der Proverbien* (Leipzig, 1863), p. 56. On the root *d-ʾ-b* ‘dismay’ (similar in sound to *dōb* “bear”), cf. Ps. lxxxviii 10; Jer. xxxi 25; Deut. xxviii 65. McKane (*Proverbs*, 33)

wise man: “The tongue of the wise produces much knowledge, but the mouth of dullards pours out folly” (Prov. xv 2; cf. vv. 7, 14, xvii 16, 24). The rubric of foolishness also includes negative social behaviors such as quarrelsomeness, babbling, and haughtiness.⁸

The conjunction of a bear and a fool evokes surprise and amazement; the sense of fear and danger usually associated with a bereaved bear are replaced by mockery and sarcasm. The reference to the “fool in his folly” in the complementary clause forces the listener to reflect on the destructive potential of folly, which is made all the more vivid by the contrasting image of the bereaved she-bear. Here the sage manages to give new life to a hackneyed idiom by varying its application in content and form. The she-bear robbed of her whelps is usually related to a human referent; but according to the wisdom notion advanced here, the person is defined “a fool in his folly,” the prime example of one who lacks reason and commonsense. The old image is given new life by changing the usual analogous pattern into a variant of the “better-than” proverb.⁹

3.2 LION AND SLUGGARD

The sluggard says, “There is a lion outside! I shall be slain in the streets!” (Prov. xxii 13; RSV)

The sluggard says, “There is a lion in the road! There is a lion in the streets!” (Prov. xxvi 13; RSV)

claims that the LXX deviation “may arise from a pietistic and moralizing tendency.” Loewenstamm proposes an emendation based on the Vulgate’s retrieved version of *ʔʕûš* ‘despair’ instead of *ʔîš* ‘man’, thereby creating an emotional fit with the image of the bear whose cubs have been killed. See Samuel E. Loewenstamm, “Remarks on Proverbs XVII 12 and XX 27,” *VT* 37 (1987), pp. 221–22.

⁸ See e.g., Prov. x 18; xii 16; xiv 16, 29; xviii 6–8; xx 3; xxvi 6; Qoh. vii 9. Several commentators attribute the fool’s behavior to irresistible urges: Ibn Ezra; Delitzsch, *Proverbs of Solomon* I, p. 361; Hame’iri, *Proverbs*, p. 173. Ehrlich (*Psalmen, Sprüche und Hiob*, p. 98) interprets it as stupidity, as in “a fool with his nonsense” (xvii 12b) or “so a dullard repeats his folly” (Prov. xxvi 11).

⁹ On the processes of adaptation, assimilation, or integration of hackneyed idioms into new semantic contexts, see G. E. Bryce, *A Legacy of Wisdom* (Lewisburg, PA, 1979).

3.2.1 *Šaḥal* ‘Lion’

Šaḥal is one of the biblical terms for lion: “The roar of the lion (ʿaryēh), the voice of the fierce lion (*šaḥal*), the teeth of the young lions (*kʿpîr*), are broken. The strong lion (*layiṣ*) perishes for lack of prey, and the whelps of the lioness (*lābî*) are scattered” (Job iv 10–11 [RSV]; cf. *b. Sanh.* 95a). The *šaḥal* appears in synonymous parallelism to *kēpîr* (Hos. v 14; Ps. xci 13), ʿārî (Prov. xxvi 13), and *lābî* (Hos. xiii 8b) and among other predators such as the leopard, bear, and “beasts of the field” (ibid. vv. 7–8).¹⁰

Šaḥal is used metaphorically for the foe and represents God’s power to punish and destroy the impious who attack the righteous (see Job iv 10–11 and Ps. xci 13).¹¹

3.2.2 *Discussion of the Saying*

These two sayings consist of an attribution—“the sluggard says”—followed by direct quotations: a consequential link (Prov. xxii 13), “There is a lion outside! I shall be slain in the streets!” or a synonymous parallelism (Prov. xxvi 13), “There is a lion in the road! There is a lion in the streets!”¹²

Each verse paints a miniature scene in which lions wander the streets and terrify pedestrians. If the sluggard leaves home he will be entering a dangerous zone where beasts of prey roam free. The lion is frequently evoked in the Bible as a symbol of the enemy, both in laments and in hymns of thanksgiving. For example, “They open their mouths at me like tearing, roaring lions” (Ps. xxii 14 [RSV 13]). The lion often poses mortal danger for the flock: “As a shepherd rescues

¹⁰ The NJPS translates two out of seven occurrences of *šaḥal* in the Bible as “cub” (the case under discussion here, as well as Job iv 10). *Šaḥal* also appears twice in synonymous parallelism with *kʿpîr* (Hos. v 14; Ps. xci 13). There is no decisive proof for this identification, however. On the lion, see §2.2.2.4.

¹¹ See Dhorme, *The Book of Job*, pp. 47–48; H. J. Kraus, *Psalms 1–59: A Commentary*, trans. H. C. Oswalds (Minneapolis, 1988), pp. 95–99.

¹² In both Prov. xxii 13 and xxvi 13 the LXX has the noun φονευταί ‘murderers’, instead of the “I shall be slain” of xxii 13 (cf. 2 Kgs vi 32; Isa. i 21); the Peshitta has the same reading.

from the lion's jaws two shank bones or the tip of an ear, so shall the Israelites escape" (Amos iii 12).

In both aphorisms, the possible encounter between man and predatory beast represents a threat, similar to the encounter with the be-reaved bear in the aphorism about the fool (Prov. xvii 12). But the fact that it is expounded by the sluggard minimizes the impact of the threat aroused by the thought of a lion wandering the streets and places it in a limited associative context applying only to the lazybones, thus rendering it not entirely believable. The author of the parable has deliberately created a logical gap between reality and its literary expression, thereby evoking a degree of incredulity, for the sluggard's pretext is ridiculous. In the end, readers cannot help wondering what relationship could exist between a sluggard and a lion roaming the streets.¹³

The stock image of the lazybones in Proverbs evokes a rich variety of humoristic descriptions: "The door turns on its hinge, and the lazy man on his bed" (xxvi 14). It is in this same spirit that he is rebuked: "How long will you lie there, lazybones; when will you wake from your sleep?" (vi 9; cf. xix 15). His laziness leads to hyperbole: "The lazy man buries his hand in the bowl; he will not even bring it to his mouth" (xxvi 15). He stays at home, lies in bed, and avoids all productive work.

In Prov. xxii 13a the adverb *baḥûš* 'outside' refers to the open spaces of the streets and the marketplace, an unprotected location beyond the four walls of the home. In this, it resembles Hosea's use of the word, "with thieves breaking in and bands raiding outside" (vii 1), as well as the plural noun *ḥûšôt* in the prophet's description of destruction, "and its corpses lay like refuse in the streets" (Isa. v 25). The use of *baḥûš* here is intentional, because, alongside its primary meaning of "street," it also occurs in agricultural context: "Prepare your work outside, get everything ready for you in the field; and after that build your house" (Prov. xxiv 27 [RSV]), thereby suggesting the lazybones' typical conduct in another aphorism: "In winter the lazy man does not plow; at harvest time he seeks, and finds nothing" (Prov. xx 4). The scene of hustle and bustle in the street, repeated with slight variation in both of our sayings—"in the road," "in the streets"—is

¹³ Clifford (*Proverbs*, p. 198) notes the play of sounds in xxii 13: *ʾārî* 'lion' in the first clause and the verb *ʾērāšēah* 'I shall be slain' in the second clause.

echoed in the verse, “The chariots race madly through the streets, they rush to and fro through the squares” (Nah. ii 5 [NRSV]).¹⁴

The dialogue style of the saying is reinforced by the sluggard’s nonsensical hyperbole and lame excuses.¹⁵ Direct speech is also used to characterize the trickster and illustrate his unreliable nature: “Like a madman scattering deadly firebrands, arrows, is one who cheats his fellow and says, ‘I was only joking’ ” (Prov. xxvi 18–19).

It follows that our saying rests on a rhetorical echo that reflects the general consensus about the sluggard: the lazybones, known for his apathy and tendency to avoid any action (cf. Prov. vi 6–11, x 26, xix 15, 24, xxiv 30–34, xxvi 14–15), is described as afraid that he will encounter a wild beast if he goes outside. This statement, placed in his mouth, demonstrates one of the sluggard’s infinite stock of excuses.¹⁶

3.3 DOG AND FOOL

As a dog returns to his vomit, so a fool repeats his folly. (Prov. xxvi 11)

3.3.1 *The Comparative Saying*

In this comparative saying,¹⁷ the comparative *kāp* introduces the first clause, but the applicative particle *kēn* ‘thus, so’ is missing in the second clause. Here we have an analogy between the behavior of the fool and the dog. The fool, who constantly repeats his foolishness, is compared to the loathsome dog that returns to swallow its vomit.¹⁸

¹⁴ For synonymous parallelism between *hūṣ* ‘outside’ and *r^ehōbôt* ‘streets’, see Prov. i 20; vii 12; between *hūṣôt* and *r^ehōbôt*, see Jer. v 1; and between *š^ewāqīm* ‘markets’ and *r^ehōbôt*, see Song iii 2. The Tg. and Syr. translate *r^ehōbôt* in both sayings (xxii 13; xxvi 13) as “markets.”

¹⁵ On hyperbole as the comic and sarcastic element in both sayings, see: Hameiri, *Proverbs*, p. 116; Delitzsch, *The Proverbs of Solomon* II, p. 92; McKane, *Proverbs*, p. 596. On the element of surprise in shaping the comic atmosphere of the saying in Proverbs, see R. Alter, *The Art of Biblical Poetry* (New York, 1985), p. 172.

¹⁶ Delitzsch (*The Proverbs of Solomon* I, pp. 24–26; II, p. 189) proposes that Prov. xxii 13 is the original and xxvi 13 secondary, based on the style. However, the phenomenon of repeated sayings with a variation in one of the clauses is frequent in Proverbs; e.g., xxi 9 and xxv 24; xviii 8 and xxvi 22; xix 24 and xxvi 15.

¹⁷ On the comparative saying, see §1.5.1.1.

¹⁸ The combination of the preposition *‘al* ‘on’ with the verb *šāb* ‘returns’ instead of *‘el* ‘to(wards)’ has led many commentators to understand that the dog returns to its

3.3.2 *Keleb* ‘Dog’

The noun *keleb* is attested in other Semitic languages: Ugaritic *klb*, Akkadian *kalbum*, Aramaic and Syriac *kalbā*, and Arabic *kalbun*.

In Ancient Near Eastern literature, the dog symbolizes a submissive, obedient animal, whose characteristic behavior is to grovel and humiliate itself in front of its master.¹⁹

The phrase *keleb mēt* ‘dead dog’ occurs several times in the historical books of the Bible as an idiom of self-abasement: “Against whom has the king of Israel come out? Whom are you pursuing? A dead dog? A single flea?” (1 Sam. xxiv 15; cf. 1 Sam. xvii 43; 2 Sam. ix 8, xvi 9; 2 Kgs viii 13).²⁰ On the one hand, the Bible depicts the dog as a wild animal prowling the streets (Ps. lix 7, 15; cf. xxii 21) or as a bloodthirsty beast rending its prey (Ps. lxxviii 24), and as such is compared to the cruel enemy. On the other, it is a submissive creature that abases itself before its master—the faithful domestic dog (e.g., 1 Sam. xvii 43). Even though the unique epithet *kal^ēbê šōnī* ‘sheepdogs’ (Job xxx 1) attests to the existence of the domesticated dog, there are no descriptions of dogs that stay close to home and eat scraps under the table (cf. Matt. v 27). From the verse “you must not eat flesh torn by

own vomit and eats it. See, e.g., Arama, *Yad Avshalom*, p. 86; Kahana, *Sefer Mishley*, p. 124; McKane, *Proverbs*, p. 599; Murphy, *Proverbs*, p. 196.

¹⁹ The image of the dog as a repulsive beast appears in the epic of Kirta, *CAT* 1.16, Tablet III, lines 2–3, 15–17 et passim. See: Parker, *Ugaritic Narrative Poetry*, pp. 30, 31, 34; Rimbach, *Animal Imagery*, pp. 76–77. For the use of dogs in curse formulas see: “The Vassal-Treaties of Esarhaddon,” *ANET*, pp. 538b, 539a; Hillers, *Treaty-Curses*, pp. 61, 68; Marcus, “Animal Similes,” p. 94 and n. 61. For the similarity between the Deuteronomic curse and the vassal treaties of Esarhaddon, see Weinfeld, *Deuteronomy and the Deuteronomistic School*, p. 132. Sargon employs the image of the dog as an obsequious creature when he portrays the Manaeen king and his nobles thus: *eli erbi rettišunu iptāššilū kīma kalbī* ‘grovelling on all fours in obeisance before him’ (TCL 3, 12:58).

²⁰ The Akkadian parallel is *kalbu mītu*. See David W. Thomas, “*Kelebh*, ‘Dog’; Its Origin and Some Usage of it in the Old Testament,” *VT* 10 (1960), pp. 410–27 (esp. p. 417). On the link between ‘*ebed*’ ‘servant’ and *keleb* ‘dog’ in a rhetorical question (cf. 2 Kgs viii 13) as a term of self-disparagement before a king, see Cogan and Tadmor, *II Kings*, p. 91. For *ardu*, *kalbu* in the Amarna letters, see W. L. Moran, *The Amarna Letters* (Baltimore and London), 1992, nos. 314–316, 319, 322–325, 378; *AHw*, p. 424b; *CAD* K 72. In the Lachish letters we find “Who is thy servant (but) a dog? (*my* ‘*bdk klb*)” (2.4, 5.4, 6.3); see *ANET*, p. 322; George W. Coats, “Self-abasement and Insult Formulas,” *JBL* 89 (1970), pp. 14–24; Frank C. Fensham, “The Dog in Exodus XI: 7,” *VT* 16 (1966), pp. 504–507.

beasts in the field; you shall cast it to the dogs” (Exod. xxii 30) we may infer that the dog did play a sanitary role in the household.²¹ The dog, like the pig, is a scavenger,²² which may explain why it is sometimes depicted as licking up blood on the battlefield. This motif appears frequently in curses (Jer. xv 3; 1 Kgs xiv 11, xvi 4, xxi 19, 23–24, xxii 38), in threats (Ps. lxviii 24), in the petition to the Lord for vengeance against one’s enemy (Ps. ii 17, 21), and in the bold image of *lō’ yehēraṣ keleb l’sōnō* as a figurative expression for snarling (Exod. xi 7).²³

3.3.3 Discussion of the Saying

The description of the dog that returns to its own pool of vomit and eats it arouses feelings of loathsomeness and disgust. In the Book of Proverbs, “vomit” stands for immoderate and unrestrained behavior, as in the warning against overindulgence: “If you find honey, eat only what you need, lest, surfeiting yourself, you throw it up” (Prov. xxv 16). It is also mentioned in the admonition against behavior driven by base appetites, such as overeating or excessive drinking (cf. xxiii 29–35), which utterly degrade a person (cf. Isa. xix 14, xxviii 8–9). Indeed, the *kēsīl* ‘fool, dolt, dullard’ in Proverbs “gains only contempt,” as opposed to the wise man who “inherits honor” (iii 35). Because the archetypal *kēsīl* is brutish, ignorant, and emotionally dull, he can readily descend to moral depravity and wickedness.²⁴

Yoking together the fool who repeats his folly with the dog who licks up its own vomit arouses the sort of revulsion we might feel in the presence of an overeater or drunkard.²⁵ The thematic pole of the

²¹ For biblical allusions to dogs roaming outside human settlements and feeding off refuse, similar to pigs, see Ps. lix 7, 15; 1 Kgs xiv 11. See also: Firmage, “Zoology,” p. 1143; Borowski, “Animals in the Literatures of Syria-Palestine,” *HAWANE*, pp. 301–3. On temple rules in Babylonia barring dogs from the temple—“If a dog enters the house of God, the gods will not have mercy on the land” (quoted by Joann Scurlock, “Animals in Ancient Mesopotamian Religion,” *HAWANE*, p. 369.

²² On the pig, see §2.2.1.1.

²³ See BDB, *ḥāraṣ* I, p. 358, “sharpen”; and, figuratively, “decide, determine (a verdict).”

²⁴ The *kēsīl* ‘fool’ is mentioned in the Bible only in Proverbs (48 times), Qoheleth (17 times) and Psalms (3 times). On the *kēsīl*, see §2.2.2.7. See Shupak, *Where can Wisdom be Found?* pp. 201–204; Fox, *Proverbs 1–9*, pp. 41–42.

²⁵ Foolishness is perceived as a deviation from the human norm (cf. Prov. xiv 1, 8, xvi 22, xviii 13, xix 3). Consequently repeating foolishness leads to humiliation, as

saying deals with the repetition of something loathsome: the dog returns to its vomit, while the fool, the embodiment of worthless intellect, returns to his faulty way of thinking time and again.

The applicative clause, “so a fool repeats his folly,” uses the verb *š-n-h*, which has the same meaning as the geminate verb *š-n-n* ‘repeat’. Both are used to express the method of repetition used for learning (Deut. vi 6–7; cf. xi 19), but its application to the repetition of folly is ironic and mocking.²⁶ The fool’s essential stupidity is elsewhere stated in an ironic image: “Even if you pound the fool in a mortar with a pestle along with grain, his folly will not leave him” (Prov. xxvii 22).

3.3.4 *The Expansion of Prov. xxvi 11 in the Septuagint and Ben Sira*²⁷

As when a dog goes to his own vomit and becomes abominable, so is a fool who returns in his wickedness to his own sin. [There is a shame that brings sin: and there is a shame that is glory and grace.]

The Septuagint version expands both clauses: the dog that returns to its vomit becomes loathsome; the fool is in fact wicked and his folly is redefined as “sin.” Thus the scorn heaped on the fool in the Hebrew is replaced by contempt for the sinner in the Greek version.

The Greek translation presents a moral-religious evaluation of the *k^esîl* and considers him to be a sinner, and not merely a person lacking intellectual keenness (cf. LXX Prov. i 22, 32; iii 35; xiii 19). Here the Septuagint interpolates its own definition of two types of shame. At first glance this addition may seem to be irrelevant to the aphorism. But a close look at how the Septuagint views the *k^esîl* ‘fool’ clarifies the conceptual link between the biblical saying and the two types of shame.

Arama (*Yad Avshalom*, p. 86) explains: “The fool, whose original behavior is already spoilt, when he repeats it, such behavior becomes even more loathsome.”

²⁶ For a possible semantic linkage between the geminate and the *tertiæ yod š-n-n/š-n-h*, see *z-k-k/ z-k-h; š-h-h/ š-h-h; š-g-g/ š-g-h* and others in GKC, §§ 77d–e; G. Bergsträsser, *Hebräische Grammatik* (Hildesheim, 1962), 170, § 31; HALOT suggests *š-n-h* II as a secondary form of *š-n-h* I, meaning *wiederholen* ‘repeat’; see 4: 1484.

²⁷ See Tova Forti, “Conceptual Stratification in LXX Prov. 26, 11: Toward Identifying the Tradents Behind the Aphorism,” *ZAW* 119 (2007), pp. 241–58.

The Septuagint version of Prov. xxvi 11 occurs word for word (except for an added connective) in the Septuagint text of Ben Sira (Ecclesiasticus) iv 21. What is the link between the aphorism of dog and fool in Proverbs and the Septuagint's borrowing from Ben Sira, interpolated (apparently) to explain it?²⁸

To answer this question we must clarify the nature of "shame," a key concept in the conceptual framework of Ben Sira.²⁹ He devotes an extended discourse to the subject, the *mûsar bōšet* 'Instruction on Shame' (xli 14–xlii 8).³⁰ His ambivalent use of "be ashamed"/"be not ashamed" is embedded within the structure of the maxim in iv 20–31: "My son, let your actions be timely; fear what is wrong, be not ashamed to be yourself. There is a sense of shame laden with guilt, and a shame that merits honor and respect." The word *bōšet*, which in the Bible means chiefly "something worthy of strong censure," underwent a semantic development in post-biblical literature and could also mean "consciousness of guilt"—a positive emotion, as it appears in Sirach: "Not every kind of shame is meet to retain, and not every kind of abashment is to be approved" (xli 16).³¹ Ben Sira also applies *bōšet* to behavior that should be denounced: e.g., the poor person who, ashamed of his want, pretends to be wealthy (xx 21–23); a

²⁸ Baumgartner (*Etude critique*, pp. 225–26) noted that the addition of the two types of shame in Prov. xxvi 11 is simply a quotation from Sirach iv 21, but found it difficult to explain: "On ne se rend pas compte de la raison d'être de cette citation, dans un contexte qui traite de tout autre chose." Mezzacasa characterizes this phenomenon as a moral-theological gloss added by the translator; in some cases the inspired author quotes a saying without offering any reasonable explanation of his moral attitude; in other cases, along with the empirical truth of the biblical saying, we find a theological-dogmatic call to imitate an example, as in 2 Pet. ii 22; the concise character of the saying provides the reader with interpretive space. See G. Mezzacasa, *Il Libro dei Proverbi di Salomone: Studio Critico sulle aggiunte Greco-Alessandrine* (Rome, 1913), pp. 79–82.

²⁹ See Di Lella and Skehan, *The Wisdom of Ben Sira*, pp. 8–10.

³⁰ The text about "two kinds of shame" (Sir. iv 21), which is not preserved in the Masada Scroll, follows MS A from the Cairo Geniza, as translated by Skehan and Di Lella (*The Wisdom of Ben Sira*, p. 174); the section entitled "Instruction on Shame" (xli 14–xlii 8) follows Y. Yadin, *The Ben Sira Scroll from Masada* (Jerusalem, 1965), pp. 41–43.

³¹ For a semantic development of *bōšet*, see, e.g., the *Mekilta de-Rabbi Yishma'el* to Exod. xx 17: "'And that his fear may be ever with you [*lit.* on your face]'—this is bashfulness. It is a good sign in a man if he is bashful. 'That you sin not'—this says that bashfulness leads one to piety [*lit.* to fear sin]." See Menahem Kister, "Some Notes on Biblical Expressions and Allusions and the Lexicography of Ben Sira," in T. Muraoka and J. F. Elwolde (eds.), *Sirach, Scrolls and Sages (STDJ 33)* (Leiden, Boston, and Cologne, 1997), pp. 167–68.

father's shame at his son's stupidity (xxii 3, 5); the shame of a man whose wife supports him (xxv 22; xxvi 24–25).

In MS B of Sir. xli 14a, the heading *mûsar bōšet* 'Instruction on Shame' appears as an introductory formula to a list of actions of which should be ashamed (xli 14–xlii 1 [MS B from the Cairo Geniza]). One should be ashamed of involvement in immorality (adultery) or in a breach of justice and etiquette. Be ashamed of fornication in the presence of your parents (xli 17a), of perjury (xli 17b), of deceiving one's master and mistress (xli 18a), of a crime against the congregation and people (xli 18b), and more. The last item is the discourtesy of insulting a person who offers you a gift (xli 22c, d).

Ben Sira continues with a list of actions that should not be a source of shame (xlii 2–8). These examples are drawn from property and inheritance (xlii 3b) and fair business practices (xlii 4a–5a). How does this demand that one not be ashamed fit in with behaviors that are shameful? Apparently Ben Sira uses contrasting headings for each section as a rhetorical device. Although the formal stylistic variation may change the viewpoint, the moral standard remains firmly in place. The opening verse, "of the following things do not be ashamed, and do not sin to save face" (xlii 1; NRSV), formulates a moral rule that sins are to be denounced publicly, rather than concealed.

The "Instruction on Shame" sheds light on the declaration in iv 21 (MS A): *Yēš bōšet mašš'at 'āwôn, w^eyēš bōšet ḥēn w^ekābôd*, "there is a sense of shame laden with guilt and a shame that merits honor and respect."³² Some acts should be denounced and exposed, and concealing them is a sin. Ben Sira encourages the open recognition of sin and opposes its concealment, similar to the exposure of wisdom that is considered more advantageous than its concealment. On the other hand, it is better to hide stupidity than reveal it (iv 23; xli 15).

With these insights in hand, we return to the two types of shame in the expanded Septuagint version of Prov. xxvi 11. The fool's compulsive repetition of his foolishness is taken as a moral fault or sin and considered to be one of the expressions of shame and disgrace that should be exposed. Some would explicate the expanded Greek version by comparing it to the saying about the dog in 2 Peter ii 21–22: "For it had been better for them not to have known the way of righteousness,

³² The Academy of the Hebrew Language, *The Book of Ben Sira, Text, Concordance and an Analysis of the Vocabulary* (Jerusalem, 1973) [Hebrew].

than, after they have known it, to turn from the holy command. But it happened unto them according to the true proverb, the dog is turned to his own vomit again; and the sow that was washed to her wallowing in the mire.” Here, too, sinners who repeat their sin are compared to the loathsome behavior of the dog and the pig.³³ This comparison, however, leads us away from Ben Sira’s conceptual world to a different theological framework, one that reflects another stage of development in the concept of sin.

The extended comparison between the Septuagint text of Proverbs xxvi 11 and Ben Sira helps explain the otherwise enigmatic deviation of the former from the Hebrew text. The difference between the concision of the biblical saying and the expanded gloss in the Septuagint demonstrates that the Greek translator interpreted the verse in the spirit and manner of Ben Sira’s exhortations. The biblical saying contains no hint of the religious and moral ethos and mentions only the fool’s stupidity, an intellectual limitation leading to failure.

We therefore suggest that the parallel between the Septuagint version and Ben Sira reflect a process of conceptual development. In other words, the Greek version adds a new and elaborated stratum of religious teaching in the spirit of the Law and Divine Covenant (cf. Sir. xlii 1–2a). The evidence from Ben Sira (iv 20–21; xli 16) helps solve the riddle of the Septuagint’s interpolation in Proverbs xxvi 11. We have already recognized religious and moral admonitions in Proverbs, such as “The fear of the Lord is the beginning of knowledge” (i 7) and “The beginning of wisdom is the fear of the Lord, and knowledge of the Holy One is understanding” (ix 10). The Septuagint versions of Prov. i 7 and vii 1 sharpen the call to fear the Lord. The identification of the fool with the sinner in the discussion of principle of retribution, found only in the Septuagint version (i 22, 32, iii 35, xiii 19), reflects its stronger religious and moral bent. Ben Sira, too, places particular emphasis on the fear of God, equating the purpose of Wisdom with obedience to the Torah and Prophets. The Hebrew text of Ben Sira preserves the tradition of the *Bêt midrāš*, the “Study House,” where the sages of Jerusalem gathered (li 23). The same hermeneutic approach can be traced in the Greek translation of Proverbs; here too

³³ See Mezzacasa, *Il Libro dei Proverbi di Salomone*, pp. 79–82; On the double gloss of the Greek expanded version, see d’Hamonville, *Les Proverbes*, p. 318.

we see the imprint of the school of sages who contributed to the conceptual stratification of the Book of Proverbs.

3.4 DOG AND PROVOKER

A passerby who provokes a fight is like one who takes a dog by the ears. (Prov. xxvi 17; free translation)

or:

He who meddles in a quarrel not his own is like one who takes a passing dog by the ears. (RSV)

This proverb³⁴ describes an episode of picking a quarrel: the picturesque image of someone who provokes a dog by pulling its ears (LXX: “tail”)—considered to be a very sensitive organ—represents the quarrel-monger.

The Masoretic cantillation (*etnaḥ* under *keleb*) places the pause after “dog,” attaching *‘ōbēr* ‘passing by’ to the man of the comparandum (as in the first translation above). Moving the pause so that the participle is attached to the dog (as in the second version above) emphasizes the dog’s chance presence and suggests that the man is smarting for a fight.³⁵ The asyndeton of the MT between the verbs *‘ōbēr* and *miʿabbēr* can also be interpreted as indicating two different actions carried out simultaneously; one defines the man as a passerby (cf. the idiomatic use of *‘ōbēr wāšāb* ‘passerby’ [Ezek. xxxv 7]), while the second relates to the provocateur’s behavior.³⁶

The negative nature of the image is reinforced by the verb *miʿabbēr* ‘be infuriated’, a denominative of *‘ebrāh* ‘rage, anger’ (cf. Job xl 11). The same word appears in the warning against provoking a king: “The terror of a king is like the roar of a lion; He who provokes

³⁴ On the comparative saying and its variations, see §1.5.1.1.

³⁵ See, e.g., Gemser, *Sprüche Salomos*, p. 95; McKane, *Proverbs*, pp. 601–602. Toy (*Proverbs*, p. 478) considers that the adjective *‘ōbēr* superfluous, because “the dog was not a domestic animal in Palestine, and to seize any dog was dangerous.” *‘ōbēr* is probably a gloss or an erroneous repetition due to the adjacent *miʿabbēr*.

³⁶ The reading of the Aramaic translation, *nāšē ūmītnēšē* ‘striving and struggling’, intensifies the topic of strife by translating both verbs as derivatives of *‘-b-r* ‘infuriate’. The two meanings of *‘-b-r*; “passing” and “becoming furious,” appear in sequence in Deut. iii 25–26: “Let me, I pray, cross over and see the good land. ... But the Lord was wrathful with me.”

his anger (*mit^cabbēr*) risks his life” (Prov. xx 2).³⁷ The reflexive form (*hitpa^cel*) is also found in the antithetical comparison of the fool’s vanity and overweening self-confidence with the prudence of the wise man, who behaves with caution: “A wise man is cautious and turns away from evil, but a fool throws off restraint (*mit^cabbēr*) and is careless” (Prov. xiv 16 [RSV]). The Vulgate and the Peshitta, reading by metathesis *mit^cārēb* ‘get involved’, point out the tendency of the hot-tempered person to get himself embroiled in a quarrel that has nothing to do with him. But the other occurrences of *mit^cabbēr* in Proverbs (see xiv 16, xx 2b) support the MT version. So do the frequent admonitions against being hot-tempered (see Prov. xiv 29, xv 18, xviii 8, xxii 8, xxvi 18), considered to be the typical behavior of the fool.

Our verse introduces a series of sayings (xxvi 17–22) that refer to the quarrelsome and querulous. They use fire imagery, because of the metaphoric fanning of the flames of anger and strife: “deadly firebrands” (v. 18), “charcoal for embers and wood for a fire” and “kindling strife” (v. 21). This is fitting, since *mit^cabbēr*, too, is associated with fire: “The Lord heard and He raged; fire broke out against Jacob, anger flared up at Israel” (Ps. lxxviii 21). This image is appropriate for a person who provokes quarrels and enflames others even as he himself becomes consumed with rage.³⁸

Seizing a dog’s ears exemplifies the dangerous situation that such a person can bring upon himself.

³⁷ On lion and king, see §2.2.2.3.

³⁸ Gersonides (ad loc.) interprets “someone else’s quarrel” as stealing the dog’s food in addition to grasping his ears; i.e., this is two-fold incitement to quarrel.

CHAPTER 4

ANIMALS AS MODELS FOR HUMAN SOCIETY

4.1 A DIDACTIC MODEL WITHIN AN ADMONITION: THE INDUSTRIOUS ANT

Go to the ant, O sluggard, Observe her ways and be wise, [Because] She has no arbitrator, She does without officer and ruler. She lays in her stocks in summer, and stores her food at harvest. How long, O sluggard, will you lie there? When will you rise from your sleep? A little sleep, a little slumber, A little folding of the hands to lie down, and poverty will come to you like a vagrant, and want like a beggar. (Prov. vi 6–11)¹

4.1.1 *The Ant*

The noun *nēmālā* ‘ant’ (*Formica spp.*) is attested in other Semitic languages, including Akkadian *namalu* (*namlu*),² Syriac *nēmālā*, *nam-mālā*, and Arabic *naml*.

Ants are insects of the Formicidae family. Most ants feed off dead insects, but some eat plants, primarily seeds and grain. The harvester ant (*Messor semirufus*) collects grain from the territory near its anthill and stores it in upper chambers that serve as storehouses for the food before it is husked and cleaned. After the grain has been threshed it is stored in lower chambers. The chaff builds up near the anthill, where it serves as kind of protective barrier to rainfall seeping into the subterranean colony. The ant mentioned in Proverbs is identified with *M. semirufus* primarily because it is active throughout the year.³

¹ The translation follows McKane, *Proverbs*, p. 219.

² Akkadian *lammatu* ‘ant’ (*namalu*, *namlu*) is treated as a West-Semitic loanword (the standard Akkadian term for ant is *kulbābu*); see: *AHw* pp. 533, 725; *CAD* L p. 67; N/1 p. 208.

³ See Tristram, *Natural History of the Bible*, pp. 319–21; Bodenheimer, *Animal*

The ants' social order consists of three classes: the fertile winged queen; winged males, whose sole function is to fertilize the queen; and a great number of sterile wingless female workers, who engage in numerous activities, such as foraging, carrying, threshing, sorting, and storing.

Ancient Near Eastern literature is full of observations of ants used to illuminate human behavior. The ant is mentioned twice in the Bible, both times in Proverbs. In both the sermon to the sluggard (vi 6–9) and the numerical saying (xxx 25) listeners and readers are enjoined to learn from the ant's diligence and efficient organization. Although Assyrian sources do not mention the industriousness of the ant, which stores food in summertime for the hard days of winter, a note of appreciation for it may be detected in Sargon's "Letter to the God" (TCL 3, 24:143), where his army's ability to traverse difficult terrain is compared with the ant's similar skill. Alongside this view of the ant as a model of diligence, hard work, perseverance, and navigational prowess, however, ant imagery in Assyrian royal inscriptions refers mainly to their limitless hordes, which are nevertheless insignificant and easily routed.

Another characteristic of the ant, its aggressive reaction to those who maltreat it, is mentioned in one of the Amarna Letters from Lab'ayu, the governor of Shechem, in which he justifies his cruelty to prisoners by comparing his urge for revenge to the sting of a threatened ant: *kī namlu tumḥaṣu lā tikabbilu u tanšuku qāti amēli ša yimaḥḥaṣṣi*, "If one strikes an ant, does it not fight and sting the hand of the man who struck him?" (EA 252, lines 16–22).⁴

The ant is cast in a negative light in an idiomatic expression of self-abasement found in the Syriac version of the story of Aḥiqar, the wise counselor of Sennacherib and Esarhaddon. Aḥiqar humbles himself before the king by describing his position "as one of the loathsome ants in the kingdom." The formula is repeated in the king's anger at the insult represented by the counselor's unimportance: "Have I become so light in the eyes of your master that he has sent me a loathsome ant in his kingdom?"⁵

Life in Biblical Lands II, p. 263.

⁴ See William F. Albright, "An Archaic Hebrew Proverb in an Amarna Letter from Central Palestine," *BASOR* 89 (1943), p. 30; Moran, *The Amarna Letters*, pp. 305–306.

⁵ See A. Yellin, *Sefer Aḥiqar he-Ḥakam* (Jerusalem, 1938), p. 44.

4.1.2 *The Parable*

The admonition⁶ begins with an imperative addressed to the sluggard: “Go to the ant” (vi 6a). The imperative demands a dramatic change in his behavior,⁷ recalling the urgency of the injunction to the man who has gone surety for his fellow: “Go grovel” (vi 3c) before the lender and appeal to his pity in any way, even the most humiliating.⁸ Similarly, the image of the sluggard conveyed by “the door turns on its hinge and the lazy man on his bed” (Prov. xxvi 14; cf. v. 15), furnishes a suitable context for the command “go!” designed to rouse him from his slumber: “How long, O sluggard, will you lie there, when will you rise from your sleep? (vi 9)” The sluggard is urged to observe the ant’s behavior and internalize its diligence.

The “ways” to be observed can be taken literally as the trail blazed by the harvest ants carrying their burdens, but it can also be understood as the path of moral rectitude. In Proverbs, *derek* and its synonyms *ʾōrah*, *nāṭīb*, *maʿāḡāl*, and *mēšārīm* express a moral road that offers the choice between contrasting modes of life: one path leads to “righteousness, justice and equity” (ii 8); the other is the route taken by “men whose paths are crooked, and who are devious in their course” (ii 15).⁹ Thus, the warning against laziness calls on the sluggard to imitate the ant’s diligence in pursuit of an ordered and upright life.

The dependent clause, “[because] she has no arbitrator, she does without officer and ruler” (vi 7), provides the motive for the imperatives, “go,” “observe” and “be wise”: even without rulers, ant society is ordered and regulated. The teacher employs three terms of military

⁶ On the admonition pattern, see §1.5.2.1.

⁷ Hameiri (*Proverbs*, pp. 56–57) discusses the many uses of “go” in the Bible, from moving the body to stimulating the mind to reflect and act (Deut. xiii 7; Ps. xlv 9; lxi 5).

⁸ See §2.1.3.1.

⁹ The terms associated with wisdom—*hokmā*, *daʿat*, *ʿormā*, *lʿbūnā*, *tūšiyā*, *mʿzimmā*, and *taḥbūlā*—denote cognitive abilities, competence, and intelligence, which are indispensable strategies for choosing the right path in life (see Prov. i 2–6). *Derek* is part of various compounds expressing contrasting moral behavior: *derek ḥayyīm* (vi 23) or *ʾōrah ḥayyīm* (xv 24) ‘way of life’, as opposed to *maʿāḡāl*, which is associated with *repāʿīm* and *šʿōl* (Prov. ii 18; v 5); i.e., the path leading to Sheol and to the shades. For the similar use of “way” in Egyptian Wisdom Literature, see B. Curoyer, “Le chemin de vie en Égypte et en Israël,” *RB* 56 (1949), pp. 428–32.

and civil rank to contrast the human need for social organization with the self-sufficiency of the ant. Here *qāṣîn* ‘arbitrator’,¹⁰ *šōṭēr* ‘officer’,¹¹ and *mōšēl* ‘ruler’¹² are used synonymously for a figure of authority.¹³ These terms of social hierarchy are not meant to reflect actual ranks in Israelite society, but to contrast the self-sufficiency exemplified by the ant with the defects of human behavior, despite the organization of human society.

Although the teacher is an astute observer of his surroundings and appreciates the inherent wisdom of nature, here he seems to be unaware of the highly regimented social order of the anthill, with the division of labor between the wingless female workers, the winged queen, and the winged males. He considers the human need for hierarchical order to be in some fashion inferior to what he perceives as the ant’s autonomy and instinctive wisdom.

The ant also serves as a model for human behavior in its prudent preparations for winter: “She lays in her stocks in summer, and stores her food at harvest” (vi 8). Harvest ants are active during the daytime in winter and spring; in summer, they work during at night as well, storing up food during the harvest season to prepare for the winter. The same image of ants’ gathering food in the summer is repeated in a numerical saying: “Ants are a folk without power, yet they prepare food for themselves in summer” (xxx 25).¹⁴

Here “summer” and “harvest” are synonyms, as also in x 5: “He who lays in stores during the summer is a capable son, but he who sleeps during the harvest is an incompetent.”

¹⁰ On the *qāṣîn* as a civil-legal authority, see Isa. iii 6–7, xxii 3; Prov. xxv 15; Mic. iii 1, 9; as a military leader, see Josh. x 24 and Judg. xi 6, 11. See Hame’iri, *Proverbs*, p. 59; Toy, *Proverbs*, p. 134.

¹¹ The context of the occurrences of *šōṭēr* supports the meaning of “the executive enforcing the law” (cf. Exod. v 6; Num. xi 16; Deut. xx 5, xv 18). See: Alexander Rofé, “Judicial System,” *Beit Miqra* 21 (1976), p. 201 [Hebrew]; Moshe Weinfeld, “The Term *Šōṭēr* and his Duty,” *Beit Miqra* 22 (1977), pp. 418–19 [Hebrew].

¹² *Mōšēl* is applied to God (Ps. xxii 29; lix 14; lxxxix 10), Solomon (1 Kgs v 1), and to the administrator of a household (Gen. xxiv 2; xlv 8). Several passages in Proverbs deal with the appropriate relationship between ruler and subject (xxiii 1; xxviii 15; xxix 2, 12, 26; see also Qoh. ix 17; x 4).

¹³ Hame’iri (*Proverbs*, pp. 56–57) states that the appeal to the ant was intended “to show all present an example taken from the most worthless creature,” similar to the moral lesson taken from the narrative of Jonadab the son of Rechab (Jeremiah 35).

¹⁴ Delitzsch (*Proverbs of Solomon I*, pp. 140–41) discusses the different stages associated with the verbs *tākin* and *ʿāgʿrā* in association with “summer” as a climatic season and “harvest” as an agricultural season.

Now the teacher turns from the objective description of the ant's positive qualities to rhetorical questions directed to the sluggard: "How long, O sluggard, will you lie there? When will you rise from your sleep?" (vi 9) The repetition of the interrogative *māṭay*—"how long" and "when" (*ad māṭay, māṭay*)—and the use of the antithetical verbs "lie" and "rise" reflect the Teacher's emotional involvement.¹⁵

The end of the section, shaped as a moral exhortation, is repeated almost word for word in Prov. xxiv 33–34 in the Teacher's conclusions at the sight of the neglected field. His mocking tone is indicated by the threefold use of *m^ecaṭ* 'a little [bit] of': "A little sleep, a little slumber, a little folding of the hands to lie down" (vi 10 and xxiv 33). The repetition sounds a repeated warning, but also serves as a grotesque imitation of the sluggard's desire for repose.

The consequence, "and poverty will come to you like a vagrant, and want like a beggar" (vi 11; cf. xxiv 34), indicates the disastrous outcome of the idler's misguided behavior and is similar to the metaphor of the fool's catastrophe in Qoheleth: "The fool folds his hands together and has to eat his own flesh" (Qoh. iv 5). Here, in Proverbs, the idler is warned that he risks becoming a wandering tramp (*ʾiṣ māgēn* is to be understood in light of the Ugaritic *mgn* 'beg, entreat') or *m^ehallēk* 'vagrant', who must beg his food from door to door.¹⁶

The structure of the passage orients the educational process. The introductory imperatives—"go," "observe," "be wise"—are sequential stages in the intellectual process. The exhortation "go" calls upon the sluggard to shake off his sloth and choose action instead of sinking further into inaction. Next, "observe" summons the sense faculties need to learn the lesson, which is then internalized and made habitual through the imperative "be wise."

The ant's perpetual activity is invoked by the Teacher as a counterweight to the stereotypical conduct of the lazy man: "In winter the

¹⁵ For the rebuking tone of the rhetorical question "How long?" see also Prov. i 22; Exod. x 3; 1 Sam. i 14; xvi 1; 1 Kgs xviii 21; et passim. On the rhetorical question, see Claus Westermann, "Die Begriffe für Fragen und Suchen im Alten Testament," *FAT* 2 (1974), pp. 162–90; Moshe Held, "The Rhetorical Question in the Bible and in Ugaritic Poetry," *Erlsr* 9 (1969), pp. 72–79 [Hebrew].

¹⁶ Most medieval commentators understood *ʾiṣ māgēn* to mean "shield bearer"; so do some moderns (e.g., Toy, *Proverbs*, p. 125). Another interpretation associates *māgēn* with the Ugaritic *mgn* 'beg, entreat', thus linking it to the parallel *m^ehallēk* 'vagrant, beggar'. See William F. Albright, "Some Canaanite-Phoenician Sources of Hebrew Wisdom," *SVT* 3 (1955), pp. 9–15. For other suggestions see: McKane, *Proverbs*, pp. 324–25; Fox, *Proverbs 1–9*, pp. 217–18.

lazy man does not plow; at harvest time he seeks, and finds nothing” (xx 4). It is paralleled by one of the definitions of the intelligent son: “An intelligent son stores up [food] in summer; the shameful son sleeps in harvest time” (x 5).¹⁷ The ant and the wise son are privy to the secrets of nature and aware of the agricultural seasons; “storing up” (*ogēr*), “summer,” and “harvest time” are key words both in the ant fable and in the adage about the intelligent son.

The ant that stores food in the summer for use in the winter is the model of foresight and industry.¹⁸ It is mentioned in the warning against sloth (vi 6–11), which incorporates the parable of the ant as a model for emulation. The numerical saying (xxx 24–28) merely lists the main characteristic of the ant among various phenomena from the animal world.¹⁹

The same ideal represented by the ant underlies two other sayings that do not mention it explicitly: the wise son gathers his crops in summer, in contrast to the incompetent, or “shameful” son who sleeps through the harvest (x 5); the sluggard fails to plow in winter, and harvests nothing (xx 4). The anchoring of the figure of the idler in the social and material reality of an agricultural society is to be interpreted both literally and metaphorically. Drawing readers’ attention to the seasonal tasks of agricultural life is a main element of the sage’s moral teachings; however lofty its message, the book of Proverbs remains grounded in the daily fabric of life in biblical times and its models for human behavior are drawn from the Teacher’s understanding of the order and balance of the natural world.²⁰

4.1.3 *The Septuagint’s Expanded Version of the Ant Parable*

Following the parable of the ant, the Septuagint text of Proverbs incorporates an addendum praising the bee.²¹ Even though the admirable characteristics of insects are mentioned elsewhere in Proverbs

¹⁷ The translation follows Fox, *Proverbs 1–9*, p. 216.

¹⁸ See McKane, *Proverbs*, p. 661.

¹⁹ See A. S. Herbert, “The Parable (*māšāl*) in the Old Testament,” *SJT* 7 (1954), pp. 186–90; Johnson, “משל,” pp. 162–69; Menachem Haran, “*māšāl*,” *EM* 5:548–53 [Hebrew].

²⁰ See e.g., the warning against the evildoers (i 10–19); against giving surety (vi 1–5); against overly striving for wealth (xxiii 4–5); against intoxication (xxiii 29–35).

²¹ The juxtaposition of ant and bee is also found in Aristotle, *Historia animalium*, 622b, 627a.

(xxx 25, 27), the bee, as a paragon of diligence and industry, does not appear in any of the wisdom books of the Bible. The addition (vi 8a–c) reads as follows:

Or go to the bee, and learn how industrious she is, and how earnestly she performs work;
Whose products kings and commoners use for health, and she is desired by all and respected.
Though being weak physically, by having honored wisdom she has obtained distinction.

This praise for the diligent and productive bee, which contributes to the health of kings and commoners, is stated using stylistic and thematic elements typical of the admonitory pattern found in Proverbs 1–9. Just as he did with the ant, here the Teacher proposes that the lad model his behavior on the bee. By juxtaposing the bee's weakness with the recognition it has achieved he emphasizes the value of wisdom. A similar logic underlies the heading of the numerical saying, "Four are among the tiniest on earth, yet they are the wisest of the wise" (Prov. xxx 24).

The high esteem for the bee in the Greek version does not seem to be compatible with the bee's image as a pest and as a metaphor for enemies in the Hebrew Bible (Deut. i 44; Ps. cxviii 12; Isa. vii 18). But it fits in well with the evidence of Hellenistic sources on apiculture and the use of honey for food and medicinal purposes.²²

Indeed, Septuagint scholars agree that this passage does not derive from a Hebrew *Vorlage* but should be ascribed to a translator located in the Alexandrian cultural milieu.²³ The structural and stylistic duplication of the ant parable in the praise of the bee reinforces the hypothesis that the latter is a secondary interpolation by the Greek translator.²⁴

²² The Bible mentions honey produced by wild bees (Deut. xxxii 13; Judg. xiv 8–9; 1 Sam. xiv 25–27; Ps. lxxxi 17), but there is no textual evidence of beekeeping in the Bible. For further discussion, see Tova Forti, "Bee's Honey: From Realia to Metaphor in Biblical Wisdom Literature," *VT* 56 (2006), pp. 327–41.

²³ See: de Lagarde, *Anmerkungen*, pp. 22–23; Baumgartner, *Étude critique*, p. 68; Mezzacasa, *Il Libro dei Proverbi di Salomone*, p. 127; G. Gerleman, *Studies in the Septuagint III. Proverbs* (Lunds universitets årsskrift 52/3; Lund, 1956), pp. 30–31; Roland L. Giese, "Strength through Wisdom and the Bee in LXX-Prov. 6, 8a–c," *Bib* 73 (1992), pp. 404–11; J. Cook, *The Septuagint of Proverbs: Jewish and/or Hellenistic Proverbs?* SVT 69 (1997), pp. 164–68; d'Hamonville, *La Bible d'Alexandrie: Les Proverbes*, p. 193.

²⁴ Ben Sira praises the bee in the spirit of the Greek addition: "Least is the bee

4.2 ANIMAL HABITS WORTHY OF EMULATION, IN NUMERICAL SAYINGS

4.2.1 *Ant, Hyrax, Locust, Gecko*

Four are among the tiniest on earth, yet they are the wisest of the wise: The ants are not a strong people, yet they prepare their food in the summer; the rock hyraxes are not a mighty people, yet they make their houses in the rocks; the locusts have no king, yet all of them go out in ranks; the house gecko grasps with its hands, yet it is in kings' palaces. (Prov. xxx 24–28)

The introductory clause of this numerical saying,²⁵ “Four are among the tiniest on earth, yet they are the wisest of the wise” (Prov. xxx 24), proposes a common denominator for the animals that follow: their intelligence provides ample compensation for their small size.²⁶ The sage is not listing the smallest creatures on earth, but rather a variety of tiny animals from different zoological categories that exemplify different aspects of life. Here, as elsewhere, he opts for effective rhetoric over scientific fact.²⁷ His juxtaposition of small size with practical wisdom inspires human reflection about animal modes of behavior worthy of emulation. The phrase *qēṭānē ʾāreṣ* ‘tiniest of the earth’ denotes not only physical size but also inferior social status and implicitly associates these creatures with aspects of organized human society such as *mōšēl ʾāreṣ* “the ruler of the land” (Isa. xvi 1) and *šōpʿē ʾāreṣ* “rulers of the earth” (Isa. xl 23).²⁸ The antithetical

among winged things, but she reaps the choicest of all harvests” (xi 3). Instead of *qēṭānā*, MSS A and B of the Geniza read *ʾēlīl*, either “weak” (as in Syriac) or a diminutive of *ʾal* ‘nothing’ (cf. Zech. xi 17; Job xiii 4); see M. Z. Segal, *Sefer Ben Siraʾ Hašālem* (Jerusalem, 1972), p. 67 [Hebrew].

²⁵ On the numerical saying, see §1.5.2.3.

²⁶ The MT *mēḥukkāmīm* is rendered by the LXX (followed by the Syr. and Vul.) as σοφώτερα τῶν σοφῶν “the wisest of/among the wise,” the initial *mēm* being taken as a genitive instead of the prefix of the *puʿal* participle (cf. Exod. xii 9). See Delitzsch, *Proverbs of Solomon II*, p. 301; Murphy, *Proverbs*, p. 233.

²⁷ McKane (Proverbs, p. 661) puts it this way: “The author’s activities as a naturalist are oriented by his search for ‘parables’ of human life.”

²⁸ For *qṭn* with reference to inferior social status, see Gen. xxxii 11; 2 Sam. vii 19 (= 2 Chr. xvii 17); cf. *nikbaddē ʾāreṣ* ‘the honored of the earth’ (Isa. xxiii 8). *Qāṭōn* appears as a synonym for *bāzūy* ‘despised’ (Jer. xlix 15; 1 Sam. xv 17; Deut. i 17; 1 Kgs xxii 31). See: Delitzsch, *Proverbs of Solomon II*, p. 301; Y. Elizur, “The Wisdom of the Proverbs’ Composer,” *Oz Le-David* (Jerusalem, 1964), pp. 24–28 [Hebrew].

relationship between the two parts of the heading is also shaped by the repetition of the third person plural pronoun *hēm(ā)* and the use of the consecutive *wāw* as an adversative conjunction.²⁹

4.2.1.1 *N^emālā* ‘Ant’³⁰

The ants are not a strong people, yet they prepare their food in the summer. (Prov. xxx 25)

The ant’s outstanding traits are diligence and foresight. The verb “prepare” may be interpreted as the typical actions of gathering and storing food during times of plenty, as well as an exemplification of the abstract idea of being able to foresee difficult times and to prepare in advance.

The two verses in Proverbs (vi 8 and xxx 25) that refer to the ant present identical descriptions. But whereas the admonition (vi 8) is addressed to the sluggard and offers him the ant as a paragon to be emulated, the numerical saying (xxx 25) describes the ant impersonally as one example of natural phenomena that corroborate its opening declaration of wise animals. Here the sage portrays the ant in socio-political terms and invites readers to compare its traits and habits with an individual’s integration into a social system. The description of the ants, *‘am lō’ āz* ‘not a strong people’ (v. 25a), draws on a military idiom that echoes Num. xiii 28a: “However, the people who inhabit the country are powerful (*kī ‘az hā’ām*).”

In the admonition to the sluggard (vi 6–8) the ant is praised for its hard work and efficiency and independence of rulers and leaders. In the numerical saying its behavior is invoked as exemplary because of the superiority of wisdom to physical strength.

4.2.1.2 *Šāpān* ‘Rock Hyrax’

The *šāpān* is usually identified as the rock hyrax (*šāpān sela*), *Procavia capensis*, based largely on the Bible’s description of its habitat (Prov. xxx 26; Ps. civ 18).³¹ The hyrax lives in colonies in arid, rocky

²⁹ The forms *hēm* and *hēmā* are used interchangeably in the headings of the numerical sequence sayings; for *hēmā*, see Prov. xxx 18, 29.

³⁰ On the ant, see §4.1.

³¹ The identification of *šāpān* with the coney (AV) is supported by the South Arabian *tafan*; see Bodenheimer, *Animal Life in Biblical Lands* I, p. 21. Onqelos and Ps.-

terrain, where it finds refuge in niches and crevices that protect it from predators and inclement weather.³² It is roughly the size of a rabbit, tailless, with short ears and brownish-grey fur.

The *šāpān* is paired with the *ʾarnebet* ‘hare’ in the dietary laws in Lev. xi 5–6 and Deut. xiv 7, which describe both as nonungulate ruminants. Although hyraxes have a three-part digestive tract, they do not chew their cud.³³ The confusion between the *šāpān* and the hare can be traced back to the ancient versions, but the hyrax belongs to the order Hyracoidea, whereas the rabbit and hare belong to the order Lagomorpha and family Leporidae. Hyraxes are prevalent near the Dead Sea, in the hills of Upper Galilee, the Carmel, and the Negev highlands. The animal’s small size and footpads allow it to scale steep rocks and boulders to find shelter in crannies, as depicted in Psalms civ 18b: “the crags are a refuge for rock-hyraxes,” as well as in the saying under discussion, “they make their houses in the rocks” (Prov. xxx 26b).

The Text

The rock hyraxes are not a mighty people, yet they make their houses in the rocks. (Prov. xxx 26)

The description of the hyraxes as *ʿam lōʾ ʿāšûm* ‘not a mighty people’ again suggests military terminology, as in Balak’s appeal to Balaam, “Come then, put a curse upon this people for me, since they are too mighty [*or numerous*] (*ʿāšûm*) for me” (Num. xxii 6).³⁴

Jonathan on the Pentateuch render *šāpān* as *šapzāʾ/šapzayāʾ*, from the Aramaic root *š-p-z* ‘jump’ (corresponds to Hebrew *q-p-š*). The Septuagint (Prov. xxx 26 and Ps. civ 18) has χοιρογρύλλιος ‘rabbit’ (which the Vulgate transliterates in Lev. xi 5 and Deut. xiv 7). The Vulgate renderings of *šāpān* as *erinaciis* (dat. pl. of *erinacius*) in Ps. civ 18, and as *lepusculus* in Prov. xxx 26 demonstrate the confusion of hare and coney. See Tristram, *Natural History of the Bible*, pp. 75–77; I. Aharoni, *Torat Ha-Hay* (Tel Aviv, 1923), p. 68; Riede, *Im Spiegel der Tier*, p. 11. Most English translations have “badgers” or “rock badgers” (e.g., RSV, NJPS, NKJ), even though they live in holes, unlike the animal described here and in Ps. civ 18. See also Toy, *Proverbs*, p. 534.

³² Gilbert, “The Native Fauna,” *HAWANE*, p. 21.

³³ See Firmage, “Zoology,” pp. 1143, 1157 n. 31.

³⁴ The adjective *ʿāšûm* is often applied to ethnic collectives, such as *gôy* or *ʿam*, to indicate their military might (Num. xiv 12; Deut. ix 14; Joel i 6, ii 5), or as a quantitative expression to denote large numbers of people and possessions (Exod. i 7; Num. xxxii 1).

The *wāw* that links the two clauses functions as an adversative-emphatic *wāw*, drawing the reader's attention to how an innate sense of self-preservation may compensate for a creature's vulnerability.

In this context, the verbs (*yākînu* "prepare [food]" in v. 25b; *yāšîmû* "make [their home]" in v. 26b) denote a continuous action that signifies a habitual way of life. The wisdom of the hyrax is embodied in its inborn ability to find shelter and protect itself from external menaces, while the ant's wisdom lies in its ability to store up food despite its tiny size.

4.2.1.3 'Arbeh 'Locust'

The Hebrew 'arbeh 'locust' (*Schistocerca gregaria*)³⁵ has cognates in other Semitic language, such as Akkadian *a/eribu*, *erbûm*,³⁶ and Ugaritic 'irby. The biblical term 'arbeh 'locust' is commonly applied to the migratory phase of the insect in its fully developed winged stage, as described in the Eighth Plague on Egypt (Exod. x 4–5, 13, 19). Many other names appear in the Bible, however: *gôbay* (Amos vii 1; Nah. iii 17), *gēbîm* (Isa. xxxiii 4), *gāzām* (Amos iv 9; Joel i 4, ii 25), *hāgāb* (usually translated as grasshopper; see Lev. xi 22; Num. xiii 33; Isa. xl 22; 2 Chr. vii 13), *hāsîl* (1 Kgs viii 37; Isa. xxxiii 4; Joel i 4, ii 25; Ps. lxxviii 46; 2 Chr. vi 28), *hānāmal* (Ps. lxxviii 47), *hargol* (Lev. xi 22), *yeleq* (Jer. li 14, 27; Nah. iii 15, 16; Joel i 4, ii 25; Ps. cv 34), *sofām* (Lev. xi 22), *šelāṣal* (Deut. xxviii 42), *ṣ'pônî* (Joel ii 20).

The commentators tried to distinguish a precise meaning for each of these terms. Rashi says that *gāzām*, 'arbeh, *yeleq*, and *hāsîl* are all variants of the generic term *gôba'y*. The term *yeleq* usually refers to the young hopper without wings, i.e., the larva (*Tg. Neb. ad loc.*) *Gāzām* is often associated with the verb meaning "to prune," and thus as designating the most advanced stage of molting. Similarly, *hāsîl* is derived from the root *h-s-l* 'eliminate' and said to refer to the stage at which the insect eats even the seeds (Deut. xxviii 38; cf. *y. Ta'an. 3:6*).³⁷ The precise identification of each term is problematic, because

³⁵ See Forti, "Animal Images in the Book of Proverbs," p. 62.

³⁶ The Sumerian–Akkadian *ura=hubullu* lexicographical list presents about 20 kinds of locusts, denoted by compound terms with the first element *erib*. See Landsberger, *Die Fauna des alten Mesopotamien*, pp. 39–40, 121–125; Militarev and Kogan, *SED*, No. 11.

³⁷ See I. Aharoni, *The Locust* (Jaffa, 1920), pp. 5–39 [Hebrew]. Riede (*Im Spiegel der Tiere*, p. 293) defines *gāzām* as the penultimate stage of molting, and *hāsîl* as the

neither the contexts nor the etymologies are sufficient. The different nouns may indicate separate species, be collective terms (e.g., *gāzām* or *ḥāsîl*), or refer to different instars or stages of development, from larva to pupa to mature adult. But even the sequence in Joel i 4—*gāzām*, *ʿarbeh*, *yeleq*, and *ḥāsîl*—cannot help us identify the various names with the developmental stages of the locust.

Locusts, which are grasshoppers of the family Acrididae, go through a life-cycle that depends on climatic conditions, such as seasonal winds and moisture. Reproduction begins when the female finds appropriate soil conditions, i.e., moist ground in which to bury her eggs. The young hoppers (nymphs) that emerge pass through five molting stages. The adult, with wings that enable it to fly substantial distances, emerges after the fifth molt. In plague conditions, hundreds of millions of adults may take to the air. Young hoppers march off in search of vegetation and mature as they travel. Large swarms, guided by winds, devour every plant in sight and ravage the crops in the field, causing ruin and famine to farming societies (see Joel i 4; 1 Kgs viii 37; Amos iv 9).³⁸ The locust is described as a pest, destroying everything that grows, from the grass in the field to the fruit on the trees (cf. Exod. x 15). Carried by the east wind, during the hot season it lands like a heavy cloud; with the advent of the western wind and abatement of the heat it disappears suddenly (cf. Exod. x 13, 18; Nah. iii 17).

Locust in the Bible and Ancient Near Eastern Literature

The locust is mentioned among the insects that are permitted as food: “But these you may eat among all the winged swarming things that walk on fours: all that have, above their feet, jointed legs to leap with on the ground” (Lev. xi 22; cf. *b. Hul* 65b–66a; Damascus Document xii 14–15). The consumption of locust in the ancient Near East may be deduced from a relief in the palace of Sennacherib at Nineveh, which depicts locusts on skewers being served by servants at a banquet.³⁹

second molting stage in the metamorphosis of the larva (p. 294). But the precise identity of each term in relation to the developmental stage of the locust continues to be a matter of speculation. See *ibid.*, pp. 196–98.

³⁸ See: Bodenheimer, *Animal Life in Biblical Lands* II, pp. 320–27; Firmage, “Zoology,” p. 1150; Gilbert, “The Native Fauna,” pp. 40–41.

³⁹ R. D. Barnett, E. Bleibtreu, and G. E. Turner, *Sculptures from the Southwest Palace of Sennacherib at Nineveh* (London, 1998), pls. 436, 438–439. A report sent to Sargon II, describes the quantity and weight of locusts delivered for culinary purposes; see S. Parpola, *The Correspondence of Sargon II*, Part I (SAA 1; Helsinki 1987), No. 221.

A plague of locust is commonly understood as a figurative trope in threats of punishment for those who disobey God's covenant: "Though you take much seed out to the field, you shall gather in little, for the locust shall consume it" (Deut. xxviii 38). This is paralleled in the Vassal Treaties of Esarhaddon, as a sanction against those who violate them: "May Adad, the canal inspector of heaven and earth, put an end [to vegetation] in your land, may he avoid your meadows and hit your land with a severe destructive downpour, may locusts, which diminish the (produce) of the land, [devour] your crops" (47 lines 440–443a).⁴⁰ This imprecation has figurative and stylistic affinities with the Sefire treaty: "For seven years may the locust devour (Arpad), and for seven years may the worm eat, and ... may the grass not come forth that no green may be seen, (and may its) vegetation not be [seen]."⁴¹

In the Bible, swarming locusts are one of the afflictions, along with famine, pestilence, and blight, that may move the Israelites to utter special entreaties to the Lord in His Temple (1 Kgs viii 37; 2 Chr. vi 28). An invasion by locust was considered to be divine punishment, alongside other natural catastrophes (e.g., famine, blight, mildew, caterpillars). The ancients employed various oracular and mantic means to predict the arrival of locusts. Assyrian documents mention specific prayers and magical techniques employed against an onslaught of locusts, including the use of figurines, in supplications to the God Assur to rid the land of locusts.⁴²

The menacing shadow that locusts cast over the inhabitants of Egypt is described in dramatic terms: "Locusts invaded all the land of Egypt and settled within all the territory of Egypt in a thick mass; never before had there been so many, nor will there ever be so many again" (Exod. x 14). A similar dramatic effect is ascribed to the hornet sent by God: "I will send my terror in front of you, and will throw into confusion all the people against whom you shall come, and I will make all your enemies turn their backs to you" (xxiii 27–28; NRSV).

⁴⁰ See *ANET*, p. 538 (cf. p. 540, lines 599–600). For a detailed comparison between the curses in the Deuteronomic covenant against those who violate God's treaty (Deut. xxviii 15–68) and those found in the vassal-treaties of Esarhaddon, see Weinfeld, *Deuteronomy and the Deuteronomic School*, pp. 116–29; idem, "The Vassal-Treaties of Esarhadon King of Assyria," *Shnaton* 1 (1976), pp. 109, 118 [Hebrew]; S. Parpola and K. Watanabe, *Neo-Assyrian Treaties and Loyalty Oaths* (SAA 2; Helsinki, 1988), 13:vi:1.

⁴¹ *KAI* No. 222, A:27. See Weinfeld, *Deuteronomy and the Deuteronomic School*, p. 124.

⁴² *ABL* 1214, rev. 13.

Swarming locusts darken the earth: "A day of darkness and gloom, a day of densest cloud spread like soot over the hills. A vast, enormous horde—Nothing like it has ever happened, and it shall never happen again through the years and ages" (Joel ii 2). The darkening of the sky is part of the apocalyptic battle between light and darkness, in which the locusts are messengers of the Lord and represent the primeval forces of nature (cf. Joel ii 10).

The frightening image of swarms of locusts swooping down on cultivated fields and denuding them of all vegetation is transformed into a simile for enemy armies: "Now Midian, Amalek, and all the other Kedemites were spread over the plain, as thick as locusts" (Judg. vii 12; cf. Isa. xxxiii 4; Jer. xlvi 23, li 27; Nah. iii 15). The prophet Joel makes more sophisticated use of the trope. He weaves a realistic picture of a plague of locusts into an eschatological prophecy of a military invasion: "For a nation has invaded my land, vast beyond counting" (i 6; cf. ii 5). The dramatic memory of the locust disaster and the regrowth of fields, proof of divine benevolence, is echoed in the salvation prophecy of the Day of the Lord; the image of a well-organized attack by swarms of locusts, despoiling everything in sight, is part of both the realistic and eschatological levels.⁴³

In ancient Near Eastern literature, too, the image of the hosts of locusts marching inexorably forwards and devastating vast tracts of land is employed frequently. The annals of the Assyrian kings include descriptions of their enormous armies overwhelming enemy lands and cities. Sargon's army defeats the enemy "like locusts" (*aribiš*);⁴⁴ Sennacherib describes the advance of the coalition armies "like a spring-time invasion of swarms of locusts" (*kīma tebūt aribi ma'di*).⁴⁵ The Ugaritic Kirta Epic applies the image of locust swarms to the armed hosts of the legendary king of Ugarit (1.14 IV 29): *km ʿirby tškn šd // kḫṣn pʿat mdbr*, "like locusts they spread over the field // like grasshoppers on the edge of the steppe."⁴⁶

⁴³ For more on locusts, see: S. R. Driver, *The Books of Joel and Amos* (CBC; Cambridge, 1897), pp. 82–91; M. Cogan, *Joel* (Mikra Leyisrael; Tel Aviv and Jerusalem, 1994), pp. 25–28 [Hebrew].

⁴⁴ Winckler, *Sargon* 110:73.

⁴⁵ OIP 2, 43:56–57; J. A. Thompson, "Joel's Locusts in the Light of Near Eastern Parallels," *JNES* 14 (1955), pp. 52–55. For additional examples see: *CAD* E, pp. 257–58; Marcus, "Animal Similes in Assyrian Royal Inscriptions," pp. 98–99; Rimbach, *Animal Imagery in the Old Testament*, pp. 12–14.

⁴⁶ *CTA* 14:103–105; 192–194.

Returning to the book of Joel (i 4–12; ii 1–11), we observe that the sudden appearance of the locust is compared to the attack by an enemy (i 6) possessed of a well-trained and battle-ready cavalry (Joel ii 4–5). Joel uses four different names for the insects (i 4) to express the total annihilation of the crops at every stage of its development, from *gāzām* to *ʿarbeh* to *yeleq*, with whatever remains being eaten by the *hāsîl*: “What the cutter has left, the locust has devoured; What the locust has left, the grub has devoured; And what the grub has left, the hopper has devoured.”

The Text

The locusts have no king, yet all of them go out in ranks. (Prov. xxx 27)

In Prov. xxx 27 the sage reflects on the locust’s self-discipline—its ability to march in formation without a king—while ignoring its destructive aspects.⁴⁷ The roots *h-ṣ-ṣ* and *h-ṣ-h* (e.g., Gen. xxxii 8) mean “divide, fall into two parts” and would refer to the military tactic of dividing one’s forces.⁴⁸ Thomas, alleging an etymological link between *hōṣēṣ* and the Arabic *haṣṣa* ‘cut’, reads *hōṣēṣ* as an adverbial accusative: the locusts go out in ‘divisions’. The Septuagint, too, opts for military terminology: ἐκστρατεύει ὁφ’ ἐνὸς κελεύσματος εὐτάτως, “they march orderly at one command.”

The image of locusts marching in perfect order is also used by Joel: “They rush like warriors, They scale a wall like fighters. And each keeps to his own track. Their paths never cross; no one jostles another, each keeps to his own course. And should they fall through a loop-hole, they do not get hurt” (ii 7–8).⁴⁹

Not unlike the self-discipline of the ants in the admonition to the sluggard (vi 6–7), the locusts are viewed from a societal perspective and are praised of their ability to act in a highly organized manner, despite the apparent lack of direct authority.

In Proverbs, in sharp contrast to other biblical passages that portray the locust in a negative light, the locust lifestyle—its organized society—is proposed as a model for human beings. Here the locust is a

⁴⁷ McKane, *Proverbs*, p. 662.

⁴⁸ Delitzsch, *Proverbs of Solomon* II, p. 302.

⁴⁹ See: David W. Thomas, “Notes on some Passages in the Book of Proverbs,” *VT* 15 (1965), p. 276; McKane, *Proverbs*, p. 662. The Targum (followed by Ibn Ezra) interprets *hōṣēṣ* as an intransitive verb, “they all gather together as one.”

wise creature that lives without formal rulers but has an organized social system worthy of emulation.

4.2.1.4 *šēmāmîṭ* ‘House Gecko’

The house gecko grasps with its hands, yet it is in kings’ palaces.
(Prov. xxx 28)

Although nothing in the Bible permits certain identification of the hapax *šēmāmîṭ*, scholars generally rely on the tradition of the ancient versions. The Septuagint renders *šēmāmîṭ* as καλαβώτη ‘spotted lizard’, the Vulgate as *stellio* ‘spotted lizard’, the Aramaic (based on the Syriac) as *ʾamqēṭāʾ*/*ʾaqmēṭāʾ* ‘spider’ or ‘lizard’.⁵⁰ The variety of suggestions offered by commentators over the ages attests that this remains a crux. The Sages suggested writing *šēmāmîṭ*, with a *sāmek* instead of *śîn*, and identified the animal with a type of poisonous spider (*b. Šabb.* 77b; *b. Sanh.* 103b; *y. Šabb.* 1:1 [3b]).⁵¹ Medieval Jewish commentators accepted this identification and interpreted the phrase “grasps with its hands” (Prov. xxx 28a) as referring to the cunning legs of the spider, which spins a web to trap flies, mosquitoes, and other insects, even within royal palaces.⁵² But the phrase seems particularly apt to the house gecko (*Hemidactylus turcicus*), with its remarkable hand-like feet equipped with adhesive pads that allow it to climb steep walls and cling to ceilings.

In fact, the meaning of the Masoretic vocalization *ṭēṭappēs* is uncertain.⁵³ The vocalization *tittāpēs* (*nipʿal*)⁵⁴ offers several possibil-

⁵⁰ For the identification as lizard or house gecko, see: Löw, *Fauna und Mineralien der Juden*, pp. 265–66; Aharoni, *Torat Ha-Hay*, p. 62; Dor, *Zoological Lexicon* (Tel Aviv, 1965), pp. 192, 336–37; idem, *Animals in the Days of the Bible*, pp. 166–67; Elqanah Billiq, “*Šēmāmîṭ*,” *EM* 8:321–22 [Hebrew]. Talshir, relying on etymology, identifies the Aramaic/Syriac *ʾamqēṭāʾ* with the Hebrew *ʾānāqā* ‘lizard’ (*Varanus griseus*) (Talshir, *The Nomenclature of the Fauna*, pp. 222–24). For the midrash in which the *šēmāmîṭ*’s fear of the scorpion represents the weaker being’s fear of the stronger, see *b. Šabb.* 77b. For a comprehensive survey of the hermeneutical tradition about *šēmāmîṭ*, see Delitzsch, *Proverbs of Solomon II*, pp. 303–305.

⁵¹ For the identification as spider by modern commentators, see Tristram, *Natural History of the Bible*, pp. 265–66; Tur-Sinai, *Mišley Šēlōmōh*, p. 153.

⁵² Gersonides, ad loc; Arama, *Yad Avshalom*, p. 101. Other medieval commentators (R. Saʿadya Gaon; Ibn Janah; and David Qimḥi) understood *šēmāmîṭ* as *šēnūnîṭ*, the swallow that nests in royal palaces. Ibn Ezra, focusing on *bēyādayim ṭēṭappēs*, searched for an animal that resembles man in this way and suggested the ape, which grabs its food with its hands.

⁵³ The root *t-p-s* ‘seize, grasp, take possession of’ is not found in the *pʿel*. For the

ities, however. The logical structure of the other verses, in which the opening clause refers to the animal's vulnerability, supports understanding *tittāpēš* as "can be grasped," thus emphasizing the animal's wisdom despite its frailty;⁵⁵ but equally likely is Rashi's notion that it alludes to the gecko's amazing ability to scale vertical walls. This interpretation fits with what we have seen of the sage as a close observer of the natural world.

In his focus on the unique qualities of the little reptile that climbs around in the king's palace the sage is expressing the same admiration and sense of wonder at natural phenomena as in the verses about the ant and the locust. The house gecko has a far greater ability to infiltrate the royal halls than do most human beings. In addition, the contrast between the lowly reptile and the grandness of palaces heightens the rhetorical effect of the saying.

4.2.1.5 Summary

The numerical saying of the tiny but wise introduces a group of animals whose physical slowness is offset by their perspicacity. This is not a random assembly of natural phenomena but rather a deliberate and systematic collection of animal habits that allude to human forms of behavior and social organization. The heading and body of the saying are mutually dependent: the heading defines the common denominator of the illustrations, which in turn demonstrate its veracity. Although each phenomenon occupies an independent syntactic and conceptual unit, the combination of all of them augments their rhetorical effect.

The fact that this numerical saying has no explicit moral has led scholars to characterize it as an encyclopedic rubric for classification of scientific phenomena. However, the very fact of selecting phenomena linked to the heading by a common concept points to the educational intent of the saying. The numerical saying is designed to stimulate the curiosity of readers and hearers and spur them to test the

idiomatic use of *t-p-š b'yad* 'catch, seize', see Jer. xxxviii 23; for the variant *t-p-š bakkāp*, see Ezek. xxi 16 and xxix 7.

⁵⁴ Cf. *tibbā'el* 'when she is married' (Prov. xxx 23a) and BHS ad. loc.

⁵⁵ Most modern scholars interpret *tittāpēš* as "can be grasped," emphasizing the animal's wisdom despite its frailty. See: Toy, *Proverbs*, p. 535; Gemser, *Sprüche Salomos*, p. 106; McKane, *Proverbs*, p. 662; Murphy, *Proverbs*, pp. 233, 236–237.

validity of the heading, “Four are among the tiniest on earth, yet they are the wisest of the wise.”⁵⁶ The details initiate an educational process that begins with empathy for the tiny creatures, evokes admiration for the instinctual behavior that compensates for their handicap, and finally urges readers to adopt such modes of behavior. The numerical saying proposes that we look closely at the wonders of nature; but it calls, not for observation, but rather for applying the lessons learned to the human social order.⁵⁷

4.2.2 *Layiš ‘Lion’, Zarzār Motnayim ‘Rooster’(?), Tayiš ‘He-goat’: Fleet-footed Creatures*

There are three that are stately of stride, four that carry themselves well:
The lion is mightiest among the beasts, and recoils before none; the
zarzār motnayim, the he-goat, the king whom none dares resist.
(Prov. xxx 29–31)⁵⁸

4.2.2.1 *Layiš ‘Lion’*

Layiš is a rare poetic term for lion.⁵⁹ It may apply specifically to the male, but its limited occurrence in the Bible (Isa. xxx 6; Job iv 11; Prov. xxx 30) allows no certain definition of type, age, or the like. Cognates of *layiš* are found in Aramaic, *laytāʾ/lētāʾ*; Arabic, *layṭ*; and Akkadian *nēšu* and *nēštu* (lioness).⁶⁰

Layiš occurs only in the masculine form and with masculine verbs (Prov. xxx 30; Job iv 11). It is used in parallel with *b^enē lābīʾ* (Job iv 11) and paired with *lābīʾ* in the list of animals of the Negev (Isa. xxx 6).⁶¹

⁵⁶ On the saying’s witty character and the surprise created by the antithetical headline, see Roth, *Numerical Sayings*, pp. 20–21. See also §1.5.2.3.

⁵⁷ Toy, *Proverbs*, p. 534.

⁵⁸ The translation follows NJPS except for the identification of *zarzār motnayim*.

⁵⁹ On the various Hebrew terms for the lion, see §2.2.2.2.

⁶⁰ The l > n shift in initial position is uncommon in Akkadian, but does occur sporadically in dialects of Akkadian, Arabic, Aramaic and others. See Strawn, *What is Stronger than a Lion?* pp. 325–26.

⁶¹ In Isa. xxx 6 and Prov. xxx 30, the Septuagint renders *layiš* as σκύμνος λέοντας ‘lion’s whelp’ just as it does *k^epîr* (Judg. xiv 5) and *gûr* (Gen. xlix 9).

4.2.2.2 *Zarzār Motnayim* ‘Rooster’(?)

Although the noun *zarzār* by itself appears in rabbinic literature as the name of a bird of the raven family—a starling, crow, or a magpie (*b. B. Qam.* 92b; *b. Hul.* 65a; *Gen. Rab.* 65:75), the identity of the hapax *zarzār motnayim* in the Bible remains obscure.⁶²

Commentators have interpreted *zarzār motnayim* as referring to swiftness (*z-r-z*) and hence as an epithet for some swift creature, based on the heading of the saying: “There are three that are stately of stride” and the idea that the nomen rectum *motnayim* ‘loins’ may indicate swiftness of motion. The collocation of *z-r-z* and *motnayim* has also been understood on the basis of the Aramaic verb *z-r-z* ‘gird’ (cf. Tg. 1 Kgs xviii 46).⁶³ Modern commentators identify *zarzār motnayim* with the rooster, based on early translations such as the paraphrastic version in the Septuagint (and the Targum), “a cock walking in boldly among the hens.”⁶⁴

The varied proposals for the identification of *zarzār motnayim* prove the complexity of this issue. I prefer to second Rashi’s frank admission: “I do know not what it is.”⁶⁵

⁶² For a comprehensive discussion of the noun *zarzār* and the construction *zarzār motnayim*, see Delitzsch, *Proverbs of Solomon* II, pp. 305–309.

⁶³ Ibn Ezra makes the case for its being the “name of an animal based on the word *motnayim*, i.e., swift of loins.” Gersonides opts for a “thin-hipped dog led by hunters” (thus modern translations “greyhound,” such as KJV and NJPS; and cf. RSV Isa. lvi 11). David Qimhi suggests “a leopard, which has thin flanks and strong legs, or a warhorse.” See Kahana, *Sefer Mishley*, p. 144; Elqanah Billiq, “Zarzār motnayim,” *EM* 2:941 [Hebrew]. Bewer, followed by Gemser (*Sprüche Salomos*, p. 106), suggests emending *zarzār motnayim* to *zarzār mitnaššē* ‘overweening *zarzār* (for *mitnaššē*, cf. v. 32), on the basis of the LXX reading ἐμπεριπατῶν θηλείαις εὐψυξος ‘walking in boldly among the hens’. See J. Bewer, “Two Suggestions on Prov. 30.31 and Zech. 9.16,” *JBL* 67 (1948), p. 61.

⁶⁴ The Vg. reads *gallus succinctus lumbos* ‘the cock whose loins are girded’. The Peshitta amplifies the text: “the rooster with a double comb who walks around proudly among the hens.”

⁶⁵ Delitzsch (*Proverbs of Solomon* II, p. 309) follows the hypothesis, already raised by previous commentators, that the original reading *keleb* ‘dog’ was deliberately avoided “because it does not sound well in the Heb. collection of words.” The expression *zarzār motnayim* ‘girt about the loins’, i.e., “with strong loins” or “with slender limbs,” should be considered a proper name of the hunting dog and not a descriptive attribute. Tur-Sinai (*P^ešuto šel Miqra²*, 386–87) agrees, noting the lack of correspondence between the lion and the good walkers promised by the heading. He cites the midrash about the three bold creatures that one cannot resist: “the dog among the animals, the rooster among the fowl, and others say even the goat among the small cattle” (*b. Beṣah*, 25b).

4.2.2.3 *Tayiš* ‘He-goat’

The *tayiš* is one of the terms for a goat. The male is the *š^e‘îr* ‘izzîm and the female is *š^e‘îrat* ‘izzîm; the adult male is an ‘attûd or *tayiš* (Aramaic and Syriac *ṯyāšā*) or *š^epîr*, and the young is the *g^edî*. The ancestral wild goat (*Capra hircus*) is thought to have been first domesticated in Persia in the sixth millennium BCE. The goat has thick, outward curling horns, a dangling goatee, and strong legs, which facilitate its scrambling up and down steep hills.

4.2.2.4 *The Graded Numerical Sequence*

There are three that are stately of stride, four that carry themselves well.
(Prov. xxx 29)

The graded numerical sequence is not used unequivocally as a means of didactic admonition, but rather as a framework that joins several phenomena that share a common denominator based on values that are sometimes ambiguous. The educational message embodied in the saying is camouflaged by the empirical-scientific reporting style, forcing listeners to use their full critical faculties to decode the message.

Both of the parallel clauses in the heading of this graded numerical sequence contain the *hip^eil* present participle of the auxiliary verb *mêtîb* ‘make good, do well’, linked to absolute infinitives of motion. In this construction the verb functions as an adverb, as in the phrase *mêtîb naggēn* ‘plays skillfully’ (Ezek. xxxiii 32; cf. 1 Sam. xvi 17).⁶⁶ Thus the reader/listener is called upon to search for the common feature of these phenomena.

The lion is mightiest among the beasts, and recoils before no one.
(Prov. xxx 30)

The lion is presented as the first among the good walkers, the mightiest beast that is afraid of no one. The proof that the *layiš* is the “mightiest among the beasts” is introduced by the *wāw* consecutive attached to an explicative clause: it “recoils before no one.” That this is the meaning of *w^elō⁷ yāšûb* ‘does not return/turn back’ can be

⁶⁶ On the auxiliary verb *hêtîb* with the infinitive, see GKC, § 114n.

derived from another verse in which the phrase appears, “He scoffs at fear, he cannot be frightened, he does not recoil (*w^ēlōʾ yāšûb*) from the sword” (Job xxxix 22), as well as from the parallel image of the Lord as a lion that is not deterred by the shouts of the shepherds (Isa. xxxi 4). Thus, *w^ēlōʾ yāšûb* express the courage of one who never retreats. Even the dative phrase *mipp^ēnêy kōl* “before no one” emphasizes the perception of the lion as a paragon of courage.

The *zarzār motnayim*, the he-goat, the king whom none dares resist (*ʿalqûm ʿimmô*) ... (Prov. xxx 31)

Verse 31 presents two animals, the *zarzār motnayim* and the he-goat, linked in Hebrew by the disjunctive *ʾô* ‘or’, which translators tend to elide or render as a conjunctive *and*.⁶⁷ The reason for linking them is not explained by the syntax, but by the heading of the numerical saying: they are both “stately of stride” and “carry themselves well” (xxx 29). The inclusion of the he-goat as “stately of stride” is not a problem; Ibn Ezra on this verse explains that it walks in front of the flock, citing “like he-goats (*ʿattûdîm*) that lead the flock” (Jer. I 8).

The last clause (xxx 31b) seems to be out of place here, since it mentions a king rather than an animal. The enigmatic phrase *ʿalqûm ʿimmô* is generally rendered by taking *ʿalqûm* as two words—*ʿal qûm* or *ʿel qûm*—as found in certain textual traditions.⁶⁸ The Septuagint, followed by the Syriac and Aramaic, vocalize *ʿimmô* ‘with him’ as *ʿammô* ‘his nation’, to produce “a king publicly speaking before a nation.”⁶⁹ Medieval commentators, too, favor a two-word construction, the negative particle *ʿal* plus the jussive *qûm* ‘rise up’, turning the clause into an injunction against rebelling against the king.⁷⁰

⁶⁷ Thomas (“Textual and Philological Notes,” p. 291) suggests that *ʾô tayiṣ* ‘or he-goat’ be read *w^ētayiṣ* ‘and he-goat’, the *wāw* introducing an explanatory gloss on the obscure *zarzār motnayim* (cf. McKane, *Proverbs*, p. 663).

⁶⁸ Eastern MSS divide *ʿalqûm* into two words, *ʿal* and *qûm*. See Ginzburg’s note in his edition of the Bible.

⁶⁹ Toy (*Proverbs*, p. 537), assumes that the words *melek* and *ʿalqûm* are corrupted forms of kingly traits and movement of animals.

⁷⁰ See e.g. Rashi and Ibn Ezra, followed by modern translations like the NJPS: “The king whom none dares resist” (cf. Driver’s slight change *ʿimmô lōʾ qām*, in “Problems in the Hebrew Text of Proverbs,” p. 194). Others read “*qām ʿal* or *ʿel ʿammô* ‘standing over his people’ (cf. RSV “and a king striding before his people”). *Qûm* expresses rulership (Exod. i 8; Job xxv 3) as well as rebellion (see 2 Chr. xxi 4). *Qûm* as a term for government is borrowed for the animal kingdom: “Behold, a people! As a lioness it rises up (*yāqûm*) and as a lion it lifts itself” (RSV: Num. xxiii 24a).

According to the heading of the numerical saying, the lion, *zarzār motnayim*, and he-goat are “good walkers.” However, the lion is portrayed, not as “stately of stride,” but as brave: it is his courage that is celebrated and not his gait. What, then, is the lion doing here?

We should recall that the enumeration of remarkable traits in the animal kingdom is aimed at enlightening and inspiring readers to adopt the right moral values in their own lives. It would seem, then, that the inclusion of the lion here derives from literary and editorial concerns rather than from observation. The multiple occurrences of *melek* ‘king’ in the adjacent units (see xxx 22, 27, 31; xxxi 1, 3, 4) suggest that the editor had a larger purpose in mind when he gathered and arranged them. As we have seen, the Book of Proverbs compares the lion to the ruler or the king (cf. *ʾārī* in xxviii 15 and *kēpîr* in xix 12). The association between lion and king is expressed clearly regarding proportionate and well-regulated behavior in the royal court. The king is also compared to the lion in the glory of his raiment and in his rage and cruelty to his subjects (xix 12, xx 2, xxviii 15).⁷¹

Although the identification of the *zarzār motnayim*, the function of the disjunctive *or* before the he-goat, and the sense of *ʾalqûm* remain obscure, the evocation of lion and king in the same passage, under the rubric of those who are “stately of stride,” hints at the royal aspect of the lion’s self-confident gait.

This saying is one of five numerical sayings (xxx 16–33), four of them following the “three and four” sequence model (vv. 15b, 18, 21, 29) and one citing only “four” (v. 24). Some form of the word “king” occurs in three of them: “A slave who becomes king” (v. 22a); “the locusts have no king” (v. 27a), and “the house gecko ... is in kings’ palaces” (v. 28); “the king whom none dares resist” (v. 31). The superiority of the animals in these sayings—both the “tiniest on earth” and the “stately of stride”—is illuminated by the focus on kings: the locusts’ self-discipline is an antithesis to human society, which needs a king to manage its affairs (v. 27); the gecko’s wisdom is exemplified by its ability to penetrate royal palaces (v. 28); the epithet “stately of stride” applied to the *zarzār motnayim* and the he-goat refers to the courtly manners appropriate in the presence of the king.

Describing animals in association with the king, against whom

⁷¹ For a broader discussion of the lion in kingly sayings (xix 12, xx 2, xxviii 15), see §§2.2.2.2–2.2.2.4.

one should not rebel (*ʿal-qûm ʿimmô*), expresses praise for their natural wisdom, while at the same time alluding to the sage's critical attitude toward rulers' undue use of power.

The graded numerical sequence is not used unequivocally as a means of didactic admonition, but rather as a framework that joins several phenomena that share a common denominator based on values that are sometimes ambiguous. The educational message embodied in the saying is camouflaged by the empirical-scientific style, which forces listeners to use their full critical faculties to decode the message.

4.2.3 *Vulture and Serpent: Animal Conduct that Inspires Human Wonder*

Three things are beyond my comprehension; four I do not understand: The way of a vulture in the sky,⁷² the way of a serpent on a rock, the way of a ship on the high seas, and the way of a man with a maiden: Such is the way of an adulteress: She eats, wipes her mouth, and says, "I have done no wrong." (Prov. xxx 18–20)⁷³

4.2.3.1 *Nāḥāš 'Snake, Serpent'*

Nāḥāš denotes any reptile of the suborder Ophidia. The onomatopoeic noun *nāḥāš* (Ugaritic *nḥš*, Arabic *ḥanašun*) is a generic term for a variety of snakes, including *šārāp*, *šepāʿ*, *šipʿônî*, *peten*,⁷⁴ *ʿepʿeh*, *šʿpîpôn*, and *ʿakšûb*.⁷⁵

The snake is one of the mythological beasts in the literature Syria-Palestine. Isaiah lists the enemies of Yahweh (the same as those of Baal in the epic of the rebellion of the sea): "In that day the Lord will punish, with His great, cruel, mighty sword Leviathan the Elusive Serpent (*naḥāš bariaḥ*), Leviathan the Twisting Serpent (*naḥāš*

⁷² On the *nešer* in the Bible and its identification with the griffon vulture, see §2.1.1.2.

⁷³ Free translation.

⁷⁴ The noun *peten* is attested in Ug. *bṭn* (RS 24.244); Akk. *bašmu* (Landsberger, *Fauna*, pp. 55–60); Aram/Syr *pitnā*; and Arab. *batanun* (Firmage, "Zoology," p. 1156). *Peten* is a poetical term in the Bible (see Isa. xi 8; Ps. lviii 5, xci 13; Job xx 14, 16).

⁷⁵ *ʿakšûb* is synonymous with *nāḥāš* in Ps. cxl 4; it is also one the six names (i.e., species) of serpent mentioned in *ʿAbot R. Nat.* xxxix 3 (ed. Schechter). On the various species of *nāḥāš* in the Bible, see §2.1.2.1.

‘*āqallātôn*); He will slay the Dragon (*tannîn*) of the sea” (Isa. xxvii 1; cf. Amos ix 3; Ps. lxxiv 13–14, civ 26; Job xl 25). In the Canaanite epic, the same cosmic enemies are mentioned by his rival Mot as having been defeated by Baal: “When you killed Litan, the Fleeing Serpent, annihilated the Twisty Serpent, the Potentate with seven Heads.”⁷⁶

The *nāḥāš* is the first specific animal mentioned in the Bible (except for the *tannînim* of the Creation story); in the first two chapters, only broad categories (*b^ehēmâ*, *ḥayyâ*, ‘*ôp haššāmayim* [meaning all flying creatures and not just birds]) are mentioned. Its qualities are described at the outset: “Now the serpent was the shrewdest of all the wild beasts” (Gen. iii 1a). The personified serpent in the narrative of the Garden of Eden, who conducts a conversation with the woman and tempts her to eat the fruit of the Tree of Knowledge, has shaped all later perceptions of the snake as the archenemy of humankind (Gen. iii 15; cf. Gen. xlix 17; Ps. xci 13). The account of its punishment for provoking Eve into disobeying the divine prohibition (Gen. iii 1–5, 14–15) functions as an etiological fable to explain its form of locomotion (Gen. iii 14). This trait gave rise to the idea that snakes eat dust: “Let them lick dust like snakes, like crawling things on the ground!” (Mic. vii 17; cf. Isa. lxxv 25).

The Bible mentions some snakes as living in arid regions (Deut. viii 15) or finding shelter among boulders, stone walls (Amos v 19; Qoh. x 8), and caves (Isa. xi 8).⁷⁷

In the Bible, all snakes are considered to be poisonous (see Deut. xxxii 25, 33b; Jer. viii 17; Ps. lviii 5, c 4).⁷⁸ Their forked tongue, which snakes stick out toward their prey before they attack, gave rise to the belief that they kill with their tongue (Job xx 16b; Ps. cxl 4b), rather than their fangs.

⁷⁶ See Dennis Pardee, “The Ba‘lu Myth,” in W. W. Hallo and K. L. Younger (eds.), *The Context of Scripture, Volume 1: Canonical Compositions from the Biblical World* (Leiden, 1997), p. 265; Oded Borowski, “Animals in the Literature of Syria-Palestine,” *HAWANE*, p. 305.

⁷⁷ See Yair Aḥituv and Samuel Loewenstamm, “*Naḥāš*,” *EM* 5:821–22 [Hebrew]; Feliks, *Animals in the Bible*, p. 102; Firmage, “Zoology,” pp. 1156, 1159, n. 77.

⁷⁸ Cf. Isa. xiv 29; Ps. lviii 5, cxl 4. A similar generalization is reflected in a rabbinic saying: “The best of snakes—crush its head” (*Mek. Exod.*, *B^ešallak* 1 (89)).

4.2.3.2 *Discussion of the Saying*

The heading of this numerical sequence⁷⁹ saying employs synonymous parallelism between the numbers three and four and between the pattern set by the sequential numbers “three” and “four” and the copula complements, “[things] beyond my comprehension” and “[things] I do not understand.” The sage’s attitude toward the four wondrous phenomena that are beyond his ken—“Three things are beyond my comprehension (*nīpl^ēû*); four I do not understand”—is similar to Job’s reactions to natural wonders: “Who is this who obscures counsel without knowledge? Indeed, I spoke without understanding of things beyond me (*nīplā’ôt*) which I did not know” (xlii 3). It also recalls the psalmist’s “It is beyond my knowledge [Qere: *p^ēl^āâ*]; it is a mystery; I cannot fathom it” (Ps. cxxxix 6). The formula of astonishment arouses our curiosity and spurs us to investigate the sage’s observation as he searches for the meaning of the marvels that are beyond his grasp. The first two are animal phenomena: the vulture, as an example of flight through the air; and the snake, as the earthbound movement of reptiles.

Elsewhere in the Bible, the ancients’ admiration of the vulture’s way of life is expressed with regard to three aspects of its behavior:⁸⁰ the high rocks in which it nests (e.g., Job xxxix 27–28; Jer. xlix 16; Obad. 4); its graceful gliding motion, despite the heaviness of its wings (e.g., Deut. xxviii 49; Isa. xl 31; Jer. iv 13, xlviii 40, xlix 22; Ezek. xvii 3, 7; Lam. iv 19), and its searching for prey on the battlefield to provide food for its young (Job xxxix 27–30; cf. Hab. i 8; Job ix 26).

The Assyrians’ admiration of the *erû* ‘eagle’—the emblematic bird of prey in Mesopotamia—for its bravery and prowess features prominently in royal inscriptions. Sargon’s warriors are compared to brave eagles (*kīma erê qardūti*) flying beyond rivers and mountains.⁸¹ Sargon himself compared his ability to capture the enemy in his net to the eagle’s hunting its prey while flying (*kīma erê muttapriši abaršu ina šeti*).⁸² Tiglath-Pileser I compared his protection of his lands to the eagle’s spreading its wings (*ša nuballūšu kīma urinni eli mātāti šuparrurū*).⁸³ The eagle’s nesting on mountain cliffs inspired

⁷⁹ On the numerical sequence saying, see §1.5.2.4.

⁸⁰ On the *nešer*, see §2.1.1.2.

⁸¹ See: TCL 3, 6:25; Winckler, *Sargon* 56:329–30; 129:129.

⁸² See *Iraq* 16 (1954), 186:45–46.

⁸³ See *AKA* 94:57–58.

Sennacherib's description of the enemy's encampment on the steep peaks of Mt. Nippur (*ša kīma erê ašared eššūrē šēr zūqti Nippur šadi marši šubassun šitkunat*).⁸⁴

The four wonders are described in a fixed pattern: *derek* 'way', as the nomen regens attached to the subject of four phenomena—the vulture, the snake, the ship, and a man—followed by a locative clause: "in the sky," "on a rock," "on the high seas," and "with a maiden."

The key word *derek* refers to the route of the vulture's flight and wonder at the riddle of the vulture's navigational abilities. Admiration of the mysterious movement of predatory birds is also mentioned the book of Job: "Is it by your wisdom that the hawk grows pinions, spreads his wings to the south?" (xxxix 26).

The same sense of wonder attaches to the earthbound, legless reptile that slithers along the ground without leaving a trace in its wake (cf. Gen. iii 14).⁸⁵

At first it seems that the ship at sea does not fit in here, because the other items are natural creatures, whereas the ship is a product of human culture. But ships at sea made a profound impression on the ancients, who saw them as one of His marvels:

How many are the things You have made, O Lord; You have made them all with wisdom; the earth is full of Your creations. There is the sea, vast and wide, with its creatures beyond number, living things, small and great, There go the ships, and Leviathan that You formed to sport with. (Ps. civ 24–26; cf. Wis. xiv 1–4)

In our verse, "the way of a ship on the high seas," it is the ship's movement that arouses astonishment, since it navigates without signposts or a marked route. Thus we may interpret the way of the ship in the high seas as the route that leaves no traces apart from the foam that subsides and vanishes in the ship's wake. In this fashion, the "way of a ship" resembles the ways of the vulture and the snake. The poet's astonishment is understandable, since the ancients considered the sailors

⁸⁴ See OIP 2, 36:77–79. On different versions of the same usage and on other occurrences of the same imagery, see Marcus, "Animal Similes in Assyrian Royal Inscriptions," pp. 94–96 and n. 72; Rimbach, *Animal Imagery in the O.T.*, pp. 50–54. On Assyrian imagery of winged creatures see Schott, *Die Vergleiche*, pp. 80–81, 91–92, 96–97; on the vulture/eagle, see *ibid.*, Nos. 42, 74, 177, 286.

⁸⁵ Ibn Ezra emphasizes the wonder of the legless snake's "walking" on the rock; Gersonides stresses the mystery of his passing without a sign. Toy (*Proverbs*, p. 531) questions this, "since no trace is left on a rock by the passage of any animal," and says that the mystery is that it walks without feet.

to be wise people who were skilled in the highly valued art of navigation (see Ezek. xxvii 8–9).

Note that, in another context, vultures and ships are linked by Job: “My days fly swifter than a runner; they flee without seeing happiness, they pass like reed-boats, like a vulture swooping onto its prey” (ix 25–26).

In the fourth clause the sage shifts his focus to something quite different: the way of a man with a maiden (v. 19d); i.e., how man and woman can wondrously create new life (cf. Ps. cxxxix 13–16; Qoh. xi 5). Clearly the motif of wonder can also touch on male-female relations, the mystery of a woman’s attraction to a man (see Gen. iii 16) and the secret of a man’s attraction to a woman (see Song vii 10).⁸⁶ The fourth clause preserves the rhythm of the first three and fulfills the promise of the heading of four things beyond understanding. But now *derek* has a different sense—“manner” rather than “path.”

The moral application follows: “Such is the way of an adulteress: She eats, wipes her mouth, and says, ‘I have done no wrong’ ” (v. 20). The picture is of an adulterous woman who hides the evidence of her misdeeds; she is compared to the person who eats and then wipes her face, leaving no trace of her action.⁸⁷ Here eating is a metaphor for sexual intercourse; compare the *ʿēšet k^esîlût* ‘woman of folly’, who encourages the simpleton to taste the illegitimate pleasures she offers him, “stolen water” and “secret bread” (Prov. ix 17).⁸⁸ The “strange woman,” too, offers the youth a festive meal (Prov. vii 13–23)—an invitation that no doubt evokes sexual implications. The image of the adulterous woman who conceals her actions is accompanied by her blatant declaration that “I have done no wrong.”⁸⁹

Although the use of the particle *kēn* is characteristic of the opening of the application clause in the comparative saying, the other characteristics of the pattern are missing. In the usual pattern, the first clause,

⁸⁶ Murphy (*Proverbs*, p. 235) interprets *derek* (v. 19d) as “the *course* of the attachment that has made the two one, the mystery of how this was accomplished.”

⁸⁷ The LXX renders Heb. *māhātā pîhā* as ἀπομιψαμένη ‘having washed herself’. The verb *m-ḥ-h* is used for wiping tears (Isa. xxv 8) and for wiping/cleaning a dish (2 Kgs xxi 13).

⁸⁸ See: Gemser, *Sprüche Salomos*, p. 106; R. B. Y. Scott, *Proverbs – Ecclesiastes* (AB 18; Garden City, N.Y., 1965), p. 181; Murphy, *Proverbs*, p. 236. “Stolen water” alludes to sexual intercourse in Prov. v 15–20. See Fox, *Proverbs 1–9*, pp. 199, 200, 302.

⁸⁹ For *ʾāwen* as ‘sin, deceit, evil deed,’ cf. Prov. xxii 8; Job xv 35. For “evil plots,” cf. Prov. vi 18; Isa. lix 7; Jer. iv 14.

with one or two comparata, is introduced by the comparative *kap*, and the second clause by the particle *kēn*; e.g. “Like vinegar to the teeth, like smoke to the eyes, is a lazy man to those who send him on a mission” (Prov. x 26; cf. xxvi 1, 2, 8; xi 19; xxvi 19).⁹⁰ In our saying, no comparative *kap* linked to the four wonders prepares us for the *kēn* that introduces the adulterous woman. Without the asseverative *kēn*, we clearly have two separate literary units: a numerical saying composed of four nominative clauses with the same tempo (vv. 18–19); and a descriptive report punctuated by third-person feminine verbs: “She eats, wipes her mouth, and says ...” (v. 20).

Some scholars, taking the *‘almâ* to be a young woman betraying her husband, have interpreted the fourth wonder, “the way of a man with a maiden” (v. 19d) as the vehicle whose tenor is presented in the application clause (v. 20).⁹¹

The links that turn the graded numerical sequence and the application clause into a single conceptual unit are evidence of a secondary editorial process highlighting the warning against an immoral phenomenon. The particle *kēn* joins the adulteress clause with the graded numerical sequence, and specifically with “the way of a man with a maiden” (v. 19d). It also links the application clause to the heading of the graded numerical sequence, “Three things are beyond my comprehension; four I do not understand,” offering an additional mystery: how an adulterous woman can avoid leaving any trace of her misdeeds. In addition, the ambiguity of the verb *y-d-ʿ* ‘know’ in the heading, alluding to both intellectual and carnal knowledge, may foreshadow the physical intercourse between man and woman alluded to in the fourth example of the numerical saying (cf. Gen. iv 1, 17, 25; xix 8; Judg. xi 39).⁹²

The key word *derek* ‘way’ functions as an anaphora in each line of the numerical saying. In the first three it refers to physical motion: the

⁹⁰ On the comparative saying, see §1.5.1.1.

⁹¹ E.g., Ibn Ezra and Gersonides among medieval commentators. Delitzsch (*Proverbs of Solomon* II, pp. 296–98,) sees the use of *‘almâ* as the key to understanding the saying; *‘almâ* is a young woman ripe for marriage and pregnancy (cf. Gen. xxiv 43; Isa. vii 14), as opposed to *b^etûlâ* ‘virgin’ (Gen. xxiv 16). Hence “the way of a man with a maiden” indicates a sexual encounter with a young woman, and not a virgin, and links up with the adulterous woman in the application clause. Delitzsch glosses the prepositional *bêt* of *b^e‘almâ* as *copula carnalis* (idem, p. 296); see also Toy, *Proverbs*, p. 531.

⁹² See *yāʿ* in *BDB*, p. 394.

flight of a vulture, the slithering of a snake over a rock, and the passage of a ship over the sea. In the fourth case, however, it is a metaphor for a sexual relationship, “the way of a man with a maiden” (19d).⁹³ The shift of meaning of *derek* paves the way for linking the four wonders to the adulterous woman and to moral reflection on human conduct.

The items of the numerical saying, taken from the sage’s stock of empirical experiences, are free of moral coloring. The teacher’s didactic messages are presented both in the headings and in the phenomena contained in the body of the saying. When he presents subjects that are worthy of emulation he spares no praise; but neither does he mince words when he wants to denounce certain forms of behaviors.⁹⁴ In the unit under discussion (xxx 18–20), he used the pattern of the numerical saying as a mold for casting his lesson.

The book of Proverbs includes many warnings against the adulterous woman.⁹⁵ Nevertheless, linking such an admonition to a numerical saying is unexpected. The rhetorical turning point is shaped by an encounter on two levels between different types of literary material: the structural linkage of the application clause of the comparative saying to the graded numerical sequence paradigm, and the conceptual encounter between empirical observation of natural phenomena and the application clause that focuses on moral behavior.⁹⁶

⁹³ On *derek* as a way of life, parallel to the term *’ōrah* ‘menstrual period’, see Gen. xxxi 35 and xviii 11. For the use of *derek* in a moral context, see Ps. cxxxix 3. Von Rad (*Old Testament Theology* I, p. 425) discusses the catchword *derek* in Prov. xxx 18–20 as the common feature of puzzling things that somehow must be mastered conceptually and will ultimately reveal analogies between natural phenomena and human life.

⁹⁴ For positive evaluations, see Prov. xxx 24, 29, in contrast to the negative ones in xxx 21 or vi 16.

⁹⁵ On the Strange Woman in Proverbs (ii 16–22, v 1–23, vi 20–35, vii 1–27), see Fox, *Proverbs 1–9*, pp. 134–41.

⁹⁶ See Toy’s summarizing note in this regard (*Proverbs*, p. 531).

CONCLUSION

GENERAL REMARKS

This study has focused on animal images in Proverbs as a lens through which the wise teacher's viewpoint can be discerned. The teacher's knowledge of the animal world derives from empirical observation, encyclopedic knowledge, and early wisdom traditions. Animal images are part and parcel of the teacher's appeal to the mystery of natural phenomena as a means for investigating the more obvious truths of human behavior.

The teacher of Proverbs never refers to the mythological animals and creatures found in the prophetic and poetic literature, such as the sea monsters *Leviathan* and *Tannin* (Isa. li 9; Ps. lxxxix 11); nor does he mention animals with human traits, such as the serpent of Eden (Gen. iii 1–4) or Balaam's ass (Num. xxii 21–30), that act as mediators between God and man. Generally speaking, the teacher draws on conventional animal images to present a universal point of reference. This tendency reflects his wider pragmatic approach to teaching.

The animal imagery in Proverbs draws on various zoological categories: birds, insects, and reptiles; wild animals and predators; and domesticated animals. Together they convey a variety of behavioral codes and habits. Wild animals are no less appreciated than domesticated ones, and even destructive insects win the sage's admiration. For example, the description of locust (in the numerical saying in Prov. xxx 24–28) as among the “tiniest on earth” yet exceedingly wise expresses a sober view free of emotional associations. Instead of being viewed as the ravenous insect that destroys crops, or the “swift messenger” (Isa. xviii 2) sent to strike the foe, the locust is taken as a wise creature that lives without formal rulers and whose organized system is worthy of human emulation: “The locusts have no king, yet all of them go out in ranks” (xxx 27). This perspective encapsulates the unique worldview of Proverbs.

This study has examined a representative sample of literary parallels to typological images of animals as found in ancient Near Eastern literature, such as the close association of royal power with the lion. Thus sayings about the king's conduct convey the ferocity evoked through the image of the lion: "The terror of a king is like the roar of a lion; he who provokes his anger risks his life" (Prov. xx 2).

Above all, the multi-level methodology followed here (see below) has revealed an impressive number of animal images presented in a broad range of literary patterns: concise paradigms such as the comparative saying, the antithetical saying, the "better-than" saying, the metaphorical saying, and first-person speech, as well as more complex structures such as the admonition and exhortation, the biographical confession, and numerical sayings. The contextual approach to interpreting the symbolic role of animals made it possible to illuminate the relationship between vehicle and tenor or comparatum and comparandum.

PHILOLOGICAL APPROACH

Two remarks are in order here. First, inasmuch as an accurate philological understanding of each pericope is an indispensable first step toward literary and conceptual analysis, we strove to establish the philological basis of the various images, mindful of the various contexts from which their wording may have stemmed. To give one short example, the root *b-t-h*, used with reference to the confident lion in Prov. xxviii 1, conveys the motif of the righteous person's trust in divine grace. However, a full appreciation of the choice of this root here requires contrasting it with other occurrences of *b-t-h* and a more common term describing lions, namely *r-b-š* (Gen. xlix 9b; Num. xxiv 9a, b). Although *b-t-h* can be traced from an original sense of "fall down" (Jer. xii 5), its dominant meaning is to "have confidence in somebody," which suits a righteous man but not a lion. Perhaps Prov. xxviii 1 purposely applies this term to the lion in order to make a tighter link between the image of the confidently sprawled lion (usually expressed by *r-b-š*) and the theological domain of the righteous who place their trust in God.

Second, modern interpreters cannot always offer a definitive identification of an animal mentioned in the text. This problem is especially

acute in cases of *hapax legomena* such as *zarzār motnayim* (see §4.2.2.2) or in instances where the proposed identification does not suit the descriptive or semantic context of the passage in which it appears. In the latter, our study has paid special attention to other biblical occurrences of the problematic noun (e.g., *nešer* ‘vulture’ in §2.1.1.2)

LITERARY PARADIGMS WITH REFERENCE TO THE *GATTUNG*

Previous studies of animal imagery in the Bible have focused mainly on the role of the animal in representing ideas or codes of behavior, desirable or undesirable. The metaphoric intention and symbolic message of animal images have been analyzed only in terms of the link between the symbol (the animal) and what was symbolized. Our literary inquiry has taken account of the relations among three rhetorical elements: the vehicle/comparatum, tenor/comparandum, and the rhetorical pattern. The focus on the formal setting and literary paradigm of each animal image has revealed the dynamic hermeneutics between the animal image per se and its rhetorical uses. For example, as we saw in §2.1.2.1, with reference to the warning against drunkenness (Prov. xxiii 29–35), the viper’s venomous bite is mentioned in conjunction with the picture of the drunkard’s lurching movements after a riotous night of drinking. However, whereas the syntactical context of the snakebite in v. 32 refers to the drunkard’s ultimate fate (his *ʾaḥārīt*), the image of the lurching man in v. 35 is a concrete exemplification of his typical condition without reference to his end. That is to say, the hyperbole about the drunkard does not end with a moral lesson, but rather with the drunk’s own pathetic confession when he sobers up: “They struck me but I was not hurt; they beat me but I did not feel it” (v. 35). This conclusion deviates from the typical form of the admonition speech, which usually offers its lesson in the final clause, as in i 19: “Such is the fate of all who pursue unjust gain; It takes the life of its possessor.” We have accordingly assumed that the syntactic features of the direct warning (Prov. xxiii 31, 33–34) and the ultimate consequence (v. 32), regarded as stylistic components of the admonitory speech, were intentionally inserted into a poem mocking the drunk, such as that in Isa. v 21–22.

LITERARY PARADIGMS WITH REFERENCE TO PATTERNS AND CLAUSES

Another literary dimension of our study focused on the various patterns into which animal images are embedded. The teacher of Proverbs cites observed traits of animals for didactic purposes in admonitions, backed up rhetorically by a variety of illustrative clauses, such as the causative clause, the situational clause, and the consequence clause. Thus the image of the vulture's swift flight in Prov. xxiii 5 ("You see it, then it is gone, it grows wings and flies away, like a vulture, heavenward"), employed as a situational clause to exemplify the speedy disappearance of riches, also functions as a consequence clause within the admonition against excessive effort in amassing wealth (*ibid.*, v. 4). Similarly, the hunting scene in Prov. i 17 ("In the eyes of every winged creature the outspread net means nothing"), which is employed as a situational clause to exemplify the trap laid for the innocent lad by violent criminals, also functions as a consequence clause within the admonition against throwing in one's lot with such unsavory characters (*ibid.*, vv. 10–19).

Our study has also emphasized the importance of sensitivity to the rhetorical significance of deviations from a common literary pattern. For example, the graded numerical saying in Prov. xxx 18–20 follows the general model of x followed by $x + 1$ items (in this case, 3 followed by 4). Verse 19 lists four phenomena that are enigmatic to the teacher: "The way of a vulture in the heavens, the way of a snake on a rock, the way of a ship on the seas, and the way of a man with a woman." But these four mysteries, which derive from the teacher's observations of natural phenomena, are supplemented in v. 20 by "the way of an adulteress, she eats, wipes her mouth and says, 'I have done no wrong.'" This fifth observation is juxtaposed to the preceding four and expresses a moralistic admonition against the adulteress. The rhetorical modification works on two different levels: on the thematic level the shift is from experience to moralizing; on the formal level, there is a stylistic shift from the declarative sentences of the numerical saying to the comparative clause of the admonition pattern.

CONCEPTUAL ASPECT

The parameters of this study, in which wisdom literature is understood to function as a laboratory or workshop for the production of similes and related rhetorical forms, has enabled us to take a closer look at the conceptual aspect of the simile in its wider literary context, i.e., as part of the world-view and rhetorical intentions of the school that produced the simile or aphorism. For example, the image of the outspread net—"In the eyes of every winged creature the outspread net means nothing (Prov. i 17)—exemplifies the perils that attend the lad and is transformed into a figurative illustration of the perception of retribution. A full appreciation of the hunting scene can be achieved only if we recognize its contextual and educational setting. It follows that in order to interpret the specific figurative pattern one must pay attention to and elaborate upon the thematic contexts.

In a similar vein, the metaphorical encounters between animal images and unsavory social types society—such as bear and fool (xvii 12), lion and sluggard (xxii 13, xxvi 13), dog and fool (xxvi 11), dog and provoker (xxvi 17)—provide a window on the teacher's world-view. The encounter between man and animal stimulates the listener-reader to reflect on and assimilate the teacher's lesson.

In conclusion, the book of Proverbs is grounded in the daily fabric of life in biblical times. A variety of models of human behavior are drawn from the sage's understanding of the order and balance of the natural world. The wider perspective has enabled us to evaluate rhetorical emphases and conceptual tendencies expressed through animal imagery in wisdom teachings and to discern conceptions of and attitudes about certain animals. The methods employed illustrate an interpretive approach that may profitably be applied to the investigation of animal images in other parts of the Bible.

APPENDIX A

ANIMAL IMAGERY AS A HERMENEUTICAL TOOL FOR ANALYZING THE CONCEPTUAL POLARITY IN QOHELETH

The question of the Qoheleth's inclusion in the canon was debated by the rival schools of Hillel (for) and Shammai (against) (*m. Yad* 3:5, *Ed.* 5:3; *b. Meg.* 7a). Rabbinic sources offer two main arguments against its inclusion among the canonical books: (1) the book contradicts itself (*b. Šabb.* 30b); (2) it expresses heretical views (*Qoh. Rab.* 1:3; 11:9; *Num. Rab.* 161b). Its eventual admission to the canon was evidently because of the ancient Jewish tradition that its author was King Solomon, "the son of David, king in Jerusalem (*Qoh.* i 1; cf. i 12; see also *Song Rab.* 1:1, 10), the archetypal wise man. Another explanation, no less important, may be the orthodoxy of its closing verses (xii 12–14; see *b. Šabb.* 30b).

The apparent lack of internal coherence, which was not lost on the ancient rabbis, is a recurring issue in modern scholarship about Qoheleth. Different voices are heard in the book: one in which the author refers to himself in the first person, and another that refers to Qoheleth in the third person. A more serious problem concerns the dissonance between conservative statements that relate to various phenomena of life, on the one hand, and skeptical observations that contradict traditional beliefs, on the other hand. The skeptical voice has been attributed to the original author—the *hākām* or sage—while the conservative views have been attributed to a pious glossator or editor (one or more).¹ Another approach attributes the contradictory

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¹ See C. G. Siegfried, *Prediger und Hoheslied* (Göttingen, 1898), pp. 2–12. For surveys of theories about the identity of the alleged glossator(s), see: M. V. Fox, *Qohelet and his Contradictions* (JSOTSup 71; Sheffield, 1989), pp. 23–25; Roland E. Murphy, "The Sage in Ecclesiastes and Qoheleth the Sage," in *The Sage in Israel and the Ancient Near East*, ed. J. G. Gammie and L. G. Perdue (Winona Lake, IN, 1990), p. 263; C. L. Seow, *Ecclesiastes* (AB 18C; New York, 1997), pp. 38–43.

voices to the same author and offers two solutions for the inconsistencies: (1) The author is presenting a debate, with a genuine or fictional interlocutor, in which he quotes traditional views in order to contradict them.² (2) The author is expressing the changing perspectives of sequential stages in his life and the evolution of his own worldview.³ In other words, the conflicting points of view represent a dialogue between Qoheleth and himself.

Qoheleth employs a wide variety of expressive modes for his observations and sketches a procedure for investigation. For example, he writes, "I set my mind to study and to probe with wisdom all that happens under the sun" (i 13); "and so I set my mind to appraise wisdom and to appraise madness and folly" (i 17); "for all this I noted and I ascertained all this" (ix 1). The style of Qoheleth's confessional monologue is characterized by strings of sentences connected by coordinating and subordinating conjunctions. For example, he uses the particle *še-*, along with *āšer*, not only as a relative particle (as in classical biblical Hebrew) but also as a conjunction to introduce the subject of an object clause, a usage typical of late Biblical Hebrew.⁴

Although scholars have tried to analyze Qoheleth as a carefully planned composition divided into separate units,⁵ it is difficult to demarcate the individual pericopes. Often there is a continuous flow of thought in the argument of a literary unit; elsewhere the thematic continuity seems to be forced. Given the complexity of this issue, it seems preferable to read the text in the order in which it has come down to us and to evaluate the content of each pericope in situ.

My main concern here is to evaluate the rhetorical impact of two aphorisms that involve animal imagery (first x 1 and then ix 4). An examination of their syntactic and thematic settings will shed light on two well-known scholarly problems:

² For different categories of quotations, see Robert Gordis, "Quotations in Wisdom Literature," *JQR* 30 (1939–40), pp. 123–47; H. W. Hertzberg, *Der Prediger* (KAT 17/4; Leipzig, 1963), p. 174; J. A. Loader, *Polar Structures in the Book of Qoheleth* (BZAW 152; Berlin, 1979); Michael V. Fox, "The Identification of Quotations in Biblical Literature," *ZAW* 92 (1980), pp. 416–31; Roger N. Whybray, "The Identification and Use of Quotations in Ecclesiastes," in *Congress Volume: Vienna, 1980*, ed. J. A. Emerton (SVT 32; Leiden, 1981), pp. 435–51.

³ J. L. Crenshaw, *Ecclesiastes: A Commentary* (OTL; Philadelphia, 1987), p. 34.

⁴ Seow, *Ecclesiastes*, p. 17.

⁵ For various methodologies in delineating a planned structure of the book, see *ibid.*, pp. 43–47.

- a. *The conceptual aspect*: possible sources of and explanations for Qoheleth's contradictory statements;
- b. *The literary aspect*: Identification of the boundaries or extent of each thematic unit in the book.

Demarcation of the borders of a literary unit can help us understand its meaning and assess the role of the imagery employed by it. In other words, identification of the thematic unit can help us understand the reciprocal relationship between the whole and its parts, so that the functions of the components contribute to understanding the form of the literary unit.⁶

For the division into thematic units, I will be guided by Qoheleth's own method of investigation: stating the thesis, moving on to the antithesis or a restrictive statement, and finally presenting the conclusion. The thematic development is followed by analysis of key terms and other literary features, including catchwords, repetitions, and juxtaposed and contrasted phrases and concepts (such as youth and old age, Qoh. xi 9–xii 7), all of which bind the unit together.

1. PERFUMER'S OINTMENT AND DEAD FLIES: WISDOM AND FOLLY

We turn first to ix 13–x 1, which questions whether wisdom has any advantages to foolishness. Despite its thematic unity, the passage employs a wide variety of literary means and stylistic features: a parable (ix 14–15), a proverbial metaphor (x 1), "better-than" proverbs (ix 16a; 18a), one "better-than" proverb without the word *tôb* 'better' (ix 17); and two formulas introducing the theoretical debate (ix 13 and 16a).⁷

⁶ I follow Meir Weiss, who applies the critical principles of the "Total Interpretation" method of the New Criticism to the biblical text. See Meir Weiss, "Die Methode der 'Total Interpretation': Von der Notwendigkeit der Struktur-Analyse für das Verständnis der biblischen Dichtung," in *Congress Volume: Uppsala, 1971*, ed. H. S. Nyberg (SVT 22; Leiden, 1972), pp. 88–112; idem, *The Bible From Within: The Method of Total Interpretation* (Jerusalem, 1984), pp. 1–46.

⁷ On the delineation of the literary unit ix 13–x 1, see: R. Gordis, *Koheleth: The Man and his World* (New York, 1968), p. 309; R. B. Y. Scott, *Ecclesiastes* (AB 18; New York, 1965), p. 247; Fox includes the fool sayings in the literary unit (*Qoheleth and his Contradictions*, pp. 261–62). Ogden compares the subunits ix 17–18 and x 1–4 and finds thematic parallels, such as wisdom versus folly and wisdom's superiority (ix 17; x 2–4) versus wisdom's vulnerability (ix 18b; x 1). He also calls attention to stylistic parallels, such as repeated words, chiasmic structures, antitheses, and the key-word *leb* 'heart' (G. Ogden, *Qoheleth* [Readings; Sheffield, 1987], pp. 163–64). G. A.

“This thing too I observed under the sun about wisdom, and it affected me profoundly” (ix 13), states the author, introducing an instance of wisdom that astounds him. The illustration comes from the parable of the king and the poor wise man (ix 14–15), the amazing case of a poor man who saved (or might have saved) the entire city through his wisdom and overcame a great king and his warriors. Even more amazing, however, is the fact that no one remembers the poor man whose wisdom saved the city.⁸

Like Qoheleth here, the book of Proverbs praises wisdom over military might: “One wise man prevailed over a city of warriors and brought down its mighty stronghold” (Prov. xxi 22); “Plans laid in council will succeed; wage war with stratagems” (xx 18).⁹ Proverbs also holds that overcoming evil impulses is more praiseworthy than bravery on the battlefield: “Better to be forbearing than mighty, to have self-control than to conquer a city” (xvi 32). The aphorisms in Qoh. ix 16–18 are thus an embedded cluster within a contemplative discussion of the value of wisdom in ix 13–x 1. These sayings share the idea that wisdom is superior to martial valor. The opening clauses of the first and last of these verses state the advantages of wisdom, while the closing clauses note a limitation to this truth. The structure of the pattern is “better-than” proverb + adversative *wāw* + restrictive saying. The *wāw* actually precedes a circumstantial clause that limits the main assertion of the “better-than” proverb of the opening clause:

Qoh. ix 16: Wisdom *is better than* valor + *but* a poor man’s wisdom is scorned, and his words are not heeded.

Qoh. ix 18: Wisdom *is better than* weapons of war + *but* one sinner destroys much good.¹⁰ (RSV)

The second of this trio of aphorisms (ix 17) expresses the logical paradigm of the “better-than” proverb without using the word *ṭôb* ‘better’. Unlike the other two sayings, this saying is unqualified: “The

Barton includes x 1 in the literary unit x 1–20, which he entitles “Advice concerning one’s attitude toward rulers”: the genuine portions are x 4–7, 14b, 16, 17, 20; all the rest is interpolations (G. A. Barton, *The Book of Ecclesiastes* [ICC; Edinburgh, 1908], p. 169).

⁸ S. Japhet and R. B. Salters, *The Commentary of R. Samuel Ben Meir (Rashbam) on Qoheleth* (Jerusalem, 1985), pp. 112–13 [Hebrew].

⁹ See also Prov. xxiv 5–6; Qoh. vii 19.

¹⁰ The *wāw* of *w^c-ḥôte^c* function as an adversative: ‘but one sinner’. See P. Joüon and T. Muraoka, *A Grammar of Biblical Hebrew 2* (SubBi 14/1; Rome, 1996), §172a.

words of the wise spoken gently are heard more than the shout of a ruler among fools” (ix 17).¹¹

The conceptual tension of the contradiction between the recommendation to be wise and the limited advantage that wisdom confers creates an extended dialectic. Let us take a closer look at the juxtaposed antonyms in the verses:¹²

The parable of the king (ix 14)

- Little city, few men \neq great king, mighty siege works
- Poor wise man \neq great king

The three aphorisms (vv. 16–18)

- Wisdom \neq valor
- Poor man’s wisdom \neq scorned
- Wise men \neq foolish ruler
- Spoken softly \neq shouted
- Wisdom \neq weapons of war
- Single \neq much

The sayings in praise of wisdom (vv. 16a, 17, 18) can be interpreted as three independent aphorisms that follow one another because of free association. Their common feature—using the “better-than” proverb to contrast the relationship between wisdom and folly—echoes the same conceptual tension conveyed by the parable of the king’s siege of the town and its rescue by the wise commoner. The arrogance of a ruler screaming among fools (v. 17) echoes the conceit of the great king who built great siege works against the city (v. 14).

The opening clause of v. 18 declares wisdom to be superior to “weapons of war.” This statement, too, echoes the story of the poor wise man who overcame the mighty king. The second half of the verse—“but a single error destroys much of value”—however, challenges the categorical assertion that wisdom always prevails. Rashbam explains *ḥôte’ eḥād* ‘one sinner’ as a contrast to the lowly wise man of vv. 14–15: just as he alone saves the city through his wisdom, so can a single sinner destroy much good.¹³ In the wisdom literature, a

¹¹ The translation follows Fox, *Qohelet and his Contradictions*, p. 261.

¹² On the polarity paradigm in Qoheleth, see Loader, *Polar Structures*, pp. 58–61.

¹³ Rashbam (*Qoheleth*, pp. 112–113) also identifies the “fools” (v. 17b) in relation to the context of the “mighty siege works” of the ruler (v. 17b) in the parable of the little city: “For they are fools since they have no wise counsel to overcome the strategy of this man, who is poor and wise.”

hôte 'sinner' is often not a person who violates social or religious law, but rather one who exhibits negative traits and a lack of social concern, such as overweening pride and excessive self-confidence (Prov. xiv 21; xx 2) or haste and rashness (Prov. xix 2).¹⁴

The story of the wise man who saved the city has a retrospective appendix: "Yet no one remembered that poor man" (Qoh. ix 15c). Biblical commentators are divided as to whether this means that, because of his poverty, his wisdom was not heeded and the city fell; or that his wise stratagem was insufficiently appreciated and ultimately forgotten. The past tense *millat* 'saved' seems to mean that the poor man did indeed save the city through his wisdom, which was subsequently forgotten by his fellow townspeople. Those who would take v. 16 ("a poor man's wisdom is scorned, and his words are not heeded") as a gloss on v. 15, however, understand that the townspeople did not heed the poor man's advice and his wisdom proved of no avail; they read *u-millat hi* as a hypothetical: if only they had listened to his words he could have saved the city.¹⁵ This realistic appraisal of the poor man's social standing shows that there are limits to the benefits of wisdom. The lesson of the parable is then formulated as a "better-than" proverb stated in first person: "So I observed: Wisdom is better than valor; but ..." (16a). The qualifying phrase undermines the appreciation of wisdom, since "a poor man's wisdom is scorned, and his words are not heeded" (16b). No matter how we read the story, the wise man does not receive his well-deserved reward. Either the citizens forget him after the city is saved or they scorn his advice and do not heed his counsel (v. 15c).

The "better-than" proverb favors "words spoken gently by wise men" over the "the shout of a ruler among fools" (v. 17). On the surface, this does not seem to fit with the poor man's disappointment at not being rewarded for saving his city. In fact, the contradiction between the wisdom saying and the parable of the poor wise man expresses the dialectical tension between the ideal and the real.¹⁶ There is an ideal of wisdom, but the forces of reality operate against it.

¹⁴ *Hôte* 'sinner' (Prov. viii 36) derives its meaning from "missing the target," as in "Every one of them could sling a stone at a hair and not miss" (Judg. xx 16b).

¹⁵ The translation follows Fox, *Qohelet and his Contradictions*, p. 261. See his discussion, pp. 263–64.

¹⁶ Or as Seow puts it: "It is a contradiction between the principle and the reality, the rule and the exception" (*Ecclesiastes*, p. 322).

Although the poor man's wisdom should be heeded, despite his inferior social status, expecting a just reward may not meet the test of reality.¹⁷

The dialectical tension shared by the parable and the aphorisms that follow it establishes a thematic unity. The sayings present the conceptual association between a single error that destroys much of value (18b) and the "ruler among fools" (17b). The first halves of both verses support wisdom (v. 18a) and those who expound it (v. 17a), juxtaposed with the critical observation of the damage wrought by that "one sinner" and by the "ruler among fools."

All of this is relevant to our discussion because of the placement of the proverbial metaphor in ix 13–x 1: "Dead flies turn the perfumer's ointment fetid and putrid, weightier than wisdom is a bit of folly."¹⁸

zēbūb 'fly', used for all members of the sub-order Brachycera, is an onomatopoeic noun that mimics the sound of the insects' flight.¹⁹ There are only two explicit references to flies in the Bible: Qoh. x 1 and Isa. vii 18. In his prophecy to Ahaz (Isa. vii 10–25), Isaiah compares the onslaught of the Assyrian armies to the obnoxious hordes of flies and the bees that alight "in the rugged wadis, and in the clefts of the rocks, and in all the thornbrakes, and in all the watering places" (v. 19).²⁰

Many biblical mentions of maggots and worms, however, refer to the larvae of flies.²¹ The manna that was left over to the next day "became infested with maggots and stank" (Exod. xvi 20; cf. v. 24);

¹⁷ To society's ingratitude to the wise advisor (ix 15b, 16b) we may compare Qoheleth's skeptical approach to the material gains of the wise: "nor wealth by the intelligent" (ix 11). On the Wise in Qoheleth, see Fox, *Qoheleth and his Contradictions*, pp. 114, 207, 262.

¹⁸ The translation follows M. V. Fox, *A Time to Tear Down, A Time to Build Up: A Rereading of Ecclesiastes* (Grand Rapids, MI, 1999), p. 297.

¹⁹ For *zēbūb* 'fly' in Akkadian, cf. *zumbu* (*zunbu*, *zubbū*), CAD Z, 155. The Aramaic denominative verb *dbb* (from the noun *dibābā* 'fly') express the idea of moving and shaking.

²⁰ See Yaaqob Palmoni, "zēbūb," *EM* 2: 893–94 [Hebrew]; M. Dor, *Animals in the Days of the Bible, the Mishnah and the Talmud* (Tel Aviv, 1997), p. 200 [Hebrew]. The gathering of the gods over the officiant at a sacrifice is compared to swarming hordes of flies in both Gilgamesh (XI, 161) and the *Iliad* (2.469–73).

²¹ Evidence that ancient peoples were aware that flies develop from maggots is provided by a papyrus found in the mouth of an Egyptian mummy: "The worms will not become flies within you." See F. S. Bodenheimer, *Animal Life in Biblical Lands* (Jerusalem, 1965), 1: 116 [Hebrew]. See also Aristotle, *De generatione animalium* III, 9.758b. Aristotle states that the fly is created from garbage (*Historia animalium* V, 721).

this describes the rotting that can be attributed to the activity of fly larvae.²² Other passages describe rotting meat: “My flesh is covered with maggots and clods of earth; my skin is broken and festering” (Job vii 5; cf. Isa. xiv 11; 2 Macc. ix 9).

The fly appears in many talmudic passages as a loathsome creature, a “disgusting fly” that spreads disease (*b. Ketub.* 77b). A fly that falls into a dish is sufficient pretext for divorce (*b. Git.* 6b).

Our verse in Qoheleth refers to *z^ebûbê māwet* ‘flies of death’, that is, flies that deserve or are fated to die. But the plural noun is not in agreement with the third-person singular verbs *yab’îš* and *yabbîa’* (*lit.* “cause to stink and bubble”). This lack of concord is exacerbated by the comparison of the singular “a little folly” in the second clause of the verse to the plural “flies” in the opening clause.

The asyndeton *yab’îš yabbîa’* creates syntactic and hermeneutic problems. Ibn Ezra says that *yabbîa’* is a transitive (causative) verb: the oil continues to stink because the dead flies make it bubble. Others, who dismiss *yabbîa’* as a dittography of *yab’îš* or as an explanatory gloss that has been interpolated into the text, would omit the second verb. Still others emend *yabbîa’* to *g^ebîa’* ‘goblet’, to eliminate the asyndetic string of verbs.²³

S. D. Luzzatto, in his commentary on Qoheleth, proposed a redivision of the words: not זבובי מות but זבוב ימות ‘a fly will die’; this division is more compatible with the idea of the damage caused by “a little folly.”²⁴ Others propose זבוב מות ‘mortal fly’, designating someone who is destined to die, similar to the compound expression *’ēnōš yamût* ‘a mortal man’ (Isa. li 12).²⁵

²² The verse may be referring to larvae of *drosophila*, the fruit-fly found in over-ripe fruit. See Dor, *Animals in the Days of the Bible*, p. 202.

²³ The omission of *yabbîa’* as a dittography is supported by several ancient versions: Symmachus, the Aramaic Targum, and the Vulgate. BHS suggests emending *yabbîa* to *gābîa’* ‘goblet’ or ‘vessel’. The LXX renders it as a noun, σκευασίαν ‘preparation’; compare the Syriac *tūqnā* ‘vessel, container’. *Gābîa’* ‘goblet’ or ‘vessel’ is also interpreted as a metonym for its contents; R. Saadia Gaon translates it as “a container of oil.” See H. L. Ginsberg, *Koheleth* (Tel Aviv, 1961), p. 119 [Hebrew]; Scott, *Ecclesiastes*, p. 248; Fox, *Qohelet and his Contradictions*, p. 265.

²⁴ S. D. Luzzatto, *Mehqerey Ha-yahadut*, vol. 1: *Divrey Qohelet* (Warsaw, 1913), p. 100 [Hebrew]. Ginsberg follows Luzzatto and proposes *z^ebûb yāmût* ‘a fly about to die’, similar to the pattern of *’ēnōš yāmût* ‘a mortal man’ (Isa. li 12). See: Ginsberg, *Koheleth*, p. 119. Fox, *Qohelet and his Contradictions*, 261. C. F. Whitley supports the reading *z^ebûb* ‘a fly’, emphasizing its suitable counterbalance *siklût m^e’āt* ‘a little folly’ (*Koheleth: His Language and Thought* [BZAW 148; Berlin, 1979], p. 83).

²⁵ The singular form is reflected by the Aramaic translation *kid^fbûbā* ‘as a fly’ (cf.

The saying conjures up a picture of dead flies falling into aromatic oil and turning it putrid. The term *šemen rôqēah* indicates a compound of oils and fragrant spices (cf. Exod. xxx 25), which is spoiled by dead flies.²⁶ Because of the concise formulation of the statement, with its aphoristic quality, readers do not examine its empirical truth, but draw the appropriate analogy and absorb the moral.

The second half of the verse has a chiasmic relationship to this image:

Dead flies turn the perfumer's ointment fetid and putrid
Weightier than wisdom is a bit of folly.

The adjective *yāqār* (normally “precious”) modifying *šemen rôqēah* here takes on the meaning of its Aramaic cognate *yaqqîr*—both “honorable” and “heavy.” The Targum has *w^e-yaqqîr yattîr min hûkm^etā* ‘and weightier than wisdom’, thus rendering the verse as a “better-than” proverb.²⁷ The translation “dead flies turn the perfumer’s ointment fetid and putrid, weightier than wisdom is a bit of folly”

y. *Qidd.* 1:10 and *Qoh. Rab.* Ibn Ezra accepts the reading of the MT, noting that in the Bible a singular verb plus a plural name is frequently used to denote each separate act of the singular. For example, *bânôt ša’ādâ âlê šûr* “its branches run over the wall” (Gen. xlix 22 [RSV]; cf. Exod. xxxi 14, Lev. xvii 14, Isa. ii 18, and Qoh. ii 7). Delitzsch prefers the reading *z^ebûbê mawet* ‘death-flies, poisonous flies’, corresponding to the LXX μῦναι θανατοῦσαι ‘pestilent flies’, emphasizing the intentional dramatic effect of the simile in analogy to damage caused by a little folly. See F. Delitzsch, *Ecclesiastes*, trans. M. G. Easton (Grand Rapids, MI, 1960, pp. 370–71). K. Budde compares *z^ebûbê mawet* with other compound expressions, such as *k^elê mawet* ‘deadly weapons’ (Ps. vii 14) and *heblê mawet* ‘snares of death’ (Ps. xviii 5) (*Die Fünf Megillot* [Freiburg, 1898], p. 155); cf. C. H. H. Wright, *Book of Koheleth* (London, 1883), pp. 417–18. Fox argues against the reading *z^ebûb mawet* ‘mortal fly’: “But flies are not deadly ... nor is it relevant that they are doomed” (*Qohelet and his Contradictions*, p. 264).

²⁶ Ogden interprets *rôqēah* as a participle “describing one who blends aromatic compounds, hence ‘perfumer’ (RSV)” (*Qoheleth*, p. 164). See *yayin hareqah* ‘spiced wine’ (Song viii 2 [RSV]). The phrase *šemen rôqēah* ‘perfumer’s oil’ aided in the reconstruction of the Ugaritic lection *šmn rq[h]* in UT, 3: 21 and *šm[n] rqh* in UT, 120: 5. That these readings are correct has been confirmed by the unpublished Ugaritic Tablet RS 24.43:21 with the phrase *lg šmn rqh*, ‘a log of perfumers oil’. See Mitchell Dahood, “The Phoenician Background of Qoheleth,” *Bib* 47 (1966), p. 278.

²⁷ On *yāqār* corresponding to *kābed* in Aramaic, see *yaqqîrâ* (Dan. ii 11) as well as *Aḥiqar* and Aramaic papyri. See A. E. Cowley, *Aramaic Papyri of the Fifth Century B.C.* (Oxford, 1967 [1923¹]), pp. 215–216, lines 93, 108, 111. Rashi and Rashbam compare *yāqār*, in the sense of a heavy property, to *y^eqārôt* ‘choice [stones]’ (1 Kgs v 31). For the association between *kābôd* and *kābed* as a property, cf. Gen. xxxi 1; Isa. x 3, lxi 6, lxvi 11, 12; Nah. ii 10; Ps. xlix 17, 18. The same antithesis between the borrowed meanings of *kābed* and *qal* is found between the antonyms *kābôd* ‘honor’ and *qālôn* ‘disgrace’ (Prov. iii 35) as well as *ākabbed* and *yēqāllû* (1 Sam. ii 30).

follows Fox proposed emendation of *mkbwd* to *tkbd* 'to weight' and moving the caesura so that *yāqār* modifies "oil."²⁸

Thus dead flies are compared to a little folly, and a fine ointment to wisdom. The damage caused by a tiny and worthless creature like a fly, to an expensive unguent is compared to the effect of a little folly, which can overcome wisdom.²⁹

The proverbial dead fly is linked to the second half of the previous verse, "but one sinner destroys much good" (18b): the damage caused by a single misdemeanor is equated with that done by dead flies to fragrant oil. Hence, the proverb of the dead flies in the ointment is embedded as an illustrative device for the clauses that immediately precede and follow it

One sinner destroys much good (ix 18b).

Weightier than wisdom is a bit of folly (x 1b).³⁰

Both analogies qualify the superior status of wisdom because they propose a sober examination of reality, in which sin and folly (the primary natural enemies of wisdom) are likely to prevail.

If small flies can ruin an entire vessel of fine oil—an illustration of the disproportionate relationship between size and negative effect—people should not underestimate the damage that "a single sinner" or "a little folly" can wreak.

The fable of the king and the poor wise man (ix 14–15) and the metaphorical saying about the fly (x 1) deal with precisely the same matter: the influence of wisdom on vital aspects of life. Both parables evoke the intensity of the confrontation between wisdom and its adversaries.³¹

²⁸ Fox's emendation breaks the asyndeton *mēhokmā mikkabōd* that turns the closing stich into a "better-than" proverb. See Fox, *Qohelet and his Contradictions*, p. 265; *ibid.*, *A Time to Tear Down*, pp. 301–302.

²⁹ On the variety of the analogy patterns of proverbial sayings see, for example, the comparative *wāw* (Prov. xxii 1, xxvi 3, 8, 14) or the comparative morphemes *kē* ... *kēn* (Prov. xxvi 1, 8; xxvii 18).

³⁰ On the role of the proverb in its context, see: J. L. Crenshaw, *Ecclesiastes*, p. 169; Fox, *Qohelet and his Contradictions*, pp. 264–65; Loader uses the term *tertium comparationis* to designate the third element, which compares and applies the image to its analogue (*Polar Structures*, p. 60).

³¹ Rashbam (*Qoheleth*, 113) creates a hermeneutic link between the parable of the fly (x 1) and the fable of the king who besieges a small town with his army (ix 14–15), expressing the application of the principle of divine retribution. He claims that Qoheleth compares flies, "insects good for nothing," to a sinful ruler who is not worthy of his throne.

Like the parable of the king and city (ix 14) and the trio of aphorisms that follows it (vv. 16–18), the fly proverb employs antithesis:

fetid, putrid ≠ perfumer's ointment

little ≠ heavy and precious

wisdom, honor ≠ folly

In addition to Qoheleth's method of juxtaposing two contradictory statements to evoke a speculative debate, Qoheleth dresses his proverbs in a stimulating and challenging vocabulary:

yab'îš: The root *b-š* refers to the fetid odor caused by rotten food (Exod. xvi 20) or liquids (Exod. vii 21). Metaphorically it refers to disgraceful behavior: "A righteous man hates falsehood, but a wicked man acts shamefully (*yab'îš*) and disgracefully" (Prov. xiii 5 [RSV]; cf. Gen. xxxiv 30 and 2 Sam. xvi 21). Here (Qoh. x 1) *b-š* conveys both meanings at once, i.e., parable and lesson.

yabbîā': Although the context would admit *b-w* or *b-š* 'bubble up, froth', the *hip'il* form of the root *n-b* (as already suggested by Ibn Ezra) means 'flowing, bubbling'.³² The first two roots would be appropriate for a description of foaming, that is, bubbles on the surface of the liquid caused by a fly's falling into it. The compound *mabbûêy* (*n-b*) *māyim* in Isaiah expresses the bubbling of a spring: "torrid earth shall become a pool, parched land, fountains of water" (Isa. xxxv 7a; cf. xlix 10). The root *n-b* is used with both meanings: "The words a man speaks are deep waters, A flowing stream, a fountain of wisdom" (Prov. xviii 4). The metaphoric use of *n-b* is applied to fools and malicious people: "The tongue of the wise dispenses knowledge, but the mouths of fools pour out folly" (Prov. xv 2); "The mind of the righteous ponders how to answer, but the mouth of the wicked pours out evil things" (Prov. xv 28).

šemen rôqēah: The precious oil is associated with the wise man's reputation, as in the famous "better-than" proverb: "A good name (*šem*) is better than precious oil (*šemen*)" (Qoh. vii 1a). Anointing the head with oil exemplifies the good life for

³² Gordis, *Koheleth*, p. 315.

Qoheleth: “Let your clothes always be freshly washed, and your head never lack oil” (ix 8).³³ As the proverb states, “precious treasure and oil are in the house of the wise man, and a fool of a man will run through them” (Prov. xxi 20). That is, oil is a valuable item that the wise man deems precious, while his antithesis squanders it (cf. Prov. xxi 17). The use of the verb *n-b-ʿ* in association with dead flies that pollute precious oil calls to mind the archetypal fool, evildoer, and slanderer of wisdom proverbs, including the ‘one sinner’ (Qoh. ix 18) and the fool, who are compared to the fly that putrefies the ointment.

The rhetorical use of words that are polar opposites, backed up by double meanings and opposition between adjacent proverbs in the unit, invigorates the dialectical discussion. Readers have to consider the contextual meaning of the key words and take a new look at the advantage of wisdom in light of the realities of human life.

2. DOG AND LION: THE LIVING AND THE DEAD

The end of chapter 8 (vv. 16–17) discusses the limitations of human intelligence in understanding divine deeds. The discussion continues in chapter 9, whose opening formula, “I set my heart” (ix 1a), gives voice to the inner reflections, ruminations, and experiences derived from life, from which Qoheleth draws his conclusions.³⁴

Chapter 9 opens with the summarizing “for all this,” using the opening *kī* as a causal particle to introduce specific explanations. The infinitive *lābûr* (ix 1b), evidently from the root *b-r-r*, expresses the process of his investigation.³⁵ Qoheleth declares that he has reached

³³ On the relation of oil and qualities that produce enjoyment of life, joyousness and a good name, see Ps. xxiii 5, xlv 8, xcii 11, cxxxiii 2; Prov. xxvii 9; Job xxix 6; Song i 3.

³⁴ On Qoheleth’s procedure of discovery and argumentation, see Fox, *Qoheleth and His Contradictions*, pp. 85–89.

³⁵ The verb *lābûr* (ix 1b) is not reflected in the LXX (which is followed by the Peshitta), whose Vorlage, reading by retroversion, must have been *w^ʿ-libbi rāʾā ʾet kōl* ‘and my heart saw everything’—thus creating full parallelism between the two stichs. The principle of *lectio difficilior* supports the MT, however. For *b-r-r* with the meaning ‘select’ in late biblical Hebrew, see 1 Chr. vii 40; ix 22; xvi 41, and Neh. v 18. The root *b-w-r* is an ʾʾ variant of the geminate *b-r-r* (cf. *g-d-d*, *g-w-d* [Gen. xlix 19]). See Gordis, *Koheleth*, p. 299; Ogden, *Qoheleth*, p. 144. Others emend *w^ʿlābûr* to *w^ʿlātûr* ‘to search out for’, as in Qoh. i 13; vii 25.

his conclusions after a process of investigation: “and all this I ascertained” (1b). The wise and righteous are no different from other human beings when it comes to knowledge of their final fate; hence, “their actions” (*‘ābādēhem*) are in the hand of God.³⁶ Even love and hate are not revealed in advance: “Human beings know none of this in advance” (1d).³⁷

He continues (v. 2) that “everything is like everything else” and “the same fate” awaits all human beings.³⁸ This affirmation raises the issue of the principle of reward and punishment and the unpredictable outcome of human actions and feelings. Events are under exclusively divine control. The view that death is the common fate of all human beings, without regard to their moral qualities, blurs the distinction between the antithetical poles of the righteous and the wicked, the good and the bad, the pure and the impure, those who bring sacrifices and those who do not, and those who swear and those who shun oaths.³⁹ Qoheleth’s declaration that all share a common fate contradicts the accepted view that there is some sort of correlation between our deeds and our ultimate fate.

³⁶ The Targum, followed by Rashi, has *w^etalmidēhôn* ‘their students’ in place of *‘ābādēhem*, depicting an ideal picture of the disciples’ submission to the Torah. Ibn Ezra understands it as *ma‘ābādēhem* ‘their works’ (Job xxxiv 25). Ginsberg (*Qoheleth*, p. 113) also understands *‘ābādēhem* (from *‘abdā*) as an Aramaism and equivalent to Hebrew *ma‘āšēhem* ‘their deeds’. Whitley (*Qoheleth*, p. 79) claims that the retention of the *qameṣ* under the second syllable in a plural noun with a heavy suffix indicates the word’s Aramaic origin (cf. *k^enāt*, *k^enāwāl^ehôn* ‘colleague’, ‘their colleagues’, Ezra iv 17). Fox questions why an author composing in Hebrew would chose a rare Aramaism instead of the common *ma‘āšeh* ‘deed’; he assumes that the Hebrew translator from Aramaic (here following Ginsberg’s hypothesis that the Hebrew of Qoheleth is a translation from Aramaic) misread it for *‘abdēhôn* ‘their slaves’, misled by the conjunction with two nouns that refer to classes of people (*Qoheleth and His Contradictions*, p. 256).

³⁷ The LXX (ματαιότης ἐν τοῖς πάσι ‘vanity is in all’) reads the first word of v. 2, *הכל* ‘everything’, as *הבל* ‘vanity’ and attaches it to the end of v. 1, producing *hakkōl lipnēhem hebel*; that is, human beings cannot see the logical consequences of events. Another datum that indicates a deviation from the Masoretic verse division is Rashbam’s division of the commentary units, in which the closing phrase of v. 1, *hakkōl lipnēhem*, appears as the opening phrase of v. 2, thus implying all the evils and punishments that may occur to human beings during their life (*Qoheleth*, p. 110).

³⁸ Gordis (*Qoheleth*, p. 300) offers parallel idiomatic expressions of the idea that one thing is just like the other (e.g., *‘ehyeh ‘āšer ‘ehyeh* ‘I am whatever I am’ [Exod. iii 14; cf. iv 14]).

³⁹ The antitype for *laṭṭōb* ‘for the good one’, missing in the MT, is attested in the LXX by the reading καὶ τῷ κακῷ ‘and the bad’, which is followed by the Syriac and the Vulgate.

In the series of antitheses, the positive type is always presented first, until the last pair, in which the order is inverted to mark the close of the literary unit. An additional stylistic variation in the unit may be seen in the use of the prepositional *kāp* in the last two couples instead of the prepositional *lamed* in the first three, and the use of the word *hôte* 'sinner' as the opposite of *tôb* 'good.'⁴⁰

Qoheleth links the *hōlēlôt* 'madness' of human behavior and wicked deeds "under the sun" with the perception of death as the expected end of all human beings; hence "afterwards they join the dead."⁴¹ His deterministic worldview sees no correlation between moral behavior and death. A similar critical statement of the distortions and defects in God's handling of the world is conveyed even more sharply in Qoh. i 13b–15: "A twisted thing that cannot be made straight, a lack that cannot be made good" (v. 15).⁴²

⁴⁰ The metathesis in the final hemistich and its lengthening form a "closing deviation" to the pericope. For this phenomenon as an intentional aesthetic structure, see M. Paran, *Forms of the Priestly Style in the Pentateuch* (Jerusalem, 1989), pp. 179–88 [Hebrew]. Gordis attributes the inverted order to an ethical tendency "to end on a favorable note, בכי טוב as in 3:8." He considers the change of the prepositional *lamed* of the first three pairs into the comparative *kāp* within the coordinate construction of two pairs to be a stylistic variation (Gordis, *Koheleth*, pp. 300–301). The term *hamnišbā'* 'the one who swears' refers to one who does not take an oath seriously or even swears falsely (see Qoh. viii 2; Zech. v 3–4; Sir. xxiii 9–12). The participle *hamnišbā'* 'the one who swears' presents another stylistic variant that is probably the MT original reading. See Crenshaw, *Koheleth*, p. 160. On the positive type of one "who shuns oaths" and denunciation of one "who swears," see Sir. xxiii 9–11 and Qoh. viii 2–3. The Akkadian semantic equivalent to the Hebrew idiom *yārē' šēbū'ā* is *palāhu māmūta* (see *AHW*, p. 1317) which is also contrasted with "the one who swears (falsely)" (e.g., *BWL*, 116, lines 2–4). See Seow, *Ecclesiastes*, p. 299.

⁴¹ For a detailed discussion of the term *'ahārāyw* and the peculiarity of the syntax *w^e'ahārāyw 'el hammētīm*, see Whitley, *Koheleth*, pp. 79–80. Fox offers three different ways of understanding *'ahārāyw*: (1) "after him," referring to what will happen to an individual after death; (2) "after him," referring to what will happen on earth after his death; and (3) "afterward," referring to what will happen on earth while the individual is still alive. He opts for the third sense (*Qoheleth and His Contradictions*, p. 199; cf. Barton, *Book of Ecclesiastes*, p. 160; Gordis, *Koheleth*, p. 301; Hertzberg, *Der Prediger*, p. 172. The LXX, Syriac, and Vulgate all render the Hebrew term *'ahārāyw* in the plural ("their end"), to harmonize with the plural subject *b^enē hā'ādām*. Rashbam (*Qoheleth*, p. 111) reads *'ahārāyw* as *'ahārūt*, "the end of each and every human being is to go with the dead, since death comes to all; this is why evil-doers continue to do evil and do not repent." Ginsberg (*Qoheleth*, p. 113) renders *'ahārāyw* 'his end', based on the parallel between *'ahārāyw* and *hēleq* 'lot, share' (cf. Qoh. iii 22; vi 12).

⁴² *Hōlēlôt* 'madness', spelled with a plene *hōlem* in the final syllable (see Qoh. i 17; ii 12; vii 25), appears with a *qibbūš* in Qoh. x 13, which is suspect. If the former vocalization is the authentic one, it may have arisen on analogy with the similar *hokmôt* 'wisdom' (Prov. i 20; ix 1) as the pluralis majestatis. See Joüon and Muraoka,

What interests us here is the placement of the figurative proverb “even a live dog is better than a dead lion” (ix 4b) within the literary unit ix 1–6, and the reasons given to support its statement:

For he who is reckoned [Qere: is joined] among the living has something to look forward to (ix 4a)

Since the living know they will die, but the dead know nothing; and they have no more recompense, for even the memory of them has died. (ix 5)

Qoheleth’s gloomy observation of life is connected with the perception of ineluctable mortality. The aphorism “even a live dog is better than a dead lion” illuminates this dark reflection from a different perspective: It is better to be among the living than among the dead because “the living know they will die” (v. 5a), but those who have died “know nothing” (v. 5b). The deceased no longer have to deal with issues of reward and punishment; nor can they experience love, hate, or envy.

Qoheleth introduces his arguments with an independent relative clause that opens with the emphatic particle *kī mī ’āšer*: “For [he] who is.”⁴³ The Kethib, *ybh̄r*, is from the root *b-ḥ-r* ‘choose’,⁴⁴ making the clause is a rhetorical question: “Who is the one who chooses?” The implicit response is “no one”: no mortal has free choice.⁴⁵

The Qere is *y^ehubbar* ‘be joined’, the pu’al of *ḥ-b-r*, producing “for he who is reckoned among the living ...”.⁴⁶ This fits better with what the following reference to *biṭṭāḥôn* ‘confidence, trust’, as in “What

A Grammar of Biblical Hebrew i 265–66. *Hôlēlôt* recurs in Qoheleth in association with *siklût/siklût* ‘folly’ (i 17; ii 12; vii 25; x 13). It implies madness and unbridled behavior (see Jer. xxv 16) as well as arrogant, vain, boastful speech (see Ps. lxxv 5–6).

⁴³ *Mī ’āšer* ‘he who is’ serves as the start of the nominal clause and not just of the relative clause. A similar usage of the particle *kī* is found in Num. xxiii 23; Isa. xv 1; Amos iii 7; Prov. xxx 2; Job v 2 and xxviii 1. The LXX translates *mī ’āšer* as an interrogative, while the Vulgate reads it as a rhetorical question. The Syriac recognizes it as a relative equivalent to *kōl ’āšer* ‘he who is’ (see Exod. xxxii 33; 2 Sam. xx 11; Qoh. v 9), and this seems correct. See Gordis, *Koheleth*, p. 304.

⁴⁴ Vocalized as *yibbāḥēr* (*nip’al*, 3rd masc. imperfect) or as *yibḥar* (*qal*, 3rd masc. impf.) ‘will choose’, meaning the one who chooses.

⁴⁵ See Seow, *Ecclesiastes*, p. 300.

⁴⁶ The LXX, Vulgate, and Syriac reflect the Qere, as do medieval commentators, including Rashi and Rashbam. Crenshaw claims an ironic meaning in the Kethib juxtaposed to Qoheleth’s denial of divine retribution in v. 3; thus the praise for life proposed by the Qere seems more plausible (*Qoheleth*, p. 161). Ogden opts for the root *b-ḥ-r* (Kethib), denoting choice, hence supporting the contrasting debate between the living and the dead (*Qoheleth*, pp. 147–48).

makes you so confident?" (2 Kgs xviii 19=Isa. xxxvi 4). Thus the argument of vv. 4–6 leads to the conclusion that full participation in all spheres of human activity expresses humans' confidence in life.⁴⁷

The judgment that "even a live dog is better than a dead lion" is embedded among the argument clauses beginning with *kî* ("for he who is reckoned among the living [Qere] has something to look forward to"); the two additional motivational clauses provide further explanations: "since the living know they will die. But the dead know nothing; they have no more recompense, *for* even the memory of them has died" (v. 5). Skipping over v. 4b does not interrupt the thematic continuity of 4a–5. The reason for the hope and confidence of the living is that "the living know they will die," while the dog and lion proverb, when read in its context, undermines the credibility of the declaration regarding the benefit of living. The preference for life is expressed sardonically by alleging the superiority of the lowly dog, if alive, over the majestic lion, when dead.⁴⁸

Here it is the lion that is dead and the dog that is alive. Elsewhere in the Bible we encounter the derogatory epithet 'dead dog' to express self-abasement, as in David's desperate protest to Saul: "Whom are you pursuing? A dead dog, a single flea?" (1 Sam. xxiv 15). Even when alive, the dog is a despised creature that evokes feelings of disgust: "As a dog returns to his vomit, so a fool repeats his folly" (Prov. xxvi 11).⁴⁹ The choice of the image of a "living dog" to illustrate the advantage of life over death, following the paradigm of the "better-than" proverb, gives the discussion a skeptical instead of the customary authoritative tone.⁵⁰

This "better-than" proverb measures and then determines "what is best for a man to do in life" (Qoh. vi 12a). The anthropocentric orientation paradigm stems from its purpose of evaluating essential values and practical needs in the life of the individual.⁵¹

⁴⁷ Ibn Ezra understands *biṭṭāḥôn* as "hope" or "expectation": "While there is life there is hope" (so too Ginsberg, *Koheleth*, p. 114). Whitley follows the talmudic meaning of *biṭṭāḥôn* 'hope' in *y. Ber.* 9:13 (*Koheleth*, p. 80; cf. Wright, *Koheleth*, p. 408). For both meanings ("hope" and "confidence"), see Delitzsch, *Ecclesiastes*, p. 359. Fox argues for "hope": "knowing that one will die is not a 'hope'" (*Qohelet and His Contradictions*, p. 258).

⁴⁸ On the lion, see §2.2.2.2.

⁴⁹ See above, §3.3.2.

⁵⁰ On the "better-than" saying see §1.5.1.3.

⁵¹ Walther Zimmerli, "Concerning the Structure of Old Testament Wisdom," in *Studies in Ancient Israelite Wisdom*, ed. J. L. Crenshaw (New York, 1976), pp. 175–

In another divergence from the usual pattern,⁵² here the adjective *tôb* stands, not at the start of the saying, but in the second clause.⁵³ Thus the irony is heightened by means of the alternative form of the “better-than” paradigm: The (base) dog represents the living and the (glorious) lion the dead.

The proverb “even a live dog is better than a dead lion” is woven into the discussion in order to illustrate the superiority of life to death.⁵⁴ This passage contradicts another contemplative monologue that alleges precisely the opposite—“then I accounted those who died long since more fortunate than those who are still living” (iv 2). Furthermore, the speaker there advances the same argument for his praise of death—the evil deeds done under the sun (iv 3–5)—as in the enumeration of the advantages of life in Chapter 9.

The sage’s pessimism about human conduct does not contradict his advice to partake as fully as possible of the pleasures of life. In the opposition of life and the netherworld, the balance is tipped toward life because there is “action, reasoning, learning, and wisdom” (ix 10) in life, but not in the netherworld.

The conceptual tension between life and death in Qoh. ix 1–6 is heightened by the use of contraries:

love ≠ hate
righteous ≠ wicked

207; H. J. Hermisson, *Studien zur israelitischen Spruchweisheit* (WMANT 28; Neukirchen and Vluyn, 1968), pp. 155–56; Glendon E. Bryce, “Better-Proverbs: An Historical and Structural Study,” *SBLSP* 108/2 (Missoula, MT, 1972), pp. 343–54; Graham S. Ogden, “The ‘Better’ Proverb (Tôb-Spruch), Rhetorical Criticism and Qoheleth,” *JBL* 96 (1977), pp. 489–505; Walter Baumgartner, “Die literarischen Gattungen in der Weisheit des Jesus Sirach,” *ZAW* 4 (1914), pp. 165–98.

⁵² For the use of the emphatic *lamed* elsewhere, see Isa. xxxii 1; Ps. xxxii 6. Fox argues that the prefix *lamed* in *l’keleb* is not emphatic, because an emphatic particle would come before the predicate; see Qoh. ii 3; vi 12; viii 12 (*Qohelet and His Contradictions*, p. 258).

⁵³ Our saying resembles the ironic context of another “better-than” proverb: “I say, the stillbirth, is more fortunate than he” (Qoh. vi 3). In both sayings the undesirable states (the “live dog” and the “stillbirth”) appear in the advantageous position within the aphorism.

⁵⁴ Another example of the way an idiomatic expression exemplifies a general truth within a debate is the laconic proverb: “skin for skin” (Job ii 4a). Here too the proverb is embedded in the series of arguments that test Job anew after his trials: “But lay a hand on his bones and his flesh, and he will surely blaspheme You to Your face” (Job ii 5). On the stylistic device of quoting popular sayings in debates with oneself, see Robert Gordis, “Quotations in Wisdom Literature,” pp. 123–47; idem, “Quotations as a Literary Usage in Biblical, Rabbinic and Oriental Literature,” *HUCA* 22 (1949), pp. 196–97.

good, pure \neq impure
 one who sacrifices \neq one who does not bring sacrifices
 one who swears \neq one who shuns oaths
 while they live \neq the end
 a live dog \neq a dead lion

These polarities turn the perception of Divine providence and retribution on its head; the moral opposites become partners in a shared fate. Qoheleth depicts a chaotic universe that supports his skepticism about the common belief system.

The dog-and-lion proverb is embedded in a literary unit defined by an inclusio: the passage begins with the ignorance of their future loves and hates that is the lot even of the righteous and the wise (ix 1), and ends with the absence of all feeling and impulses, including as love, hate and jealousy, among the dead (ix 6).

Introduction

(1) For all this I noted and I ascertained all this: that the actions of even the righteous and the wise are determined by God. *Even love! Even hate!* Man knows none of these in advance. ...

Proverb

(4–5) For he who is reckoned among the living has something to look forward to—even a live dog is better than a dead lion—since the livings know they will die. But the dead know nothing; they have no more recompense, for even the memory of them has died:

Close

(6) *Their loves, their hates*, their jealousies have long since perished; and they have no more share till the end of time in all that goes on under the sun.

All human beings, ranging from the wise poor to wealthy fools, share consciousness of their ultimate fate. This undermines the principle of reward and punishment, according to which God pays human beings according to their actions. Even the advice to live is exemplified through the superiority of a living dog over a dead lion, thus expressing an even more skeptical view of divine retribution.

Gordis includes the proverb within the unit that praises life (ix 4–12) and defines the theme of viii 10–ix 3 as the failure of the principle of divine retribution. It seems, however, that the proverb with its animal image (v. 4) is meant to serve as an exemplification of a theoretical discussion and is accordingly not the start of a new

discussion. Rather, it is linked to the sage's continuing argument that human beings are not capable of speculating on their fate. Nevertheless, the advantage of the living over the dead emerges from the saying. The very fact of being alive renders people masters of their own consciousness.⁵⁵

Qoheleth juxtaposes contradictory terms and values that are seen as equal forces in the cognitive process of making the right choices. This is how he chooses to express his ambivalence about life and to stimulate his audience to reflect about contradictory phenomena in human life. Within the dialectical discourse, the vividness and allusiveness of animal images helps illustrate the inherent polarities on both the conceptual and rhetorical levels.

⁵⁵ See Gordis, *Koheleth*, pp. 188–89; 304–308.

APPENDIX B

A NEW CRITERION FOR IDENTIFYING “WISDOM PSALMS”

Gunkel’s systematic investigation of the literary types (*Gattungs-forschung*) in the book of Psalms provided biblical scholars with a methodological introduction to the study of the “Wisdom Psalms.” Gunkel employed the expressions *Gattung* and *Sitz im Leben*, which combine two planes of thought: the former defines and thus distinguishes among the various genres, while the latter determines the “situation,” i.e., the life setting from the genre (in this case the psalm) developed.¹

Gunkel’s meticulous application of aesthetic laws to identify literary types left many psalms relegated to the category of “mixed psalms.” Later scholars, though, have pointed out thematic parallels between Akkadian literature and the individual lament-prayer in Psalms. Both literary sources include descriptions of physical distress and pain, a sense of having been abandoned by the deity, and various hymnic elements that seek to placate the god. The common range of themes in both the Mesopotamian psalms of lamentation and the biblical mixed psalms call Gunkel’s assumption into question.² His *a priori* assumption that short psalms and “pure” types are early compositions,

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¹ H. Gunkel and J. Begrich, *Introduction to Psalms: The Genres of the Religious Lyric of Israel*, trans. J. D. Nogalsky (Macon, GA, 1998). Buss discusses the problematic term coined by Gunkel in defining “situation” as “referred either to historical circumstances or to the condition expressly described by the text.” See Martin J. Buss, “The Idea of *Sitz im Leben*: History and Critique,” *ZAW* 90 (1978), pp. 158–9.

² See G. Widengren, *The Accadian and Hebrew Psalms of Lamentations as Religious Documents* (Stockholm, 1937); A. Falkenstein and W. von Soden, *Sumerische und akkadische Hymnen und Gebete* (Zurich, 1953); R. G. Castellino, *Le Lamentazioni individuali e gli inni in Babilonia e in Israele: raffrontati riguardo alla forma e al contenuto* (Turin, 1940).

while “mixed” and expanded types are “late,” is now considered a dubious criterion in the reconstruction of form-critical history.³

The stylistic and thematic complexity of many psalms led to a sub-division of the main genres: e.g., the “song of prayer” was partitioned into the “individual prayer” and the “public prayer” and the former teased even further into the “prayer of the afflicted individual” and the “confessional prayer of the accused.” But even such sub-subcategorization proves to be unable to identify the main theme of a psalm.

For cult psalms, one can easily identify the cultic ritual or festival background as their *Sitz im Leben*. The identification of the original context of the Wisdom psalm, though, is much more complex. There are no references to temple rituals or court ceremonies, or allusions to historical backgrounds or traditions that might facilitate identification of the cultural background. Moreover, as long as scholars cannot agree on criteria for identifying a “Wisdom psalm,” there will be a methodological problem about its origin and message.

It was von Rad who asked who stands behind the intellectual activity that crystallized practical and empirical knowledge into a proverbial rule, wisdom saying, or poetry.⁴ He examined the relationship between this literary activity and other biblical genres such as historiography and prophecy. It is precisely when we discuss the psalms as liturgical literature that von Rad’s question takes on sharper focus. This is because of the difficulty in determining the *Sitz im Leben* of psalms that exhibit the ideas and language of Wisdom literature and their link to the creative workshop of the circles of the wise. Von Rad defused this difficulty by stating that we must not treat the copresence of prayer and didactic instruction as a dichotomy. His view was that texts originally composed as cultic psalms were reworked into didactic texts in the post-exilic period. Moreover, the Wisdom-literature features found in some psalms does not reflect a concrete picture of the *Sitz im Leben* but serves only to point out their literary link to the Wisdom milieu.

Murphy summed up the problem of defining the term “wisdom psalm” as follows: “The very idea is as broad as the wisdom literature.”⁵ In fact, the only criterion agreed upon by scholars is the

³ For a critical approach to Gunkel’s and Begrich’s form-critical research, see Hans J. Kraus, *Psalms 1–59*, trans. H. C. Oswald (Minneapolis, 1998), pp. 39–41.

⁴ G. von Rad, *Wisdom in Israel*, trans. J. D. Martin (New York, 1972), pp. 4–14.

⁵ Roland E. Murphy, “A Consideration of the Classification ‘Wisdom Psalms’ ”

conceptual linkage to wisdom thinking. But the place of speculative reflections in the prayer *Gattung* remains an unresolved question.⁶

The fluidity in the number of "Wisdom Psalms" counted by different scholars demonstrates the confusion and lack of consensus in defining the genre. Mowinckel, for example, initially classified three psalms (i, cxii, and cxxvii) as such. Later he added seven or eight more to the updated list (i, xix-b, xxxiv, xxxvii, xlix, lxxviii, cv, cvi, cxi, cxii, cxxvii).⁷ Changes of this magnitude also appear in the different editions of Eissfeldt's *Introduction*. Seven psalms (i, xxxvii, xlix, lxxiii, lxxviii, xci, cxxviii) are mentioned in the 1934 edition, but the 1964 edition adds five more (xc, cv, cvi, cxxxiii, cxxxix).⁸ The opposite tendency is exemplified in Murphy's studies: the number of "wisdom psalms" decreases from twelve in 1960 to seven in 1963. Luyten describes this situation as one of "chaos."⁹ He refers not only to the increase or decrease in the number of "Wisdom Psalms" listed in various scholarly publications, but also to the fact that some scholars categorically deny the existence of any such genre.¹⁰

Notwithstanding the inadequacy of criteria for defining wisdom psalms, three aspects have been considered to be indispensable links to the Wisdom literature and the sages' circles: thematic and conceptual

(SVT 9; Leiden, 1963), p. 159.

⁶ Mowinckel discusses the difficulty in distinguishing between the "learned" or "wise" men (*hākāmim*) or even the "scribes," who used to cultivate a special kind of literature, i.e., "the poetry of wisdom," from other social groups such as the priests, prophets, and Levites. "The psalm poets as a rule belonged to the temple singers" (p. 207), presumably the last collectors and even redactors of the psalms. "It is this learned, non-cultic psalmography which is followed up by the post-canonical, late Jewish psalmography" (pp. 216–17). See Sigmund Mowinckel, "Psalms and Wisdom," in *Wisdom in Israel and in Ancient East*, eds. M. Noth and D. Winton Thomas (SVT 3; Leiden, 1960), pp. 205–24.

⁷ Mowinckel devotes chapter 16 to "The Learned Psalmography," which was cultivated in the circle of "learned" or "wise" scribes. The characteristic form of these "non-cultic" poems is the saying, the proverb and the exhortation, with moralizing and didactic contents." See S. Mowinckel, *The Psalms in Israel's Worship*, trans. D. R. Ap-Thomas (Oxford, 1962), vol. II, pp. 104–25.

⁸ O. Eissfeldt, *The Old Testament: An Introduction*, trans. Peter R. Ackroyd (New York, 1965), pp. 124–27.

⁹ J. Luyten, "Psalm 73 and Wisdom," *La Sagesse de L'Ancien Testament*, ed. M. Gilbert (Gembloux, Belgium, 1979), pp. 59–81.

¹⁰ E.g., Castellino designates 19 psalms as "wisdom psalms" (R. G. Castellino, *Libro dei Salmi* [Turin and Rome, 1955], pp. 729–835), whereas Engnell believes that no psalm was originally composed as a didactic poem (I. Engnell, *The Book of Psalms, A Rigid Scrutiny: Critical Essays on the Old Testament*, trans. J. T. Willis [Nashville, 1969], p. 99).

features, linguistic and stylistic aspects, and the use of the wisdom vocabulary.¹¹

I propose adding the use of animal imagery as a new criterion for identifying “Wisdom Psalms.” The dynamic between animal images and their contextual implications provides another point of entry into the thematic and conceptual framework of each wisdom book. When applied to Psalms, this method shows that the use of animal imagery correlates with “wisdom psalms” and their conceptual background.

Examination of the syntactic and thematic setting of the image within its pericope enables us to clarify its rhetorical function. The combination of the zoological-behavioral and literary aspects allow us to evaluate the rhetorical impact of the Wisdom teaching through this particular aspect of animal imagery.

Here I focus on how the image of the moth in Psalm xxxix reveals its affinities with the Wisdom-psalm genre¹² and on the interpolation of a wisdom motif based on animal imagery—horse and mule—in Psalm xxxii (vv. 8–9).

1. THE MOTH: DESTRUCTIVENESS AND EPHEMERALITY

You chastise a man in punishment for his sin, consuming like a moth his precious garment. (Ps. xxxix 12)

In this bold image the moth exemplifies Divine punishment of human beings for their transgressions.

The larvae of the cloth moth consume and destroy fabric in vast quantities, as described by Isaiah: “They shall all wear out like a garment, the moth shall consume them” (1 9).¹³

¹¹ A methodology for evaluating “Wisdom Psalms” is presented by Murphy, “Wisdom Psalms,” pp. 156–67 (repr. in *SAIW*, pp. 456–67). Philological criteria for the identification of the “wisdom thesaurus” in the psalm are offered by Avi Hurvitz, “Wisdom Vocabulary in the Hebrew Psalter: A Contribution to the Study of ‘Wisdom Psalms,’” *VT* 38 (1988), pp. 41–51; idem, *Wisdom Language in Biblical Psalmody* (Jerusalem, 1991) [Hebrew].

¹² For a previous version in which I presented a close examination of Psalm 39, see: Tova Forti, “The Moth Image: A Window on a Wisdom Psalm (39),” in *Homage to Shmuel: Studies in the World of the Bible*, ed. Z. Talshir, Sh. Yona, and D. Sivan (Jerusalem, 2001), pp. 319–31 [Hebrew].

¹³ In the Bible the moth is *ʿāš*, which appears as a synonym for *rāqāb* (perhaps the tree worm) in Hos. v 12 and Job xiii 28. We also find *ʿāš* in relation to clothing in Sir. MS B (xlii 13) from the Cairo Geniza; the variant *sās* occurs in the scroll from

Scholars have classified Psalm xxxix as a "prayer of the individual," in which the poet appeals to God (v. 13) and reveals his intimate pain. The author perceives his suffering from the "plagues" as Divine punishment for his sins. Hence only God can remove these afflictions (vv. 9–12). Because of the many expressions of suffering and pain (vv. 3, 11), some scholars would define the psalm as one of "sickness and healing," a subcategory of the "prayer of the individual."¹⁴

Let us trace the rhetorical function of the moth in the structure of this psalm. The supplicant opens with a personal confession, but "bridles" or "muzzles" his mouth and refrains from complaining aloud about his sufferings, lest he sin by speaking against God. The refrain of his emotional storm changes into a polemic appeal to God and an argument for theological and philosophical explanations of human suffering. Meditations on the transience and vanity of human life and the uselessness of human possessions are presented as arguments that God should sympathize with human suffering.

The unexpected image, "consuming like a moth his precious garment" (v. 12), concludes an eight-verse unit (vv. 5–12) in which the supplicant goes from stifling his complaints to a meditative justification for God's intervention.

The image of the moth comes after the supplicant entreats God to heal his illness: "Take away your plague from me" (v. 11), thus providing a concrete illustration of the sufferer's collapse. The placement of the moth image (12b) between the theodicy of the first stich ("You chastise a man in punishment for his sin" [12a]) and the declaration of the existential nothingness of human beings in the third stich ("No man is more than a breath" [12c]) highlights the impact of the moth metaphor.

In various loci in the Wisdom Literature the moth exemplifies human transience, notably Job xiii 28–xiv 1: "Man wastes away like a rotten thing, like a garment eaten by moths; man born of woman is short-lived and is sated with trouble." In Job (xiv 2b), human life is a shadow that does not endure. So too in our psalm, "Man walks about

Masada: *kî mibbeged yēšē' sās umē'iššā rā'at 'iššā*, "For from the garment emerges the moth, and from a woman a woman's wickedness." For the biblical *hapax legomenon* *sās* (Isa. li 8), see H. R. (C.) Cohen, *Biblical Hapax Legomena in the Light of Akkadian and Ugaritic* (Missoula, MT, 1978), pp. 114 n. 21.

¹⁴ Although Kraus states that the reflections in Psalm 39 place it in the form group of didactic poetry, he does not include it in the group of "wisdom psalms" in his introductory discussion of "Didactic Poetry" (Kraus, *Psalms 1–59*, pp. 58–60, 417).

as a mere shadow” (v. 7), where *šelem* cannot have its usual sense of image or likeness, but must mean a passing image or shadow (*šēl*), as in “Man is like a breath; his days are like a passing shadow” (Ps. cxliv 4).¹⁵ Ironically, the double meaning of the word suggests a contradiction between the traditional perception of human beings as created in the “image (*šelem*) of God” (Gen. i 26, 27) and the Wisdom literature’s perception of them as no more than a passing shadow (*šēl*).

Another characteristic term of the Wisdom literature found in this psalm is *hebel* ‘breath’, which recurs some forty times in Qoheleth and is also employed by Job to express the vanity of life: “I am sick of it. I shall not live forever; let me be, for my days are a breath” (vii 16). In Psalm xxxix, the word figures in a repeated (vv. 6 and 12) declaration of the vanity of human life—“no man is more than a breath” (cf. also v. 7)

Similarly, we find *tôhelet* (v. 8) as a synonym of “hope” (cf. Prov. x 28) and *h^agîgî* ‘thoughts’ (v. 4b; cf. Ps. xlix 4), both of them drawn from the lexicon of Wisdom Literature. We also have *heled* ‘life expectancy’—“You have made my life just handbreadths long; its span is as nothing in Your sight” (v. 6a; cf. Ps. xlix 2; Job xi 17)—juxtaposed to *hâdel* ‘cease to exist’ in the previous verse: the length of life granted to a person by God is terminated when God brings that life to an end. The metathetic interplay *h-l-d* and *h-d-l* emphasizes the contrast between “lifespan” and “cease to exist.”

Note, finally, the idiomatic “before I pass away and am gone” (xxxix 14b), referring to the suddenness of death and the transient nature of human life, as lamented by Job: “The eye that gazes on me will not see me; Your eye will seek me, but I shall be gone” (Job vii 8).¹⁶

¹⁵ See Ps. cii 12; Job viii 9; xvii 7; Qoh. vi 12. Note the conceptual linkage between *gēr* and *tôšāb* “sojourner” and “transient,” and the image of “shadow” in 1 Chr. xxix 15 and in Ps. xxxix 7a, 13b. *HALOT* (זל"ח II, p. 1029) interprets “shadow” in comparison to the Akkadian *šalāmu* ‘to be dark’. But the *mem* of the word *šelem* may be enclitic. For a detailed discussion, see Chaim Cohen, “The Meaning of צלמות ‘Darkness’: A Study in Philological Method,” *Texts, Temples, and Traditions: A Tribute to M. Haran*, ed. M. V. Fox et al. (Winona Lake, IN, 1996), pp. 294–95, n. 28.

¹⁶ *W^eēnenni* ‘I shall be gone’ appears frequently in Job (e.g., iii 21, xxiii 8, xxiv 24, xxvii 19). For adverbial idioms of short time, transience of life, and their Akkadian counterparts, see Moshe Held, “Studies in Biblical Lexicography in the Light of Akkadian Parallels,” *Studies in Bible Dedicated to the Memory of U. Cassuto on the 100th Anniversary of His Birth* (Jerusalem, 1987), pp. 104–14 [Hebrew].

Two stylistic devices characteristic of Wisdom literature are also worthy of mention:

1. The anaphora of the emphatic adversative *ʔak* (vv. 6c, 7a, 12c) emphasizes the themes of vanity, transience, and the futility of life (cf. Job xiii 15, 20; Ps. lxxiii 1–2);
2. The use of *ʔāmartî* ‘I said’ (v. 2) to introduce an inner monologue, sometimes based on statements of dogma (cf. Ps. liii 2; lxxxix 3–5; Job xxxii 7–8), or to introduce dialectical passages, as in Qoheleth (e.g., ii 1).¹⁷

In sum, the image of the moth provokes theological reflections about issues of Divine Providence and the essence of human existence and develops the contrast between human transience and God’s omnipotent eternity. Its insertion between Divine chastisement and the reflection that “no man is more than a breath” creates a skeptical mood typical of speculative wisdom literature. Therefore, I would suggest that close examination of the moth image in Psalm xxxix constitutes an indispensable stage in the investigation of the formal-aesthetic and conceptual wisdom background of that psalm as a whole.

2. CURBING ANIMALS AND GUIDING HUMAN BEINGS

Be not like a senseless horse or mule whose movement must be curbed by bit and bridle; far be it from you! (Ps. xxxii 9)

Here we are dealing with the interpolation of a didactic motif into an individual song of thanksgiving¹⁸ or into a penitential psalm or confessional song—subcategories of the individual lament.¹⁹

The psalm opens with a double *ʔāsrê* formula applied to the penitent (vv. 1, 2). The thanksgiving style changes into a personal lament

¹⁷ For a detailed discussion of these stylistic devices, see Forti, “The Moth Image,” 327–28. G. von Rad defines this literary genre as the *Hoffartsmonolog* or “insolence monologue” (G. von Rad, *Theologie des Alten Testament II* [Munich, 1962], p. 190, n.10; see also M. Dahood, *Psalms II* [AB; New York, 1968], p. 19).

¹⁸ Kraus, *Psalms 1–59*, p. 367.

¹⁹ Munch coined the term “Schulandachtspsalmen” for compositions used in devotions at school and in the synagogue (e.g., Psalms 19b, 25, 119); and “Unterrichtspsalmen” (e.g., Psalms 32, 34) as the *Sitz im Leben* for instruction in the wisdom schools. See P. A. Munch, “Die jüdischen ‘Weisheitspsalmen’ und ihr Platz im Leben,” *AcOr* 15 (1937), pp. 112–40.

by the suffering sinner (vv. 3–4). This is followed by a dramatic transition in the petitioner's state, the result of his confession, which turns into a doctrine of faith: "Therefore let every faithful man pray to You" (vv. 5–6). God is described as providing sanctuary and refuge from "the rushing mighty waters" (vv. 6–7). Next the poet offers advice—an admonition that includes the proverb of the horse and mule (vv. 8–9). This is followed by a statement of the dogma of punishment for the wicked and reward for the righteous (v. 10). The psalm closes with an appeal to the righteous and the upright to rejoice in God (v. 11).

Psalm 32 is noteworthy for the variety of ideas and styles, which led scholars to classify it as a "mixed type." Gunkel categorized it as a song of thanksgiving with embedded wisdom elements, such as the importance of confession: "I did not cover up my guilt; I resolved, 'I will confess my transgressions to the Lord'" (v. 5). The same idea is presented in a similar way in Proverbs: "He who covers up his faults will not succeed; He who confesses and gives them up will find mercy" (xxviii 13). Nevertheless, Gunkel isolates the didactic admonition in vv. 8–9 and assigns it to wisdom thought: "the form of the beatitude, the expression 'teach the path of YHWH,' the image of the stubborn animal, characteristic forms of wisdom (admonition and instruction), and the content of wisdom (observing the essence of the fate of the godless)"—these, he says, are thoughts and forms of wisdom literature, so that "the thanksgiving song thereby approaches wisdom teaching."²⁰ Mowinckel, who originally classified Psalm xxxii as a didactic psalm and regarded it as part of the "learned psalmography" intended to "reinforce the faith of the young" by means of moral instruction, does not include Psalm xxxii among the "non-cultic" poems and claims that in spite of the didactic character of the "learned psalmography" these psalms must be considered "prayers."²¹ Kuntz includes Psalm xxxii among the mixed wisdom psalms, a subcategory of the wisdom psalm.²² Murphy emphasizes the difficulty in locating

²⁰ Gunkel, *Introduction to Psalms*, §10, pp. 297–98.

²¹ Mowinckel considers even the admonition to the congregation to be the worshiper's personal experience. For his earlier evaluation, see Mowinckel, "Psalms and Wisdom," pp. 213–14; for the later one, in which he considers Psalm xxxii to be a "personal thanksgiving psalm" along with Psalms xxx, xxxiv, xl 2–11, lxxiii, xcii, ciii, and cxvi, see Mowinckel, *The Psalms in Israel's Worship II*, pp. 31–43, 137.

²² Kenneth J. Kuntz, "The Canonical Wisdom Psalms of Ancient Israel; Their Rhetorical, Thematic and Formal Dimensions," in *Rhetorical Criticism-Essays in Honor of James Muilenburg*, ed. J. J. Jackson and M. Kessler (PTMS 1; Pittsburgh,

the entire cluster of wisdom characteristics in any psalm assigned to the category of the Wisdom psalms (i.e., Ps i, xxxii, xxxiv, xxxvii, xlix, cxii, cxxviii). He distinguishes between the "wisdom environment" as the background from which the psalm emerged and the wisdom influence, and the "life setting" (*Sitz im Leben*) of its use in worship and prayer. The use of the psalm as a "song of thanksgiving" provides an opportunity to incorporate wisdom elements as a teaching.²³

Craigie outlines the overall structure of the psalm, demonstrating the chiasmic relationship between its two main parts:

<i>Part I</i>	(1) Wisdom (vv. 1–2)	A
	(2) Thanksgiving (vv. 3–5)	B
<i>Part II</i>	(1) Thanksgiving (vv. 6–8)	B'
	(2) Wisdom (vv. 9–10)	A'

The inclusio formed by the wisdom elements reflects the process of its composition. The individual's thanksgiving psalm "has been given literary adaptation according to the wisdom tradition."²⁴

As the history of the proposed genre classifications of Psalm xxxii shows, there is no consensus about the definition of the "wisdom psalm." Even among those scholars who have attempted to define a specific "wisdom psalm" genre there is a clear tendency to classify Psalm xxxii as a "mixed psalm."

The *ʾašrê* formula is a frequent didactic "overture" to a psalm.²⁵ But the only other accumulation of wisdom terminology here is in vv. 8–9: "Let me instruct you and teach you which way to go; let me offer counsel; my eye is on you. Be not like a senseless horse or mule whose movement must be curbed by bit and bridle; far be it from you!"

1974), p. 210. The literary unit Ps. xxxii 8–10 (11) is defined as an independent wisdom paragraph by O. S. Rankin, *Israel's Wisdom Literature* (New York, 1969) p. 1 n. 1.

²³ Murphy ("Wisdom Psalms," pp. 162, 167) identifies Psalm xxxii as a "wisdom psalm," but omits it in R. E. Murphy, *In Seven Books of Wisdom* (Milwaukee, 1960).

²⁴ See P. C. Craigie, *Psalms 1–50* (WBC 19; Nashville, 1983) p. 265.

²⁵ *ʾašrê* 'blessed' (vv. 1b; 2a) appears 26 times as an introduction to a psalm, eight times in Proverbs, once in Job, once in Qoheleth, and nine times in other books. See: Waldemar Janzen, "*ʾAšrê* in the Old Testament," *HTR* 58 (1965), pp. 215–26; Murphy, *Wisdom Psalms*, p. 159 (bibliography on *ʾašrê* in n. 2); R. N. Whybray, *The Intellectual Tradition in the Old Testament* (BZAW 135; Berlin and New York, 1974), p. 154; Leo G. Perdue, "Didactic Poems and Wisdom Psalms," in *Wisdom and Cult: A Critical Analysis of the Views of Cult in the Wisdom Literatures of Israel and the Ancient Near-East* (SBLDS 30; Missoula, 1977), p. 323; Kenneth J. Kuntz, "The Retribution Motif in Psalmic Wisdom," *ZAW* 89 (1977), pp. 224–25.

"The way you should go" (v. 8b): Here *b^ederek zû tēlēk* expresses the idea of guidance in choosing the correct path in life. *Derek* 'path, way' occurs frequently in the Wisdom literature (65 times in Proverbs, 16 times in Job, and twice in Qoheleth), along with its synonyms *ma^ggal* 'course'²⁶ and *ʾorah* 'path'. The physical condition of the path and its straightness are metaphors for honesty (ethical straightness) or dishonesty (ethical crookedness).²⁷

"I will counsel you with my eye upon you" (8c): This idiomatic expression, referring to the eye of the wise counselor, is employed for the choice of the right path, similar to what is said of God in Proverbs: "For a man's ways are before the eyes of God; He surveys his entire course" (Prov. v 21; cf. xv 3, xxix 13). In Psalm xxxii, however, it is linked to the root *y-ʿ-ṣ*, which is associated with wise counsel.²⁸

The lesson is phrased using an image taken from the world of domestic animals: "Be not like a senseless horse or mule whose movement must be curbed by bit and bridle; far be it from you!" (vv. 8–9).

These verses are full of the scholastic vocabulary: *ʾaškil^eka* ("I will instruct or conduct you") and *ʾôr^eka* ("I will teach you"). The root *y-r-h*, followed by the prepositional *beth* denotes a teaching model, as in "I will teach you what is in God's power" (Job xxvii 11a); "I instruct you in the ways of wisdom, I guide you in straight courses" (Prov. iv 11). The last wisdom lexeme here is the negative infinitive *ʾēyn habîn* 'senseless, without understanding', derived from the noun *bīnah*, a wisdom term indicating the cognitive capacity to understand and discern.

Although the speaker of vv. 8–9 is not identified, the intellectual qualities mentioned clearly relate to the wise man, as personified by the wise teacher in Proverbs.²⁹ But the didactic vocabulary of vv. 8–9

²⁶ Held offers another synonym for *ma^ggal*, reading *šādôt* 'fields' for *š^enat* (Ps. lxxv 12), suggesting the pair *ma^ggal/šādeh* as the analogous parallelism *šādeh/derek* "field/path" (Jer. vi 25). See Moshe Held, "Hebrew *ma^gāl*: A Study in Lexical Parallelism," *JANESCU* 6 (1974), pp. 107–109.

²⁷ On *derek* in the Bible, see B. Curoyer, "Le chemin de vie en Egypte et en Israël," *RB* 56 (1949), pp. 412–32. For *derek* in wisdom literature, see: Whybray, *Intellectual Tradition*, 124–34; M. V. Fox, *Proverbs 1–9* (AB 18A; New York, 2000), pp. 115, 117.

²⁸ For the wisdom term *ʾāšā* "offering counsel" in other books, see Exod. xviii 19; Num. xxiv 14; 1 Kgs i 12; Jer. xxxviii 15. For *ʾāšā ʾāleykā ʾēnī* the LXX has ἐπιστηριῶ ἐπὶ σὲ τοὺς ὀφθαλμοὺς μου, i.e., "fixing the eyes upon" or "strengthening the eyes."

²⁹ Gunkel identifies the speaker as the psalmist, who like the sage addresses the inexperienced (H. Gunkel, *Die Psalmen*⁵ [Göttingen, 1968], p. 135). Kraus (*Psalms 1–*

follows a series of ethical terms—transgression, sin, guilt and confession (vv. 1–5). Consequently, the identity of the author of the whole psalm is unclear: is it the *ḥākām* ‘wise man’ or the *ḥāsīd* ‘pious and faithful man’?³⁰

A direct appeal by the teacher produces an admonition shaped as a proverb: “Be not like a senseless horse or mule, whose movement must be curbed by bit and bridle; far be it from you!” (xxxii 9).³¹ The mention of accessories for curbing animals indicates that we are dealing with beasts of burden or transportation. The *resen* ‘bridle’ (cf. Isa. xxx 28) fits onto the head of the animal and is tied around its cheeks, while the *meteg* ‘bit’ fits into the animal’s mouth (see 2 Kgs xix 28; Isa. xxxvii 29) and is fastened to the rings on the bridle so that the head can be turned to the sides and be reined in.

The *pered* ‘mule’ is the offspring of a male donkey and a mare. Mule and horse are described as steered with the bit and curbed with the bridle. These devices, used to control animals, illustrate the different didactic approaches for human beings and animals.³² The devices used to control such animals are also mentioned in Proverbs: “A whip for a horse and a bridle for a donkey, and a rod for the back of dullards” (xxvi 3).³³ In our psalm the image of the harnessed animals indicates the animals’ lack of understanding, in contrast with the human capacity to choose the right way: “Let me offer counsel; my eye is upon you” (xxxii 8).

This image illuminates the moral-religious principle of confessing one’s sins. Human beings are given the choice of repenting and

59, p. 371) claims that the individual statements in vv. 8–9 are divine utterances quoted in a song of thanksgiving: “עליך עיני, ‘on you is my eye’ assured the petitioner of the healing presence of God.”

³⁰ Among the impressive variety of epithets applied to supplicants (*ṣaddīq*, ‘*ebed*, ‘*ānī*, ‘*ānāw*, ‘*ebyōn*, *dal*), *ḥāsīd* (xxx 4, xxxi 24, xxxvii 28) designates the conditions of loving and devotion. See Kraus, *Psalms 1–59*, pp. 76–77.

³¹ The compound ‘*edyō liblōm* has raised difficulties. ‘*edyō* could be rendered as ‘*ādāyw*, i.e., prepositional ‘*ad* plus the 3rd per. acc. suffix, with the sense of *bā’adō* ‘against him’. For a summary of the different readings of עדי, see Giorgio Castellino, “Psalm XXXII 9,” *VT* 2 (1952), pp. 37–42; as a third homonym of ‘*-d-h* ‘gallop’, based on the Arabic verb *ḡadā*, see A. A. Macintosh, “A Third Root עדה in Biblical Hebrew?” *VT* 24 (1974), pp. 454–73. The hapax verb *b-l-m* occurs in later Aramaic and rabbinic Hebrew with the sense of “block” or “hinder” (see *b. Hul.* 89a). The Syriac employs *b-l-m* to render *h-s-m* in ‘you shall not muzzle’ (Deut. xxv 4).

³² The principle use of the horse was for pulling chariots. On horses and asses, see Edwin B. Firmage, “Zoology,” pp. 1135–37.

³³ The rod serves as a means of instruction and chastisement in the book of Proverbs: x 13, xiii 24, xix 18, xxii 15, xxiii 13–14.

choosing the right way, whereas animals, controlled by bit and bridle, do not have freedom of choice.

A closer examination of the lexical and conceptual aspects of these two verses in their literary context shows that this unit is probably a secondary interpolation. Removing the image does not damage the conceptual integrity of the psalm, which begins with a description of the suffering of the supplicant, as punishment for his sin (vv. 3–4), continues with his confession and prayer, and concludes with a total reversal—“many are the torments of the wicked, but he who trusts in the Lord shall be surrounded with favor” (v. 10). Within this framework, the uniqueness of human understanding is contrasted to the senseless of animals.

The didactic illustration of the horse and the mule (v. 9) does not fit with the doctrine of retribution (v. 10) that brings the psalm to a conclusion in harmony with its beginning. Thus, verse 8, which introduces the image of the horse and the mule in v. 9, may also be a secondary interpolation, the work of a later redactor (from the social milieu of the *sôp^erîm-ḥ^akāmîm*), who drew on a reservoir of aphorisms and didactic rhetoric associated with Wisdom literature.

Summing up, in the attempts to determine criteria for the “Wisdom Psalm” genre, various criteria have been proposed that combine linguistic and conceptual tests for identifying the degree to which Wisdom Literature has influenced the literary character of the psalms. The two cases discussed here prove the presence of different degrees of wisdom influence on individual psalms. Although both psalms contain features of the individual prayer, i.e., repentance and confession, descriptions of distress and trust in God’s delivery, only Psalm xxxix reflects the overall structure of the Wisdom tradition. Reflection, meditation, and didactic terminology can be found throughout. Classification of Psalm xxxii as a wisdom psalm is less certain, because its wisdom affinities are limited to two verses (vv. 8–9) that are reminiscent of the animal imagery of the Wisdom literature. It seems likely, than, that they are a secondary didactic elaboration within a thanksgiving psalm, whether an original (though non-essential) part of the psalm or added by a later editor.

A careful evaluation of animal imagery thus provides an additional criterion for identifying a “wisdom psalm” or a wisdom dimension in a psalm of another type.

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De 32: 44 people, he, and *H'* the son of Nun, 1954
2Ki 15: 30 And *H'* the son of Elah made a *
17: 1 began *H'* the son of Elah to reign *
3 and *H'* became his servant, and *
4 of Assyria found conspiracy in *H'*: *
6 In the ninth year of *H'* the king of *
18: 1 in the third year of *H'* son of Elah *
9 which was the seventh year of *H'* *
10 that is the ninth year of *H'* king of *
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Ne 10: 23 *H'*, Hananiah, Hashub, *

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Ro 12: 13 necessity of saints; given to *h'*, 5381
1Ti 3: 2 given to *h'*, apt to teach; 5382
Tit 1: 8 But a lover of *h'*, a lover of good *
1Pe 4: 9 Use *h'* one to another without *

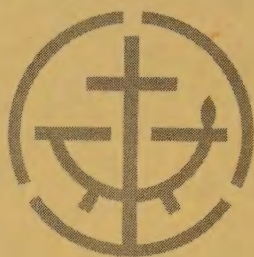
host^A See also HOSTS.
Ge 2: 1 finished, and all the *h'* of them, 6635
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30 And his *h'*, and those that were 6635
4: 3 all that enter into the *h'*, to do the *
10: 14 and over his *h'* was Nahshon the son *
15, 16 over the *h'* of the tribe of the *
18 and over his *h'* was Elizur the son *
19, 20 over the *h'* of the tribe of the *
22 and over his *h'* was Elishama the *
23, 24 over the *h'* of the tribe of the *
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10 thy servant down to the *h'*: *
11 strengthened to go...unto the *h'*: *
11 armed men that were in the *h'*, *
13 bread tumbled into the *h'* of *
14 delivered Midian, and all the *h'*, *
15 and returned into the *h'* of Israel, *
15 into your hand the *h'* of Midian, *
21 the *h'* ran, and cried, and fled, *
22 even throughout all the *h'*: and the *
22 and the *h'* fled to Beth-shittah in *
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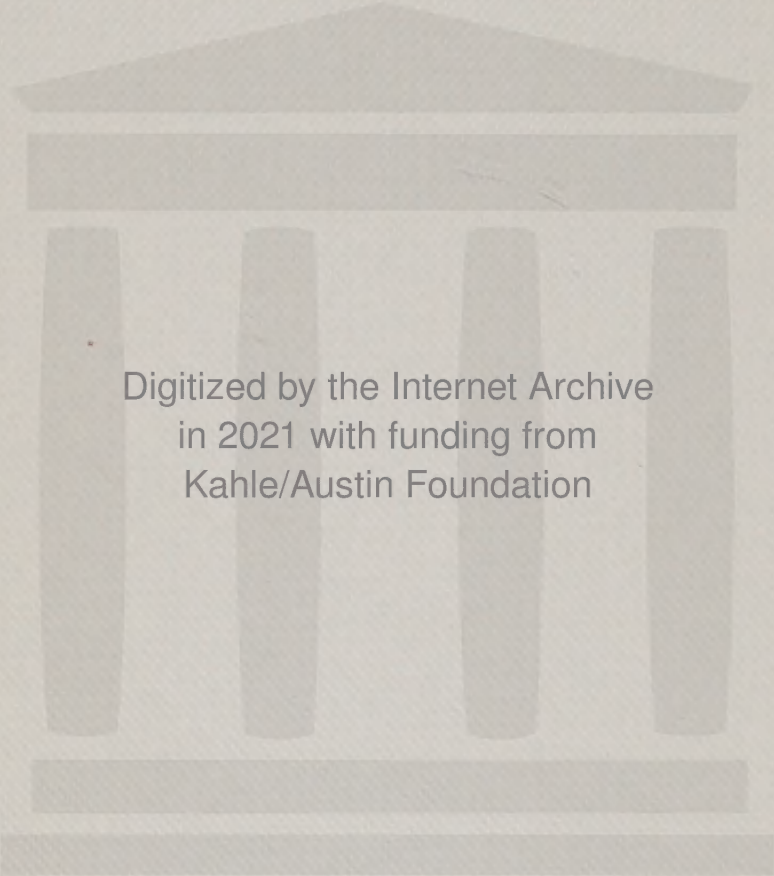
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The Animals in the Bible

The Frontiers of Knowledge Series

"One consequence of the rise of the American university graduate school with its strong emphasis upon advanced study and research has been the growing separation of first-rank scholars and scientists from the task of presenting their own subjects in primary and secondary schools—indeed even in elementary courses for undergraduates.

"The chief contact between those on the frontiers of scholarship and students in schools was through the occasional textbooks for high schools prepared by such distinguished scientists as Millikin or by historians of the stature of Beard or Commager. For the most part, however, the scholars at the forefront of their disciplines, those who might be able to make the greatest contribution to the substantive reorganization of their fields, were not involved in the development of curricula for the schools. In consequence, school programs have often dealt inadequately or incorrectly with contemporary knowledge. . . ." So reports Dr. Jerome S. Bruner in his recent book *THE PROCESS OF EDUCATION*.

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The
ANIMALS
in the
BIBLE

The Identity and Natural History of All
the Animals Mentioned in the Bible

by
ROY PINNEY

With a Collection of Photographs
of Living Species Taken in the
Holy Land by the Author

CHILTON BOOKS

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Introduction

“And God blessed them, and God said unto them, Be fruitful, and multiply, and replenish the earth, and subdue it: and have dominion over the fish of the sea, and over the fowl of the air, and over every living thing that moveth upon the earth.”

(Gen. 1:28)

“And out of the ground the Lord God formed every beast of the field, and every fowl of the air; and brought *them* unto Adam to see what he would call them: and whatsoever Adam called every living creature, that *was* the name thereof.”

(Gen. 2:19)

As mathematicians and physicists work to piece together a picture of the future, men of other disciplines and sciences are having equal success in reconstructing and recalling the past. The most dramatic progress made by the latter group has included filling in the details of man's early adventures as recorded in the Bible.

Within recent years, archaeological discoveries, the recovery of dead languages, and refinements in the science of philology have permitted the Bible to be read as a testament in other than merely religious terms. Each year, scientists and scholars come forward with further corroboration of the Bible's historical accuracy.

We have identified the tiny scaled creatures which made up the miraculous “manna” that appeared like dew each morning to feed the Children of Israel on their march through the Wilderness of Zin. We know which fishes were harvested by the Apostles of Jesus from their nets in the Sea of Galilee; which animals and birds were prescribed by Mosaic law to be offered up for sacrifice by the priests in the Holy Temple of Solomon some three thousand years ago.

One fascinating aspect of this recovery of the past—up to now not made available to the general public—has been an identification to a high degree of accuracy of the animal life that figures in the pastoral and agricultural setting of the Biblical world. Improved readings of the basic texts in Hebrew, reinforced by a knowledge of the languages of the surrounding peoples—such as Ugaritic, Akkadian, Sumerian, and Egyptian—now permit the reader to know with a great measure of accuracy the fauna of those early days. Preserved in the Bible is a detailed panorama of the animal life of the Near East of millennia ago.

The animal life of Biblical times persists to this day. It is not a matter of restoring Sumerian ziggurats on the plains of Mesopotamia, or digging hundreds of feet below the earth to find the lost cities of Jericho. The spider that spun a protective web across the cave in which David hid from the soldiers of the angry King Saul has not been trampled by the march of history. The sheep and the goats that were herded by the nomad, Jacob, continue in the flocks of wandering Bedouins today. The falcon, the eagle, the night hawk, and the lapwing have proved more enduring than the mighty palace of Darius or the tombs of the Pharaohs.

This book presents the integrated evaluations of the latest findings of the archaeologist, the philologist, and the zoologist with respect to the animal world of the Bible. It is at once a literary appreciation of Biblical history and an authentic photographic concordance to the Bible.

ROY PINNEY

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The Animals in the Bible

Names and Order of All the Books of the Bible, with the Number of Their Chapters

BOOKS OF THE OLD TESTAMENT

Genesis	50	Ecclesiastes	12
Exodus	40	Song of Solomon	8
Leviticus	27	Isaiah	66
Numbers	36	Jeremiah	52
Deuteronomy	34	Lamentations	5
Joshua	24	Ezekiel	48
Judges	21	Daniel	12
Ruth	4	Hosea	14
I Samuel	31	Joel	3
II Samuel	24	Amos	9
I Kings	22	Obadiah	1
II Kings	25	Jonah	4
I Chronicles	29	Micah	7
II Chronicles	36	Nahum	3
Ezra	10	Habakkuk	3
Nehemiah	13	Zephaniah	3
Esther	10	Haggai	2
Job	42	Zechariah	14
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Matthew	28	I Timothy	6
Mark	16	II Timothy	4
Luke	24	Titus	3
John	21	Philemon	1
The Acts	28	Hebrews	13
Romans	16	James	5
I Corinthians	16	I Peter	5
II Corinthians	13	II Peter	3
Galatians	6	I John	5
Ephesians	6	II John	1
Philippians	4	III John	1
Colossians	4	Jude	1
I Thessalonians	5	Revelation	22
II Thessalonians	3		

Chapter 1

Lands of the Bible

If you were on a tropical isle, in the midst of a steaming jungle surrounded by vines and palm trees, you would be surprised if you came across a polar bear. If you were walking in a desert you would not expect to meet a chimpanzee.

At any particular place you have a fair idea of what kinds of animals you will encounter. That is because almost all species of animals are specially adapted to the many factors that may be lumped together in the word "environment." Each kind of animal can survive in a land only when the right physical conditions *for it* exist: there must be the correct food; the correct weather, neither too hot nor too cold, neither too wet nor too dry; the correct terrain—mountain, forest, or desert—and so on. And if the environment should change for any reason, then the animals living there must either adapt—which means change their own physical natures, thus becoming different animals—or die out, at least locally.

Think, for example, of what happened to the dinosaurs. Once the lords of the earth, these enormous creatures perished when the environment which supported them changed, and new animals, better suited to the new conditions, replaced them. Think of all the elements needed to make life possible for a robin or a sparrow: warm temperatures, nesting materials, trees, a supply of berries, worms, and other foods, which in turn require for their existence fertile soil, water, etc. Such a list of survival factors can be drawn up for any animal—mammal, bird, reptile, fish, or insect.

Only man seems to have conquered his environment by building fires and shelters for warmth, by digging holes for water, by irrigating a desert for food, and so on, and thus can survive in all climates; but, even then, surviving, in some climates, can be accomplished only through the most extreme efforts.

The lands forming the setting for the Bible comprise regions of southwestern Asia and northeastern Africa equaling an area in the United States from Maryland to Florida, and from the Atlantic to the Mississippi. They are peculiarly rich in animal life because within this relatively small region can be found many different environments. These range from arid deserts to dank marshlands, from grassy plains to icy mountain peaks, from moist fertile lands to sand-strewn wastelands, from clear rivers to the Dead Sea. An examination of these lands will provide a background for the discussions of the Bible's animals.

The Bible's lands, where the first stirrings of Western civilization took place, include the Nile River area in Egypt; the valleys of the Tigris and the Euphrates Rivers which are now part of Iraq, but which were known in ancient times as Mesopotamia ("Land Between Two Rivers"); and the territories which make up the modern countries of Syria and Lebanon, the northern part of Saudi Arabia, Jordan, and Israel.

The Middle (or, more correctly, the Near) East, as this area is now known, is of immense importance because it links the continents of Europe, Asia, and Africa. The cultures which were born here spread in all three directions. In particular, the area known until recently as Palestine was the crossroads of the ancient world. People (and animals) traveling between Egypt and Mesopotamia, and later between Europe and Asia, could not cross the vast Arabian desert, and so had to follow a route which led through Syria and along the coast of Palestine, an area of rich soil known as the "Fertile Crescent."

The country of Palestine, and its neighbor, Transjordan, no longer exist. In 1947, the United Nations agreed to split the area into two nations: Israel, a country for the Jews, and Jordan, a country for the Arabs, the latter incorporating all of ancient Transjordan, plus a chunk of territory on the western side of the Jordan bulging toward Beersheba. The coastal lands—excepting the strategic Gaza Strip—and all the fertile regions were given to Israel.

Through the fertile crescent of Palestine there flows twice every year a great tide of birds and animals on the move. To avoid unfavorable environments caused by changing seasons, many animals, birds in particular, migrate, moving to warmer lands in the winter and to cooler ones in the summer. The migrations of most of the area's creatures take them through Palestine, some remaining for an entire season there, others only passing through. Almost every species of bird to be found in northern Africa, southern Europe including the Mediterranean regions, and western Asia can be found at one time or another in Palestine. Thus, the geographically central Bible lands have their animal life periodically enriched.

The climate of Palestine, which determines the flora and fauna of the area, is produced by the interplay of geographical factors. Located in the warm temperate belt (29° to 33° north latitude), its proximity to the Mediterranean spares it the aridness of the interior areas of Arabia and Syria. With the exception of the Jordan River valley, the temperatures of the region rarely exceed 90° Fahrenheit, and in February, in the middle of the Palestinian winter, the mean temperature ranges in the vicinity of 45°.

There is no true winter as we know it; rather, there is a rainy season and a dry one. The rainy season, equivalent to winter, begins in November

when the warm winds from the sea are cooled as they meet the mountain air. The winds deposit their moisture in the strip of Israel and then continue on to the Jordan River where, warmed once again, they take up new moisture to soak the tablelands beyond, making the land fertile, and swelling the many small streams which flow into the Jordan River. In March the torrents subside, and by May the mountain air no longer is cold enough to produce rain. This season is a time of harvest; the farmer's ripened crops must be gathered quickly before the hot, dry summer begins. During the summer months, June to September, the heat during the day, especially in the interior regions, occasionally becomes intolerable for man and beast alike, but because of the dryness the evenings are pleasantly cool.

The greatly varying temperatures and humidities of Palestine, of course, have their effect on the animal life. At times, when conditions reach their extremes, the mortality rate of some species increases greatly. In the rainy season, for example, small rodents and their predators—jackals, foxes, birds of prey, and snakes—are forced to migrate from the low-lying lands to the drier mountain regions; in the dry season a reverse migration takes place. Similar phenomena can be observed in other species.

Bird migrations of various species take place almost throughout the year, but the bulk occur in March and April. In the spring and autumn months fierce, hot winds called "sirocco," or "hamsins," blow across the land from the deserts. The wind wilts flowers, shrivels leaves, blackens plants, and sweeps flocks of insects and birds from the sky. Animals who cannot find shelter from the heat and sun die. These extremes do not affect the entire land, for climatic conditions vary from region to region, depending upon other factors.



The accompanying diagram presents a typical cross section of Israel and Western Jordan. It shows the mountainous region of Judea (formerly an elevated tableland pressed together, so to speak, by rainfall and erosion), the deep depression of the Jordan River valley, and a second tableland, or plateau, to the east which is somewhat flatter than the mountainous region. As the diagram shows, the central and dominating factor of the land is the Jordan River and its valley which, lying well below sea level, is the deepest depression scooped out anywhere on land by nature. The river is the most important influence upon the

climate and plant growth of the area, and thus the most important factor in the land's animal distribution. An imaginary journey down the river would therefore be in order.

At the northern end of the Jordan Valley, where the borders of Syria and Lebanon meet, stands Mt. Hermon. On the eastern side the mountain slope is steep and almost barren of plant life, while, on the western slope, grow some evergreens and wild fruit trees. Hermon is covered with snow from 2800 feet up to its peak at 9000 feet during the winter but by September very little remains. The mountain's bare white stones can be seen as far away as Bethlehem's hills; because it dominates the landscape for many miles the Arabs call Hermon *Jebel esh Sheikh*, Sheikh Mountain, "chief of mountains." It is from the vicinity of Mt. Hermon that the Jordan River begins its descent.

Four tributaries and a number of small streams from the grotto of Paneas join to form the Jordan River and the neighboring River of Paneas (named after the Greek nature-god Pan). As these streams swell the river, the waters plunge southward with great force, eventually reaching a swampy area. This area in ancient times was the source of papyrus, a reed-like plant used to make mats and rolls of writing material. (The word "paper" stems from papyrus.) The waters flow through this land and into a shallow lake known in Biblical times as Semechonitis, today called Lake Huleh. Emerging from Lake Huleh as rapids, the water rushes 10 miles into the Sea of Galilee (also known as the Lake of Tiberias), a descent of 689 feet to a depth of 682 feet below sea level. Galilee remains, as it was thousands of years ago, a rich source of fish for the inhabitants of the land.

Leaving Galilee the Jordan twists like a snake through the deepest valley in the world, some 65 miles (200 miles if we follow the tortuous river route) to the Dead Sea, 1286 feet below sea level. Along this route the river valley widens from 4 to 14 miles, and slopes up to heights of 3000 feet in the surrounding country. The western side of the valley is rather dry, with little rainfall and few tributaries; few areas are fit settlements for men or animals. A notable exception is the city of Jericho in Jordan.

To the east, on the other hand, the Yarmouk River and many smaller streams provide large areas of fertile land. Within the valley itself there is a strip of still further depressed land which once was heavily forested. In these forests, parts of which still remain, many wild animals once roamed. The Bible refers to this area in Jer. 49:19: "Behold, he shall come up like a lion from the swelling of Jordan . . ."

The Jordan River ends in the Dead Sea, one of the most remarkable natural formations in the world. Each of the ancient peoples had a different name for this body of water, each name expressive of one of the

sea's unique qualities. To the Greeks, for example, it was known as "Asphalt Lake" because of the asphalt which now and then floats to its surface and washes up on its shores. The Hebrews call it the "Sea of Salt." Its extreme saltiness results from the great amount of evaporation from the lake itself and from the rivers which feed it—evaporation caused by the torrid sun and dry air. Modern man calls it the Dead Sea because almost nothing can live in its saline waters. South of the Dead Sea there is a marshy area called *es Sebkha* ("land on which a salt crust has formed"), which, like the sea itself, is barren. From *es Sebkha*, stretching a hundred miles south to the Gulf of Aqaba in the Red Sea, lie nothing but arid desert wastelands.

Between the valley and the Mediterranean which licks the western shores of Israel lies the coastal plain, an area in contrast to the Jordan Valley in that it is consistently fertile. The plain stretches from Egypt to Lebanon, and varies in width from 12 miles near the city of Gaza (not to be confused with the Gaza Strip) to 200 yards at the promontory of Mt. Carmel, near Haifa. Around Gaza the land is rich, a "garden spot" containing springs, regal sycamore trees, flourishing olive groves, and, consequently, a nice assortment of animals.

Although the lands of the Bible contain many different types of terrain, generally speaking the area can be divided into three broad zones: forest, steppe, and desert, each zone having its own climate, its own forms of vegetation (or lack of vegetation), and, therefore, its own species of animal life.

Running along Israel's coastline, along the border with Egypt down to the Gulf of Aqaba and then up again toward the Dead Sea, there is a uniform strip of desert. Reaching up into the Jordan Valley, the sand dunes also cover most of the eastern part of Jordan. Dry as these deserts are, except for the salted regions near the Dead Sea, they are not at all lifeless. As well as being dotted with oases, the desert contains its own forms of animal and vegetable life which have adjusted to the scarcity of water. Over the centuries, much of the desert's vegetation has provided fodder for man's camels and fuel for his fires.

Within the desert strip lie the forest lands and steppes which cover most of Palestine. Long ago, at the beginning of the Neolithic age, vast forests covered much of the land. The Plain of Sharon which extends northward from the city of Jaffa was such an area, and because the dunes near the sea held back the water from the hills to the east, it was dotted with swamps as well. Another forest zone was the area called Gilead in the Old Testament; once a rich mass of oaks, Gilead has been cut through with valleys formed by the large amount of rainfall. Today, in the area of the Neolithic forest zones, the land has few trees and is covered mostly by bare rocks and hills.

The fact that a geographical area is a forest zone can be determined by measuring the amount of rainfall. A forest zone, for example, in the latitude of Palestine receives 12 to 14 or more inches of rain annually, while a desert gets less than eight. The annual amount of rainfall on the steppe regions falls between these two values. The existence of a forest zone can also be determined by the flowers that blossom forth from crevices, in the spring. The forest climate with its substantial rainfall produces anemones, ranunculi, alpine violets, iris, orchids, and asphodel.

The forests of the Biblical regions gave way before the encroachments of men, just as the vast forests of the American continent did later. Biblical life centered about the raising of goats and sheep. To provide their flocks with grazing land the shepherds and goatherds cut down the forests. As late as 1900, some forest still remained in east Jordan, but even that has since disappeared. Once the forests were gone soil erosion set in, and today most of the soil in these regions has been washed away, leaving the hillsides covered with bare white rock. Where once the land flourished with evergreen oak, deciduous oak, and Neppopines, today only small Macchi-bushes struggle to survive. (Happily, under the careful irrigation of the Hebrews who have returned to their homeland, some forest regions are now beginning to bloom with wheat fields and olive orchards.)

Between the desert and the forests, roughly enclosing all of Israel and western Jordan except for the northern region, there are the steppes, those mountainous regions which cover much of Palestine. A steppe is considered a region which cannot support a forest. Grasses, bushes, and occasionally trees do grow, however. The steppes were used for grazing in Biblical times. Extending southward from the valley of the Leontes, the steppes slope downward sharply into the Jordan Valley. In the west their central area is called Samaria, a region less rugged than the Galilee country, with gentle hills and valleys. Moving southward the steppes stretch over the area of Judea as a high, mountainous plateau. The city of Jerusalem lies in a depression within Judea. South of Jerusalem the plateau rises again to the high areas north of Hebron (3370 feet above sea level).

East of Judea there is a sudden drop in three terraces into the Dead Sea. As the steppe descends it reaches a desolate area of gorges, canyons and bare rock called in the Old Testament "the wilderness of Judea." East of the Jordan the land rises again to the high tableland mentioned earlier. In the north there is a land called Hagolan containing volcanic hills and craters. To the south the disintegration of lava deposits has left a more fertile region, called Bashan in Biblical days. Bashan was once a forest land of oak trees well suited to cattle breeding. South of Bashan is the forest land of Gilead, and still farther south is a ridge

running from the Jabbok. The land of the Ammonites lies east of this ridge, while to the south, below the River Arnon, lies the land on which the kingdom of Moab once stood.

This, then, is the land of the Bible, a land where camels find their proper environment along with fish, birds, and oxen. Here dwell hares and swine, wild goats and cats, gazelles and dogs, snakes and antelope, each finding in some region, be it desert, steppe, or forest, its proper *environment*—the proper set of conditions in which each can survive and thrive.

Each left its mark, for good or bad, on the men who dwelled in Palestine thousands of years ago; each found its little niche in the record of those men—the record we call the Bible.

Chapter 2

Origin of the Bible

For almost 3000 years, men have been fascinated by the Bible. The famous stories of the creation of the world and the creation of man, of the great Israelite patriarchs, of Moses and the flight from Egypt, of David and Solomon and Daniel, were first sung, then told by fathers to their children. They were told and retold until they were finally written down on dried animal hides, or papyrus, or parchment, or clay tablets, or paper, to be read, studied, memorized.

The Bible has been discussed, interpreted, translated, commented upon, written about, counted, reprinted, and then read some more. Originally the document of religion for the small nomadic tribe of the Israelites, it has become Holy Writ for four major religions—Jewish, Catholic, Protestant, and Islamic—embracing hundreds of different beliefs among half the world's people.

Nations have fought bloody wars over their interpretations of the Bible. Even men of the same belief will spend weeks, even years, debating the meaning of a single passage. Some people have accepted every word in the Bible as literal truth, believing that the earth was, indeed, created in seven days, and that Adam was the first man, and that the serpent tempted Eve, and that Noah alone was saved from a great flood, and that the Red Sea split in two to allow the Children of Israel to pass through. Others have tried to interpret the Bible in the light of science, saying that the Biblical stories are allegories, that their meaning is not to be taken literally but symbolically. Still others have denied the Bible, calling it mere literature—the myth and superstition of a primitive people. No matter what men have felt about the Bible, they have never ignored it. It stands unchallenged as a writing of immense literary worth as well as a central document of civilization as we know it.

To understand how the Bible came to such prominence, we must go back to the beginning. You may be familiar with the story of the blind poet Homer—how, as minstrel to the great Greek kings, he sang the stories of Achilles and Odysseus, of the 10-year war at Troy, and of the Olympian gods, stories which he or someone later wrote down in *The Iliad* and *The Odyssey*, works which later became the “bible” of ancient Greek civilization.

The Old Testament was born in much the same way. A man, whom scholars call “J” because his name has been lost over the years (he is called “J” because he uses the name “Yahweh” or “Jehovah” in referring to God), apparently sang the traditional stories of Israelite

history in about 850 B.C. To a gathering of his people, perhaps in an oasis or around a well, "J" sang the familiar tales of the Israelite heroes, Abraham, Joseph, and Moses, of their wars and hardships, of their God and their glory in being the "Chosen People." "J" was a poet who put into verse the well-known heritage of his people, and eventually the verses were copied down. About a century later, a man known as "E" (because he used the title "Elohim" for God) retold "J" 's stories, adding to them, enriching and enlarging them, and pointing morals. From these stories there began to emerge a form, a theme. The talented men who reworked the stories were forming a work of art, a book, something that would endure. In later times a group of priests, called "P" by the scholars, used the framework of legend and history collected by "J" and "E" as the basis for a system of law.

At last the Bible as we know it was emerging. Like the recognizable form that is developed from a lump of clay by the sculptor's skillful fingers, the priests brought from their mass of writings a theme—the Covenant. The Covenant, the basis of the Jewish religion, is an agreement between God and his people, the Children of Israel, promising eternal blessedness in return for obedience. It is what binds the Israelites to God.

The Bible, as it finally emerged, tells us what led up to the Covenant (Genesis), how the Covenant was established through Moses (Exodus), what the Covenant contained (Leviticus and Deuteronomy), what happened to the Covenant (the books of history such as Joshua), how the Covenant was celebrated (Psalms), and how it fell into neglect and was later revived (the books of the prophets, such as Isaiah and Ezekiel). In the years which followed, other writers added to the Bible. We know, for example, that in the court of David a man known to us as Abiathar, who was an historian, added the chronicles of the Judaic kings to the history of the Children of Israel. The New Testament, which is accepted as part of the Bible by Catholics and Protestants but not by Jews, begins at a time a little after the end of the Old Testament and tells the story of Jesus Christ, who Christians believe was born to establish a new Covenant.

The Old Testament was written mostly in Hebrew, the ancient language of the Israelites, on dried animal skins or parchments which were sewn together and rolled up on rods to form scrolls. The tradition has been kept to this day, and in synagogues you will find Torahs—scrolls of law written in Hebrew on parchment scrolls. The Torah contains the Pentateuch, the first five books of the Bible. A few parts were written in Aramaic, a Semitic language which came into use among the Israelites during their exile in Babylon. The writers of the New Testament, on the other hand, wrote in Greek (with the single exception of Matthew, who wrote in Aramaic), the language widely used by

the civilized world following the conquests of Alexander the Great. Thus we can see how the Bible came to be so significant: first, as the history of a nation and the statement of the beliefs of that nation; and, more importantly, as a book of faith and moral law for millions of people of all races, nationalities, and creeds.

The books of the Bible fall naturally into three categories: those dealing primarily with history, those dealing with law, and those dealing with prophecy. Taken together, they form a source of religious inspiration and belief as well as one of the truly remarkable literary achievements of all time.

Men have approached the Bible in many different ways, some of which may surprise you. A short time ago, for example, an oil company used certain passages from the Bible to locate an oil well in the Middle East, thus demonstrating the great accuracy of the Scriptures both historically and geographically.

Despite the comparatively primitive means of transmission used to pass the Bible down through the generations, the text we have today seems to be remarkably close to the original. This fact was pointed up by the discovery recently of a group of writings, called the Dead Sea Scrolls, which somehow escaped the traditional destruction of temple manuscripts, because of age. The Dead Sea Scrolls, which were inscribed on thin sheets of copper, were found in large earthen pots, and buried in caves in the desert, where the dryness prevented them from disintegrating, thus remaining the oldest surviving Biblical manuscripts. They have as yet been only partially examined by Bible experts and scholars, but the comparisons with modern versions which have been completed show remarkably little difference. The Bible we read today, therefore, is substantially the same as that read two thousand years ago.

Another way men have approached the Bible is to look for more than is already there, seeking anagrams and riddles and secret messages through bizarre codes. From the "secrets" they find in the Bible by, for example, taking the first letters of each chapter and rearranging them to form words, they develop mystical religions and cults.

Perhaps no book has ever been examined as closely as the Bible. Men have even taken the time and effort to count all the various things it contains. Their mathematical endeavors have revealed such sidelights as: there are 1189 chapters in the Bible, of which 979 are in the Old Testament. The middle chapter of the Bible is Psalm 117 (being both preceded and followed by 594 chapters), which happens also to be the shortest chapter of the Bible, 28 words in all. Going farther, the counters have added up 31,173 verses in the Bible, of which 23,214 are in the Old Testament, and 773,692 words, of which 559,439 are in the Old Testament.

Although there are over three-quarters of a million words in the

Bible, there are only about 7000 *different* words, the most common being the word "and," which appears 46,227 times in the Scriptures. There are 3,566,480 single letters in the Bible, give or take a few, and the longest word is "Mahershalhashbaz," which has 18 letters. (Mahershalhashbaz is the transliteration of a Hebrew sentence which means literally, "The booty hastens; the spoil speeds." It refers to a prophecy of doom for Syria.)

The first Bible was printed by Johannes Gutenberg, the German who built the first printing press in 1456. In fact, the Bible was the first book ever run off on this epochal invention. Since then more than a *billion* copies of the Scriptures have been printed. The Bible has been translated into 180 languages and dialects, with substantial portions of it being translated into an additional 1100. Each year 8 or 10 languages are added to the list. The first Bible translated and printed in North America was in the language of the Algonquin Indians. The Puritans who settled in America brought their English editions with them from England, of course, but in 1661 they decided that their Indian neighbors should be able to share in the general enlightenment.

There have been literally hundreds of English versions of the Bible. The most widespread is the King James version, which is used by most Protestants. In 1919, the Jewish version, the standard text for English-speaking Jews, was put together. Catholics use the Confraternity version, the Douay-Rheims, or the Westminster edition. While basically the same, the various differences in translation of these Bibles reflect the dissimilar interpretations of faith of these religions.

Besides the standard editions, many unusual versions of the Bible have been printed over the years. There is, for example, a translation known as the Breeches Bible. Printed in England some time ago, this version tells how, after Adam and Eve ate the forbidden fruit, they gathered fig leaves and fashioned "breeches" to cover themselves. Thomas Jefferson, third President of the United States and author of the Declaration of Independence, attempted to improve the Scriptures by rearranging many passages. His work on what is called the Jefferson Bible was never finished. In addition, idiosyncrasies of translation have given us a Bug Bible, an Idle Bible, a Printer's Bible, and so on.

Several centuries ago, a new copy of a Bible was brought to the king of England for inspection. He promptly called it the Wicked Bible and ordered the entire printing destroyed. Some copies of the Wicked Bible, however, still exist, and if you read one you would be as shocked as the king when you came to the Seventh Commandment. Because of a typographical error it reads: "Thou shalt commit adultery."

The Bible is the most fascinating book ever written. No matter how we accept it, it is a work of consummate art and genius, always fresh, and always full of surprises for those who know it well.

Chapter 3

Animal Worship

Most ancient societies worshiped animals, animal images, or gods who assumed the form of animals. The Hindus, for example, believing that the soul of the dead transmigrated—i.e., entered the body of a living animal—revered most animals, especially the cow which was believed to contain the soul of the most noble of the departed. The Egyptians considered many of the most common animals sacred, and it is reported that in the time of the Roman occupation of Egypt, the Pharaoh—despite his desire to please the new rulers of his land—could not save a Roman soldier from being stoned to death by an irate mob after the soldier inadvertently killed a cat. The Canaanites, for many years the closest neighbors of the Children of Israel, worshiped gods named the Baalim, which appeared as gigantic bulls or other grotesque forms.

Despite the strict monotheism of the Old Testament, the worship of animals by primitive societies was so widespread a phenomenon that it is not surprising to find traces of it cropping up among the Hebrews in early times. The most famous example of animal worship recorded in the Bible is the story of the Golden Calf. Moses had gone up to the peak of Mount Sinai to receive the Ten Commandments. After many days passed the Israelites began to fear their leader had perished, and their fear led to sacrilege. They persuaded the high priest Aaron to cast their jewelry into a large idol, a calf made of gold. Moses returned to find the “Chosen People” in the midst of pagan ritual, and in anger cast down the two tablets of law he was carrying, shattering them to dust with a loud crash. Destroying the idol, Moses ordered the children of Levi to put to the sword the leaders of the idolatry: “And the children of Levi did according to the word of Moses: and there fell of the people that day about three thousand men” (Exod. 32:28).

The choice of a calf (or bull, as some later translators and commentators maintain) is not unusual. Many ancients revered the bull as a symbol of agricultural productivity. The Egyptian god Apis, with whom the Hebrews were undoubtedly familiar having just been released from their long years of slavery, had the shape of a bull. A major god of Babylonia was a winged bull, and the image of the bull was a central one in Canaanite devotion. Furthermore, in the Bible, God is sometimes addressed as *'abbir Ya'akov*, which means literally “Bull of Jacob.” (Many translators, however, use the less discriminatory “Mighty One of Jacob,” not wanting to overemphasize the slight taint of paganism in early Judaic theology.) (Gen. 49:24, Isa. 1:24, *et al.*) Bulls and oxen also played a

symbolic role in the Temple of Solomon, where horns were placed on top of the altar (I Kings 7:44). The later prophets, Amos, Hosea, and Josiah, all attack the practice: a good sign that it represented a deviation from orthodox monotheism.

One of the most frequently mentioned creatures in the Old Testament is the serpent, which is used alternately as a symbol of evil, as in the story of the temptation of Eve to eat the fatal fruit, and as an object of some reverence. Many early societies, probably the Israelites among them, believed the serpent was immortal, that it renewed its life each time it shed its skin. The Greek god of healing was attended by serpents, and even today the symbol of medicine is a staff intertwined by two snakes. An image very similar to this is the brazen serpent, cast by Moses in the desert of Sinai. The Bible tells how God saw the Israelites losing faith and to punish them sent down "fiery serpents among the people, and they bit the people; and much people of Israel died" (Num. 21:6). Later, seeing the Hebrews had repented, God told Moses to cast a snake of brass and set it upon a pole: ". . . and it shall come to pass, that every one that is bitten, when he looketh upon it, shall live" (Num. 21:8). The Bible later tells how the righteous Hezekiah, when he became king of Judea, ". . . brake in pieces the brazen serpent that Moses had made . . ." (II Kings 18:4), strongly implying that at least some of the Hebrews had begun to worship the statue itself. Some commentators even say that the brass serpent had been worshiped in the early religion of Israel, and only later, when Hebraic monotheism had reached an advanced stage, was the story of the image's miraculous curing powers invented.

There are other indications in the Old Testament that the early Hebrews let some aspects of animal worship enter their religion. The Temple, center of Hebrew spiritual life in the age of the great Judaic kings, is described in the Bible as containing on its inner walls carvings and pictures of ". . . every form of creeping things, and abominable beasts . . ." (Ezek. 8:10). Some commentators believe that the ban on eating the flesh of many animals (see Chapter 4, "Animals—Clean and Unclean," page 20) has its roots in the sacredness of the "unclean" animals. (Swine, for example, were considered holy in ancient Egypt.) However, despite these evidences, it should not be assumed that the Israelites were outright animal worshipers. Animals can be regarded as sacred for many reasons without actually being deified. Images of animals can be used emblematically or symbolically (as indeed they are in Christianity) without being considered literally supernatural. Moreover, the references in the Bible may be isolated and temporary aberrations in the Judaic religious practice may be ignored for they are aberrations that all in time disappeared, leaving no trace. Most, in fact, appear to have been of an origin foreign to the Hebrew nation.

The use of animals in religious ceremonies (as opposed to the actual worship of animals) is referred to quite frequently in the Old Testament, usually taking the form of sacrifices. The first animal sacrifice recorded is the offering made by Abel of the first-born of his flock (Gen. 4:3-5). Ritual sacrifice of an unblemished male goat to atone for a sin is also mentioned in the Bible. Significantly, the laws concerning the purity of animals for sacrifice suggest that the unclean beast was indeed considered unclean, rather than sacred as has been suggested (see above). The Bible describes a later Hebraic ritual in conjunction with the Day of Atonement: a scapegoat is led into the wilderness carrying away with it the sins of the people, and propitiating an evil spirit called Azazel who was believed to dwell in the wilderness (Lev. 16:8, 10, 26).

The New Testament contains no references at all to the worship of animals. However, specific animals, because of their well-known and individualized characteristics, are used emblematically and symbolically. The contrast shown here indicates the origins of animal worship. Originally, an animal and a trait were associated in the minds of the ancients, just as today we apply human characteristics to many animals: the sly fox, the busy bee, the brave lion, the meek lamb. The trait was then probably applied to a person in much the same way that we say someone is "as brave as a lion." The image of Baal as a bull may stem in this way from someone saying of an early Canaanite chieftain, "He's as strong as a bull."

In a monotheistic religion, the process is halted in the early stages, and the animal remains merely a symbol for the deity. In this way, Jesus is often referred to as the Lamb of God, but no special divine significance is attached to every lamb by Christians. The position reached by the Israelites in the system remains unclear. Whether, for example, the brazen serpent remained merely symbolic of God's power or itself became an object of devotion is a subject for scholarly debate. In the New Testament there is no such confusion. The animals mentioned have only limited symbolic significance. The ass stands for peace (thus Jesus rides an ass when he enters his ministry); the dove for innocence; the dog and swine for uncleanliness and vulgarity (yet Christians may eat pork!). Jesus also often used animals in his parables, saying, for example, that you cannot put a camel through a needle's eye.

Animal figures were later used in and about the great medieval cathedrals. Stone gargoyles, representing lambs, dolphins, hens, pelicans, apes, and centaurs adorned the roofs and buttresses of the massive Gothic churches, and while they may have been merely ornamental, a greater significance is indicated by the fact that reformers such as Bernard of Clairvaux felt the need to demand their removal. Drawings of fish, used to symbolize Christ, can be found upon the walls of medieval catacombs.

The image, however, apparently derives wholly from an anagram spelling ICHTHYS (ancient Greek for "fish"), composed of the initial letters of a title in Latinized Greek, which read: "Jesus Christ, God, the Only One, Deliverer."

The Biblical attitude toward the "miracle" is not quite the same as our conception of it—namely, as a suspension or disruption of the laws of Nature. The Biblical writers, as a matter of fact, had no conception of Nature as a realm for which God had instituted laws. Instead, God Himself was thought to preserve His creation, revealing His will in natural events. In this light, the fact of an inexplicable suspension of natural processes becomes more credible.

This interpretation of Nature, on the other hand, does not mean that the Hebrews credited Nature with no regularity. The harmonies they perceived in Nature were understood as revelations of God's fidelity to His covenant. It stands to reason, therefore, that any "miracle" would have to possess some relationship to the sacred bond existing between God and His "Chosen People."

The plagues of Exodus are referred to as "signs and wonders." A sign is understood as the manifest evidence of the presence and activity of God. This notion of signs is applied indiscriminately by the Hebrews to ordinary events such as visits by swarms of locusts, or extraordinary ones such as the death of the first-born in Egypt. To the Hebrew, the miracles were not irrefutable demonstrations of God's existence, but only strong indications. The presence of miracles in the Bible therefore not only did not rule out the necessity of faith and trust in God but, rather, enhanced it.

The reason why there are so many conflicts between science and religion over the question of miracles is that throughout the centuries we have been led to conceive of God as more and more detached from the universe. The Hebrews stressed the immanence of their God, and so the concept of natural law was meaningless to them. Science, in its method, is bound to conceive of the universe as orderly and rational, every event possessing a discernible and understandable cause. The seventeenth-century conception of the universe, thanks to the influence of the fantastic growth of scientific knowledge, was one that embodies a "watchmaker God" who had created a world which would operate once and for all in accord with perfectly comprehensible laws. In unmistakable opposition to the Hebrew notion, the Creator was completely detached from His creation.

Thus, it is easy to see why miracles were so vigorously opposed by scientists in those days. Though there still are remnants of that conflict in existence today, science has since made a more realistic appraisal of its abilities to explain even material phenomena. Its attitude has become

less ironclad and more flexible. With the increasing realization by science that problems directly involving nonmaterial factors are outside its scope, the friction between science and religion has been diminishing. Even more important is the realization that it may not necessarily be up to the scientists to decide whether or not an event possesses causes that are other than material.

Fish are focal in two of the miracles of the Bible, both of which are found in the New Testament: "And it came to pass, that, as the people pressed upon him to hear the word of God, he stood by the lake of Gennesaret, And saw two ships standing by the lake: but the fishermen were gone out of them, and were washing *their* nets. And he entered into one of the ships, which was Simon's, and prayed him that he would thrust out a little from the land. And he sat down, and taught the people out of the ship. Now when he had left speaking, he said unto Simon, Launch out into the deep, and let down your nets for a draught. And Simon, answering, said unto him, Master, we have toiled all the night, and have taken nothing: nevertheless at thy word I will let down the net. And when they had this done, they inclosed a great multitude of fishes: and their net brake. And they beckoned unto *their* partners, which were in the other ship, that they should come and help them. And they came, and filled both the ships, so that they began to sink. When Simon Peter saw *it*, he fell down at Jesus' knees, saying, Depart from me; for I am a sinful man, O Lord. For he was astonished, and all that were with him, at the draught of the fishes which they had taken: And so *was* also James and John, the sons of Zebedee, which were partners with Simon. And Jesus said unto Simon, Fear not; from henceforth thou shalt catch men. And when they had brought their ships to land, they forsook all, and followed him" (Luke 5:1-11).

"After these things Jesus shewed himself again to the disciples at the sea of Tiberias; and on this wise shewed he *himself*. There were together Simon Peter, and Thomas called Didymus, and Nathanael of Cana in Galilee, and the *sons* of Zebedee, and two other of his disciples. Simon Peter saith unto them, I go a fishing. They say unto him, We also go with thee. They went forth, and entered into a ship immediately; and that night they caught nothing. But when the morning was now come, Jesus stood on the shore: but the disciples knew not that it was Jesus. Then Jesus saith unto them, Children, have ye any meat? They answered him, No. And he said unto them, Cast the net on the right side of the ship, and ye shall find. They cast therefore, and now they were not able to draw it for the multitude of fishes. Therefore that disciple whom Jesus loved saith unto Peter, It is the Lord. Now when Simon Peter heard that it was the Lord, he girt *his* fisher's coat *unto him*, (for he was naked,) and did cast himself into the sea. And the other disciples

came in a little ship; (for they were not far from land, but as it were two hundred cubits,) dragging the net with fishes. As soon then as they were come to land, they saw a fire of coals there, and fish laid thereon, and bread. Jesus saith unto them, Bring of the fish which ye have now caught. Simon Peter went up, and drew the net to land full of great fishes, an hundred and fifty and three: and for all there were so many, yet was not the net broken" (John 21:1-11).

In evaluating these passages we must bear in mind the fact that before the New Testament times the Hebrews knew very little about fishing. This situation is understandable from the geographical situation of the Israelites. Being essentially landlocked, they were not acquainted with the fish of the Mediterranean. The Sea of Galilee, which is the site of most of the fishing referred to in the Gospels, did not become important until New Testament times. The only other important source of fish was the river Jordan.

Fishing was not a sport among the Hebrews, although it was a modest source of food for them in Old Testament times. Three methods of fishing are alluded to in Habakkuk: (1) angling with hook and line (without a rod); (2) use of a small weighted net which was whirled around so that it entered the water in a state of expansion and caught the fish by surprise; (3) use of a dragnet, equipped with floats and weights, so as to permit it to move through the water in a vertical position, bringing the fish either to a boat or to the edge of the water, in a diminishing circle. It is this third method which was most likely used by the Apostles in the miracle of the multitude of fishes.

The passages in Luke and John are sublime illustrations of Christ's singular ability to discover and elicit the profound from the simple. Here, a group of ordinary fishermen (ordinarily sinful, as Peter admits) become transformed by the mysterious selective love of God into immortal crusaders. Since then, the fish has become a profound symbol for the Christians of God's universal love. There is some disagreement as to what exactly was the miracle. It could be that Christ created the multitude of fishes. It could be that the fishes were already present but it took a miraculous knowledge on the part of Christ to reveal it to the fishermen. Be that as it may, it is undeniable that the miracle of fishes was a symbol of a much deeper miracle—the inner transformation which turned a group of fishermen into the future heroes of Christianity, indicated by the significant phrase, "Launch out into the deep." Verse 13 (John 21) is an obvious allusion to the Eucharistic feast. Whether there is any symbolic meaning to the number 153 is difficult to tell. The numbers 1, 5, and 3 were mystical numbers for the Christians.

We find the famous account of the brazen serpent, mentioned above, in Numbers. It goes as follows: "And the people spake against God, and

against Moses, Wherefore have ye brought us up out of Egypt to die in the wilderness? for *there is* no bread, neither *is there any* water; and our soul loatheth this light bread. And the Lord sent fiery serpents among the people, and they bit the people; and much people of Israel died. Therefore the people came to Moses, and said, We have sinned, for we have spoken against the Lord, and against thee; pray unto the Lord, that he take away the serpents from us. And Moses prayed for the people. And the Lord said unto Moses, Make thee a fiery serpent, and set it upon a pole: and it shall come to pass, that every one that is bitten, when he looketh upon it, shall live. And Moses made a serpent of brass, and put it upon a pole, and it came to pass, that if a serpent had bitten any man, when he beheld the serpent of brass, he lived" (Num. 21:5-9).

The concern of the Hebrew God over His people was so intense that He proceeded to discipline them by these rigorous means. The devotion to the brazen serpent was not merely confined to the Hebrews. The practice of making an image of an affliction or pest and presenting the image to the deity to have it banished was widespread among the contemporary peoples of the Near East.

There are many who interpret the brazen serpent as a type of prefiguration of Christ's death on the cross. In this case, the affliction is man's sin. Christ identifies himself with sin in the sense that he willingly bears the load of all the sins of humanity, and offers himself up to God. Anyone, therefore, who wants to rid himself of sin would have to meditate upon the Redemption with faith, and he would be cured.

From the time of Moses on, the Hebrews regarded the brazen serpent as the symbol of the healing power of God. When afflicted with disease, they would burn incense before it in the hope of being relieved. Serpent worship was not unknown to peoples of antiquity, especially in the Near East. This practice dates back to the ancient Egyptians, who paid reverence to serpents as being sacred to their god Ammon. Greeks and Romans were known to worship the healing power of Aesculapius under the figure of a serpent. The expression "fiery serpents" (Hebrew = *seraphim*) in verse 6 (Num. 21) can connote either the brilliant appearance of the animals or the intense pain caused by their bites. It is a fact of herpetology that a great number of poisonous snakes possess brilliant colors, which usually serve as a means of warning to other animals. The "fiery serpents" are found abundantly in arid places, particularly near gulf shores.

In the seventh chapter of Exodus we find another appearance of a snake: "And the Lord spake unto Moses and unto Aaron, saying, When Pharaoh shall speak unto you, saying, Shew a miracle for you: then thou shalt say unto Aaron, Take thy rod, and cast *it* before Pharaoh, *and it*

shall become a serpent. And Moses and Aaron went in unto Pharaoh, and they did so as the Lord had commanded: and Aaron cast down his rod before Pharaoh, and before his servants, and it became a serpent. Then Pharaoh also called the wise men and the sorcerers: now the magicians of Egypt, they also did in like manner with their enchantments. For they cast down every man his rod, and they became serpents: but Aaron's rod swallowed up their rods. And he hardened Pharaoh's heart, that he hearkened not unto them; as the Lord had said" (Exod. 7:8-13).

Among the nations of the Near East the rod was a symbol of power and intimacy with God. Thus, Aaron and Moses used it to convince the Egyptians of their mission from on high. As the Scripture reveals, nothing in magical arts was comparable to this phenomenon. It is noteworthy how, in Exodus, the continual contrast is made between the dynamism and vitality of the Hebrew religion and the inefficacy and sterility of the Egyptian religion. The miracle of Aaron's rod is merely one of a number of such illustrations. The serpent held a certain significance for the Egyptians. In art it was sometimes used to symbolize the power and craftiness of the Pharaoh. It is not clear what particular snake is being referred to in this miracle.

Another famous miracle involving a serpent is found in the Acts of the Apostles. St. Paul was performing missionary work on Melita (Malta), an island in the Mediterranean about 80 miles south of Sicily: "And when Paul had gathered a bundle of sticks, and laid *them* on the fire, there came a viper out of the heat, and fastened on his hand. And when the barbarians saw the *venomous* beast hang on his hand, they said among themselves, No doubt this man is a murderer, whom though he hath escaped the sea, yet vengeance suffereth not to live. And he shook off the beast into the fire, and felt no harm. Howbeit, they looked when he should have swollen, or fallen down dead suddenly: but after they had looked a great while, and saw no harm come to him, they changed their minds, and said that he was a god" (Acts 28:3-6).

The natives were not far from right because Paul was to heal a dying man a few days later. (They are referred to as barbarians because they spoke no Greek.) The people of Melita, like the Hebrews, believed serpents to be the agents of God's vengeance. The event emphasizes Paul's implicit trust in God. This miracle was one among scores of miracles and exorcisms which helped to foster the spread of the early Christian Church.

Chapter 4

Animals—Clean and Unclean

No distinction is made, in the Biblical story of Creation, between “clean” animals and “unclean” animals, or between holy animals and unholy. Genesis reads: “And God made the beast of the earth after his kind, and cattle after their kind, and every thing that creepeth upon the earth after his kind: and God saw that *it was* good” (Gen. 1:25).

And although man is given dominion over the animals, the Bible specifies that man’s food shall be: “. . . every herb bearing seed, which *is* upon the face of all the earth, and every tree, in the which *is* the fruit of a tree yielding seed . . .” (Gen. 1:29).

Biblical scholars believe the early Hebrews ate meat only on rare occasions, usually ceremonial, and their diet consisted for the most part of bread and milk. Noah and his family were the first to be permitted to eat animal flesh because bread could not be obtained on the ark. It is in the story of Noah that animals are first called clean and unclean: “Of every clean beast thou shalt take to thee by sevens, the male and his female; and of beasts that *are* not clean by two, the male and his female” (Gen. 7:2).

But, even here, the reference is to the animals’ fitness as a burnt offering rather than to their food value. The concept of the “clean” animal develops first in reference to sacrificial rites and only later becomes part of dietary law. Thus we find that animals with broken bones are considered unfit as food because, earlier, such an animal was not a suitable sacrifice.

A highly detailed system of dietary laws is given to Moses for the Israelites in the Old Testament books of Leviticus and Deuteronomy. First the clean beast (meaning mammal) is defined: “Whatsoever parteth the hoof, and is clovenfooted, *and* cheweth the cud among the beasts, that shall ye eat” (Lev. 11:3). The passage eliminated from the Israelites’ diet many animals then commonly used as food in the Near East, including the camel and the rabbit (unhooved creatures), and swine (which do not chew their cud). Because neighboring tribes ate the flesh of these creatures, the Bible specifically labels them unclean. The prohibition also covers all members of the cat family (including the large felines, sometimes consumed by Semitic nomads), and canines. Dogs, which in ancient times were the scavengers of the towns and villages, were considered “. . . abomination unto the Lord thy God” (Deut. 23:18). Another section of the Scripture catalogues clean mammals: “These *are* the beasts

which ye shall eat: the ox [meaning bulls and cows], the sheep, and the goat [all of which were used for sacrifices], The hart, and the roebuck, and the fallow deer, and the wild goat, and the pygarg, and the wild ox, and the chamois" (Deut. 14:4-5). (It is interesting to note the extensive grasp of zoology necessary to properly place these animals in the permitted group.)

Of all the unclean animals, the swine is singled out for special loathing. Rabbinic law, which develops and extends Biblical law, strictly forbids the eating, raising, or keeping of swine. Among the Israelites the swineherd was subject to contempt and abuse, barred by custom from the temple by law and from marriage with any but his own kind. Even in the New Testament story of the Prodigal Son, the swineherd is the symbol of complete human degradation, craving even to eat the food of the pig (Luke 15:15-16). And Jesus cautions his followers not to ". . . cast ye your pearls before swine . . ." (Matt. 7:6). The Biblical injunction against pork is on firm ground, for, especially in the warm climate of the Holy Land, the meat of the pig was apt to cause various diseases. Trichinosis, for example, is a malady produced by worms hatched in the flesh of swine.

The classification of creatures extends to the sea, marking as unclean ". . . all that have not fins and scales in the seas, and in the rivers, of all that move in the waters, and of any living thing which *is* in the waters . . ." (Lev. 11:10), and barring the use of eels, crabs, shrimp, lobsters, and clams as food. Most species of fish which, because of their great abundance in the Mediterranean and the Sea of Galilee, were dietary staples for the Israelites, are, however, considered clean and edible.

The Bible then lists 21 types of flesh-eating birds, including the vulture, the raven, the hawk, the owl, the pelican, and the bat (which, of course, is a mammal), which are unclean and must be held "in detestation."

Unclean animals could never under any circumstances, and despite all forms of consecration, become clean. On the other hand, animals considered clean could become unclean in many different ways. A beast was unfit for food if it died a natural death; if it was attacked and torn by a beast or bird of prey; if it was missing an organ (such as the kidney); if it had a double organ (two livers); if it had fallen and sustained internal injuries; if it had broken bones; if it had missing or dislocated limbs; or, if it was slaughtered in any but the prescribed way.

Although the Bible contains no definite mode of slaughter, the ancient priests formulated a ritual of slaughter which was later codified in Rabbinic law and is still practiced by Orthodox Jews today. The Bible forbids the eating of the blood of any animal. It is believed that the Israelites ascribed to the blood possession of the animal's "soul" or

“spirit” (the Hebrew term is more vague than modern English translations); making the blood tabu or forbidden. This explains why all carnivorous animals are considered unclean and why Hebraic law prescribes special cooking of meat to insure that all the blood is removed before it is eaten. Another theory holds that the blood (and “fat,” by which is meant the kidneys and the membranes of the liver and intestines as well as fat in the modern sense) belongs to God and therefore may not be consumed by men. The Bible also forbids the cooking of a kid in its mother’s milk, and, by extension, the eating of meat with milk or milk products such as cheese and butter. This stems from an old superstition which says that the contact, in the stomach of a man, of meat and milk will cause his domestic stock to stop producing milk.

While the priesthoods of most ancient societies obeyed similar dietary laws, and many ancient writings distinguish between clean and unclean animals, the Israelites are distinct in having food prohibitions that apply to the entire people. While some of the rules derive from considerations of health and sanitation, others seem more arbitrary. According to the Bible, the food restrictions need have no reason apparent to man, for they are the law of God, given to the Israelites to set them apart and above their neighbors. By making the usual restrictions apply to the entire people, the Hebrews became in a sense a nation of priests as befits their self-appellation: “The Chosen People.”

Later Biblical commentators have offered other explanations for the dietary laws. Some say that the Hebrews believed unclean animals were inhabited by evil powers and that the eating of their flesh would cause the evil power to enter the man. Others theorize that unclean animals originally were considered sacred and for that reason not fit food. (The pig was considered holy in Egypt. In the Hindu religion, the cow is still sacred today, and its flesh may not be eaten.) The sound sanitary and psychological reasons for assigning most animals to an unclean category cast doubt upon the latter theory.

There are in the New Testament no similar dietary restrictions. The Christian believes he may eat any flesh, pointing to a passage which says: “There is nothing from without a man that, entering into him, can defile him: but the things which come out of him, those are they that defile the man” (Mark 7:15). Thus, a major difference between modern Jewish and Christian practice developed.

The body of Hebraic law regarding animals can be divided, generally speaking, into three categories: those concerning the suitability of specific animals for food; those dealing with the treatment and protection of animals; and those referring more specifically to the use of animals as property.

Of the three, the last is the least important to us, but in Biblical times,

when animals were the major source of property, it had great significance. In the Bible can be found, for example, legislation dealing with damage done by grazing animals to crops, or with injuries caused by maddened oxen (Exod. 21:28). Another law requires the digger of an open pit to pay the owner of any animal that wanders into it, ". . . and the dead *beast* shall be his" (Exod. 21:34). If an ox gored to death another ox, the live ox was, by law, sold, and the money divided with the owner of the dead ox (Exod. 21:35). References can be found to an Israelite law requiring shepherds to replace missing stock unless they can prove the loss was no fault of their own.

The Biblical decree against plowing with an ox and an ass together, while possibly grounded in the general humane attitudes governing other Biblical laws (in this case, the uneven steps of the two species would cause suffering to both), may also stem from the principle of avoiding conjunction of different species, the same principle that forbids cross-breeding and extends even to the use of linen and wool together in the same garment.

The most significant and eternal Biblical statutes regarding animals are concerned with their protection and treatment. Generally, the Bible cautions mankind to remember always that animals are living creatures of God, and, while not on the same level as man, who was created in God's image, still higher than the vegetable, or the mere inanimate. God created animals to serve man (Gen. 1:28), but at the same time placed upon him the responsibility of treating the animals with kindness and consideration of their needs. Of course, using animals for food will cause them pain, but, significantly, the Hebraic laws of slaughter are designed to be as painless to the victim as possible, even prescribing the kind of knife and cautioning that the knife must be extremely sharp. The Hebraic ritualistic slaughter may be the least painful ever devised.

Furthermore, the Bible strongly suggests that man was intended to be a vegetarian (Gen. 1:29), and that only in the time of the Deluge, when the eating of animals became a necessity for survival, was Noah permitted to use animals for food, and then, of course, only when following strict rules. That the Ten Commandments decree a Sabbath, or day of rest for beasts as well as men (Exod. 20:10), vividly portrays the Biblical attitude toward living things.

Examples of Biblical kindness to animals abound. Isaac discovers that Rebekah would be a proper wife for him when she remembers to bring water for his camels as well as himself (Gen. 24:14-15). The Bible also tells how Moses, after driving off the shepherds who had refused to let the seven daughters of Micah use a well, helped the girls water the flock (Exod. 2:17). And Nathan tells David a parable suggesting that in the age of the great Judaic kings, lambs were often kept as household

pets: "But the poor *man* had nothing, save one little ewe lamb, which he had bought and nourished up; and it grew up together with him, and with his children; it did eat of his own meat, and drank of his own cup, and lay in his bosom, and was unto him as a daughter" (II Sam. 12:3).

When God speaks out of the Whirlwind to Job, rebuking him for questioning the Divine Judgment, He shows extreme understanding and consideration for animals (Job 39). David, one of the greatest of the Children of Israel, is noted for his gentleness toward his flock.

Biblical law specifies that the ox may not be muzzled when threshing grain, a practice probably common among the neighbors of the early Hebrews (Deut. 25:4). The Bible also considers the feelings of the animal as parent, forbidding the slaughtering of a young animal in the first seven days of its life (Lev. 22:27), and barring the removal of any bird from its eggs (Deut. 22:6). Another law bans the slaughter of an animal and its offspring on the same day.

Kindness to animals is reflected in the suggestion that a passerby, seeing an animal struggle beneath too heavy a burden, must interrupt his journey to unload the beast, even if it might belong to an enemy (Exod. 23:5). According to Mosaic law, the first-born of animals is as sacred to God as the first-born to man.

This attitude extends into other realms. Hunting as a sport was always looked upon with disfavor by the Hebrews. Esau was generally condemned by the Hebrews because of his fondness for hunting, and later writers regarded hunting as surrender to the baser instincts. The authors of the Talmud, a book of law written to amplify and explain the Bible, carries kindness to animals to the extreme, saying that the beast of burden should be fed before its owner. It also forbids buying animals unless suitable food is on hand to feed them.

Medieval rabbis continually specified a man's duty to feed and shelter homeless animals, and strongly condemned all types of cruelty, including overloading oxen and tormenting household or city animals such as dogs and cats, despised as they were. Even the spurring of horses was criticized! Judah Hanasi, a rabbi of the Middle Ages, is reputed to have suffered from a toothache for 13 years for allowing a calf to be led to slaughter, but the pain is alleged to have ceased abruptly when he saved a litter of kittens from death.

In general, the rabbis taught that he who hurt animals hurt his own soul. This attitude is also shown in the fact that the usual blessing said by Orthodox Jews upon putting on new clothing is omitted if the garment is made of fur or leather, since an animal died to make the garment. Christian doctrine, while it does not put the same emphasis on kindness to animals, is basically sympathetic to the Old Testament attitude, basing the belief on a passage from the Book of Proverbs: "A righteous *man*

regardeth the life of his beast: but the tender mercies of the wicked *are cruel*" (Prov. 12:10).

Although kindness to animals is based upon the sanctity of all life, the question of the existence of an animal's soul has been debated by Bible experts without being satisfactorily resolved. The Bible in several places (notably Lev. 17:11 and Eccles. 3:19-21) seems to suggest that animals *do* have souls, but nowhere in either the Old or New Testaments is any reference made to the reward or punishment of any animal after death.

The Old Testament in particular seems to suggest that animals were morally and legally responsible for their actions, capable of good and bad deeds, and of knowing right from wrong. In the Book of Jonah (Chapter 3) we learn that even the animals were required to take part in the fast of Nineveh. Another interesting example pointing to the likelihood of trials for animals can be found in Exodus: "If an ox gore a man or a woman, that they die; then the ox shall be surely stoned, and his flesh shall not be eaten . . ." (Exod. 21:28).

Chapter 5

Symbolism of the Bible

"All these things spake Jesus unto the multitude in parables; and without a parable spake he not unto them; That it might be fulfilled which was spoken by the prophet, saying, I will open my mouth in parables; I will utter things which have been kept secret from the foundation of the world" (Matt. 13:34-35).

The parable occurs frequently throughout both the Old and the New Testaments and also related Semitic literature. It is found in all folk literature. To appreciate the significance of the parable, it is necessary to be acquainted with the nature of symbolism as employed by the ancient Semitic peoples.

Symbolism and allegory appear in the narrative of creation; in most of the events of Hebrew history; in the sayings of the Prophets; and in the Psalms, the Proverbs, and especially Revelations. The allegories and parables of the Bible are presented in a form much resembling the pattern of a dream. Dreams, it must be remembered, were regarded by the Biblical authors as a medium of divine communication. Consequently we find in the parables the use of condensation of images and a preponderance of seemingly illogical use of symbols. Often a certain object is represented in the same passage by more than one symbol, a technique which makes it difficult for us to interpret some of the parables. The parable truly succeeds in endowing simple and ordinary situations with profound implications.

The Hebrew predilection for this kind of figurative expression is indicative of the mystical attitude which has also dominated much of Oriental philosophy and religion. The mystical mind is able to confront an ordinary phenomenon and perceive the divine at work in it. Each little event becomes, as it were, the turning point of the cosmos. The boundary is blurred between the material and the nonmaterial, between the dream and the reality.

The God of the Old Testament permeates the world He has created with a degree of intimacy unimaginable to the contemporary Western mind. This is why it is so difficult for us to grasp the full meaning of the figurative language of the Old Testament. In order to be fully appreciated, the parables should not be explained, but rather experienced; to gain the total mystical effect of the Bible, we must dream along with its authors.

Consider Ezekiel's Parable of the Eagles: "And say, Thus saith the Lord God, A great eagle with great wings, longwinged, full of feathers,

which had divers colours, came unto Lebanon, and took the highest branch of the cedar: He cropped off the top of his young twigs, and carried it into a land of traffic: he set it in a city of merchants. He took also of the seed of the land, and planted it in a fruitful field; he placed *it* by great waters, *and* set it *as* a willow tree. And it grew, and became a spreading vine of low stature, whose branches turned toward him, and the roots thereof were under him: so it became a vine, and brought forth branches, and shot forth sprigs. There was also another great eagle with great wings and many feathers; and, behold, this vine did bend her roots toward him, and shot forth her branches toward him, that he might water it by the furrows of her plantation. It was planted in a good soil by great waters, that it might bring forth branches, and that it might bear fruit, that it might be a goodly vine. Say thou, Thus saith the Lord God, Shall it prosper? shall he not pull up the roots thereof, and cut off the fruit thereof, that it wither? it shall wither in all the leaves of her spring, even without great power, or many people to pluck it up by the roots thereof. Yea, behold, *being* planted, shall it prosper? shall it not utterly wither, when the east wind toucheth it? it shall wither in the furrows where it grew" (Ezek. 17:3-10).

The type of eagle to which this parable refers is most probably the "Golden Eagle," technically known as *Aquila chrysaëtos*. This bird is found throughout Eurasia, in North Africa, and in North America. It primarily inhabits mountainous regions, but is also found in some lowland forested areas. The adult of the Palestinian form is dark brown, with the back of the head and nape of the neck golden, and the tail usually speckled with gray. Its legs are feathered down to the feet. The male measures in length up to 35 inches, has a wingspread of up to 84 inches, and a tail up to 15 inches long. The female is somewhat larger, up to 41 inches in length, 92 inches in wingspread, and a tail up to 16 inches long. This eagle feeds on hares, rabbits, marmots, fawns, lambs, grouse, and waterfowl, as well as upon other large birds. Its nest is a large structure of sticks built on the ledge of a cliff. It breeds once a year, and lays two or three eggs.

In order to appreciate the significance of the eagle in Hebrew culture as revealed in Ezekiel's parable, it will be necessary to discuss it in the total context of the parable. It is in this parable that Ezekiel prophesies the capture of Jerusalem at the hands of the Babylonians, a prophecy which became historical fact in 586 B.C. The imagery employed by the prophet was hardly unfamiliar to his people. The bird had always been a source of singular fascination to the Hebrew mind. Apparently it was suggestive of the mysterious, and of the transcendental.

When discussing the imagery of the Old Testament we must bear in mind the Hebrew predilection for using concrete things as a basis for conceptualization and communication. For this reason, much of

the Old Testament abounds with parables and allegories. It often becomes difficult, as we shall see later, to distinguish what is figuratively intended from what is literally true.

In the story of the creation, the Spirit of God is described, in the original Hebrew, as *hovering* upon the face of the waters. The hagiographer uses the verb *rachaph*, which in a later book of the Bible is used to describe a parent eagle fluttering over its young. The word for eagle was *nesher*, which sounds quite similar to *nephesh*, the ancient Hebrew word which stood for the spirits which were believed to animate the phenomena of nature. To the Hebrew the great eagle, soaring swiftly among the mountain heights, was a symbol of power as well as of protection.

Besides the familiarity of his audience with the imagery of the eagle, the bird was an especially appropriate symbol for Ezekiel from the standpoint of his own religious attitudes. The prophet placed high emphasis on the divine attributes of holiness and power. In this particular parable, however, the eagle is used to describe the enemies of God, or more appropriately, the enemies of the Israelites. It is important to note Ezekiel's belief that God and His "Chosen People" were indivisible. This quasi-Oriental attitude toward social religion is grasped only with difficulty by the Western mind. Ezekiel, ironically enough, is usually regarded as the great contributor of individualism to the development of religious thought. He constantly accuses Israel of profaning the holiness of its union with God. The capture of Israel by the Babylonians constitutes a just retribution.

The eagle is used to symbolize the "anti-God," to be identified with the Babylonians, as individualized in Nebuchadnezzar, their king. Nebuchadnezzar, like all Babylonian rulers, wore a regalia of eagle wings.

The eagle is described as having divers colors (Ezek. 17:3). This is a clear reference to the gaudily colored representations of the eagle as a symbol of royalty found on Babylonian monuments.

The cedar of Lebanon constituted a vivid and nostalgic piece of imagery to the contemporary Jew. This plant contributed a great deal of beauty to the Israel countryside, and came to be a symbol of the majesty, endurance, and fertility of the Jewish nation. We can imagine the emotional effect upon Ezekiel's audience of an eagle thus molesting a cedar.

The top of the tree refers to King Jechonias and the other princes carried into captivity by the Babylonians. The "seed of the land" (Ezek. 17:5) refers to Sedecias whom Nebuchadnezzar appointed king of the exiled Jews. The second eagle mentioned in verse 7 (Ezek. 17) symbolizes Egypt. The vine which developed from the seed of Sedecias "bends her roots" toward this eagle, indicating the collusion between Sedecias' followers and the Egyptians, which was to come to naught.

And the Jewish nation *did* survive. God would allow his people to be purged but not to be destroyed.

The imagery of the eagle is used in a number of places throughout the Old Testament. The sight of an eagle soaring over the heads of the weary Israelites during their exodus filled them with a feeling of exhilaration and encouragement. In the poetry of the words, "I bare you on eagles' wings," Israel recognized her experience of God.

In these manifestations of bird imagery, we can perceive the full Hebrew religious experience. The Egyptians, too, represented their primary god, Ra, by means of a bird. It is not certain whether the Egyptians influenced the Hebrews in this regard. The refinement of Hebrew theistic notions in comparison to those of the Egyptian is, on the other hand, indisputable. The Jews allowed their one and only God to possess much more transcendence than the Egyptians bestowed on their gods, or even on their supreme power, *Amen*.

The problem of the Westerner in attempting a literary or philosophical approach to Hebraic animal parables revolves around the concept of dichotomy. (In Oriental and Middle-East philosophy, dichotomy is even less revered.) The distinction between symbolism and reality is considerably more blurred than in the philosophical attitudes of the Western world. This disparity of approach can be readily seen by comparing the parable of the eagles to any ordinary Homeric simile.

If we are to appreciate the parables of the Old Testament it is important to understand the extent to which philosophical and religious notions and their respective genres of communication are influenced by culture. It is possible that many of the elements of Old Testament allegories and parables can be traced back to influences from primitive Hebrew notions.

A number of Biblical scholars suggest that primitive man tended to deify the phenomena of Nature with which he was immediately confronted and over which he exerted little or no control. This opinion does not refute the existence of monotheism among the primitive Hebrews; it merely declares that the primitive Hebrew had not yet evolved philosophically to the level of monotheism as we conceive it today. Primitive man was pragmatic rather than speculative. Cause and effect, idea and reality, were simply inconceivable at the time. Because he could not analyze the mysteries of natural phenomena, he venerated them. Many of the rites of the Old Testament were consequently associated with sacred mountains, trees, stones, etc.

Thus arose the Hebrew fondness for parable and allegory, and the corresponding lack of effort to separate the symbol from that which is symbolized.

Chapter 6

Zoology of the Bible

On the Second Day: “. . . God said, Let the earth bring forth grass, the herb yielding seed, *and* the fruit tree yielding fruit after his kind, whose seed *is* in itself, upon the earth: and it was so.”

On the Fourth Day: “. . . God created great whales, and every living creature that moveth, which the waters brought forth abundantly, after their kind, and every winged fowl after his kind: and God saw that *it was* good.”

On the Fifth Day: “. . . God made the beast of the earth after his kind, and cattle after their kind, and every thing that creepeth upon the earth after his kind: and God saw that *it was* good.

“So God created man in his *own* image, in the image of God created he him; male and female created he them.

“And God blessed them, and God said unto them, Be fruitful, and multiply, and replenish the earth, and subdue it: and have dominion over the fish of the sea, and over the fowl of the air, and over every living thing that moveth upon the earth.”

It takes years for a baby to develop an ability to distinguish between the bewildering array of objects with which he is confronted for the first time. At first, he can only tell that “familiar” objects, such as his parents and his cradle, are different from all the “unfamiliar” things with which he comes in increasing contact as he becomes more and more able to move around. He will not be able to remember different strangers who come to the house; will have to be constantly reminded that the big boxlike thing his parents drive is called an “automobile.”

Similarly, it must have seemed a bewildering task to primitive man to classify all the animals and plants he found in the world about him. Nevertheless, even the oldest cave paintings show a growing desire to classify animals in groups. Different deer are pictured alike, and domesticated animals are put in different groupings from wild animals. Even at the earliest stages of his history, man recognized differences and similarities between animals.

The Bible represents one of the earliest recorded attempts at a grand scheme of classification. It is one that makes no pretensions of being a scientific analysis because it was originally designed for a primitive pastoral people who could have no conception of exotic animals and plants beyond their immediate lands, and who had yet to develop an appreciation of scientific method. Thus, Biblical classification tries to re-

late to the needs of the people for which it is intended, which is why it is largely designed to be a framework for a system of dietary laws.

The scheme of Genesis is based on several approaches to classification. First, it considers the origins and habitats of various groups of animals. Fish were created and live in the sea, all the animals that fly are "birds," the "beasts of the earth" are so named because they arose from and live on the earth. Further, other parts of the Bible indicate a classification based on means of reproduction. All animals whose means of reproduction escaped the early Israelites (just as they escaped scientists until the eighteenth century) are classified as "fast breeding." These include the insects and reptiles, and are differentiated from higher four-legged animals, whose means of reproduction was understood. More important, animals are ordered according to their practical usefulness to man, so that domesticated animals are distinguished from their wild relatives. Thus the Bible divides the animal kingdom into four main groupings: the *Behemoth*,* which includes all domesticated and wild, higher four-legged animals; *Fowl*, including all flying forms such as birds, bats, flying insects, etc.; the *Swimmers*, being all the fish but not including the whales (see page 131), a distinction which has been verified by modern taxonomy; and the *Reptiles*, the animals which creep on the earth.

The Bible is unique in connecting this system of classification to an evolution of life, placing the appearance of these animal types in some sort of chronological order. Christianity rests firmly on the idea of Creation, which means there was a beginning and will be an end to life as we know it. The concept of passage of time and of a history of life is very important because it helps to explain the strange world of diverse animals and plants by relating them to man. Their origins and man's lie in the common creative act of God, a friendly force that gave man dominion over the rest of life.

Considering our current, much more detailed knowledge of evolution, Genesis is remarkably close in some respects. It states that life first arose in the waters and then penetrated the land, a fact mirrored in our modern hypothesis that such animals as the lungfish, salamander, and lizards represent transitional phases between the fish and higher forms such as the mammals. It further seems to indicate that plants and animals invaded the earth at different times, which certainly seems true in the light of modern evidence.

What the Bible does not do, however, is state directly any connection between different groups of animals which arose at different times. This is because God created each group separately. Thus, it does not attempt to consider the evolutionary implications of classification but

* As opposed to "A Behemoth." See page 97.

rather how God made each animal especially suited to its environment, a proof of the logic of His order in a seemingly chaotic world. Thus, it makes the mistake of lumping birds and bats together because both have wings and fly. Later studies of the detailed bone structure of the "wings" of bats and birds have shown that they are really quite different and that, surprisingly enough, bats are more closely related to horses and lions than eagles or roosters.

In our modern system of classification, we still use this approach of studying how animals are adapted to their environment although, of course, a more limited, systematic approach is used. The world affords animal and plant life an infinitude of environments into which they can fit, adapt to, and live in. Certain bacteria can be found even in the hottest geysers, the crustacean *Artemia* can live in the saltiest rock deposits, and some parasites spend almost their whole lives in the intestines of sheep and cows. The modern biological science of ecology studies how populations of animals and plants are fitted and related to their environments. It studies how animals are suited to move from one environment to another: for example, wind disperses seeds, ocean currents carry algae populations thousands of miles, birds undergo seasonal migrations, and herds of horses once migrated over half the earth. It then studies what it is about a particular environment that will tend to isolate one group of animals from another. Two groups of Danish viola are so classified because one will grow only on chalky (alkaline) soil, the other only on acid soil; the lemurs of Madagascar are separated from the rest of the world by the water around the island on which they live, and so on. Finally, it studies what changes these different environments have wrought on the animal and plant itself; plants that thrive in the mountains of California are normally smaller than those of the valleys; cave animals are often characterized by degenerate and nonfunctional eyes, and so on.

On the basis of considerations like these we are able to define the fundamental unit of classification, the *species*. A species of animal or plant is a group of populations which have become so isolated and different from related forms that they are no longer able to interbreed with them. They may have become so different that their reproductive organs will be physically incapable of interbreeding; while hybrids that are conceived may be infertile or inviable, etc.

By defining certain environments, such as the sea, the desert, and the cave, much as the Bible tried to define the type of habitat in which animals are found, modern ecology carries on the approach to classification of earlier times. It also affords us a valuable insight into the process of evolution still going on today, and its mechanism of action through environmental selection.

Just as the Bible recognized that domesticated animals must be considered separately from wild animals, so modern theories of evolution and classification recognize the value of breeding experiments as a means of observing evolution greatly speeded up. By domesticating over 300 species of plants, as well as 100 kinds of animals, like the horse, dog, and cat, man has often succeeded in pushing evolution to its limits of specialization. This artificial selection has led to an amazing amount of "speciation" within man's history. For example, there are only three species of wild horses left, but there are many breeds of domesticated horses. Man has purposely isolated particular horses to get the fastest ones as racehorses; plants are selected for disease resistance; sheep are selected for heavier coats; and so on.

Cases of fast natural evolution within our own time have also been recorded. One of the most striking cases has been the development of "industrial melanism," or the appearance of dark forms among a number of species of moth. In industrial areas, trees tend to become covered with soot and so these moths are better protected against their enemies because of their dark coloration. Melanic forms were first reported in 1850 from Manchester, England, but today it is quite rare to find any light-colored examples of those particular moths in any part of northern England. It has even been possible to observe evolution greatly speeded up in the laboratory. Demerec has been able to "train" bacteria to be resistant to penicillin by exposing succeeding generations to gradually increasing amounts of it. It is significant that sudden exposure only to a *large* amount will kill them; and this shows that evolution occurs only in small steps over normally long periods of time. (It took millions of years to evolve the gigantic reptilian dinosaurs from smaller ancestors.) Thus, classification can never be absolute, as species are constantly changing and various intergradations will always be found. Also, all "species" of animals appear to be changing in more than one way.

The realization of how and why different species can arise from one common ancestor is but one step to a proper understanding of the totality of evolution. A particular environment can accommodate not one but many species. Thus, they will tend to evolve as groups. Each environment will impose its particular needs on its resident populations, an effect which will be mirrored in their anatomy. All lions are classified as members of one species, but there are other similar animals, such as the tiger and leopard, which have adapted to the same type of existence as animals of prey. They all have long, sharp, retractable claws, sharp teeth, and strong jaws. In order to define the group as a whole, it is necessary to introduce a new unit of classification bigger than the species: the *genus*. The genus distinguishes a group of species on the basis of a similar, unique anatomy. It also indicates that its component species

are relatively closely related and probably came from one common ancestral species.*

Various methods have come into particular use in the last few years to determine how closely related two species are. It has been found that if the bloods of relatively unrelated species are mixed, they will "clump." The closer the two species, the less clumping there will be. Another approach has involved a comparison of the embryological developments of two species; distantly related species will have less similar embryologies than closely related ones. This is often also useful in determining the common ancestry of seemingly quite different groups of animals.

The development of classificatory groupings higher than genus, relies to a large extent on another line of evidence, that of fossils. Fossils are remnants of living things from bygone times and are perhaps the most direct evidence for the process of evolution which underlies the order of classification. By tabulating the appearance, anatomy, etc., of various fossils from various times and correlating the findings with geological evidence which indicates what sort of environment they lived in, it is possible to "see" how two groups of animals, originally quite similar, gradually developed differences and became more and more distinct. Thus, the members of the cat tribe can be put into a higher grouping called an *Order*, along with dogs, bears, weasels, hyenas, etc., called the *Carnivora* because they are all flesh eating. These, in turn, can be classified into a still higher grouping, the *Class*, here called *Mammalia*. This contains animals like whales, bats, mice, horses, deer, etc.—all of which suckle their young with milk produced by mammary glands.

Fossil evidence thus puts classification in an over-all historical perspective. Animals that seem quite different today will often be seen to come from similar ancestors. To a large extent, evolution is a process

* In scientific papers, the lion is usually referred to as *Panthera leo*, the first term being its generic and the last its specific name. This system of "binomial nomenclature" was first developed by the Swedish botanist Carl von Linné (Carolus Linnaeus) in his monumental *Systema Naturae*, published in 1758. Linnaeus' ideas on classification were derived from the religious dogma of his time, which in turn was rooted in the Bible. He appreciated the ordering of animals and plants in the Bible as proof of God's logic, feeling that "without classification—only chaos." Working mostly in Sweden, but also collecting in other northern European countries, he was able to list 4235 separate animal species. Today, we know of a million animal and 265,000 plant species, and that there are thousands more yet to be discovered. Linnaeus further realized that species tend to fall into clusters, and so he devised the concept of a hierarchy of classification. Thus species could be organized into increasingly larger groupings, each reflecting more and more directly the unity of God's Creation. He did not, however, consider this hierarchy as reflecting a process of evolutionary diversification, and held each species to be basically static.

of diversification, and the problem of classification becomes harder and harder as time goes by. Professor George Gaylord Simpson estimates that there are probably about 2 million living species of animals, a figure that, while double the usual estimates, still falls far short of some, notably the entomologists', who have stated that we have so far discovered only one tenth of all living insect species. However, given 2 million today, and that the life span of a species ranges between 500,000 to 5,000,000 years, and that the length of time since life began is 1 to 2 billion years, then the total number of species in history probably lies between 50 and 5000 million.

Mammals belong to a still higher grouping, known as the (Class) *Vertebrata*, which includes also the fish, amphibians, birds, and reptiles; all of which have in common a vertebrated backbone. This internal support, along with a nervous system which relies mainly on control by a "brain" has allowed a different line of adaptation to that which led to, for instance, the insects. Insects have an external covering skeleton which limits their size, and a nervous system which relies mainly on reflexes at the nerve endings themselves, causing them to live stereotyped lives in specific environments. There are hundreds of thousands of insect species but only one species of man, because men have developed a flexibility that allows them to live in almost any environment.

As has already been mentioned, the Old Testament was originally written in ancient or classical Hebrew, though there are versions of parts of it in Aramaic. The New Testament, which Jews do not accept, was written in Greek, except for one book which was also written in Aramaic. At a later date, a wholly Greek version, which has unfortunately been lost as a unit, was assembled. A complete Latin version, known as the Vulgate, was translated from this. This became the sole and standard reference Bible for the Christian world of both the Western and the Eastern Roman Empires. The Old Testament remained in the Hebrew language for use by the Jews. When the Western Roman Empire collapsed, the Vulgate was retranslated, and through the centuries it appeared in various authorized forms. Today, the Roman Catholic Church approves the use of translations in a number of Western languages, including English.

In the Eastern (Orthodox Greek and Russian) area, still other Latin versions appeared. The Armenians produced an independent Bible; versions in various languages and scripts were devised for the Coptic Church of Egypt, the Abassian Church of Ethiopia, and numerous sects in Central Asia. Some of these were derived directly from the Hebrew Old Testament; several included other canonical works, such as the Acts of the Apostles.

The first important version of the Bible in the English language is

the famous King James Version. Although a Catholic, James the First ordered an English translation to be made for his people, who were by then predominantly Protestant. The result was a work of exquisite literary skill and beauty, one that has lasted with slight changes until today. That the greatest literary work ever compiled should also have been so superbly—if not uniquely—translated into our language is a happy coincidence.

Despite the beauty of the King James Version, it is not perfect. Its exactness, particularly for our purposes, leaves something to be desired. In the first place, the knowledge of Old Hebrew, and even of ancient Greek, and classical Latin possessed by the translators and compilers (it was 1611, let us not forget) was not that of today's philological scholars. Secondly, and more importantly for us, these men knew nothing of zoological science. They had considerable knowledge of the wildlife of Great Britain, but they had only Aristotle and Pliny to rely on for information about the wildlife of the Mediterranean Basin and adjacent lands. They had never seen or even heard of an Aurochs (which had by then been extinct for some centuries), an Addax, or a Bubalis. They knew of hippopotami, crocodiles, and camels, but their concepts of them were vague.

Thus, when they came upon a name of an animal, they tended naturally to take the Latin interpretation of it first—the animals of Italy are closer to those of England than are the animals of Greece. If they were in doubt, they had resort to the Greeks of old; and if they still were not sure of the true meaning, they tried to interpret the nature of the beast as described in Hebrew. Limited in their knowledge, they were forced to choose the closest animal (in size, shape, and behavior) that they knew in their *own* land. The performance they turned in, while quite extraordinary, is not wholly satisfactory.

As soon as the Bible was available in English and other secular languages, scholars set to work studying it, analyzing it, and retranslating it. These commentators and translators were often bad philologists, knew nothing of etymology, and had no concept of semantics. Worst of all, they knew very little about wildlife. This period of confusion lasted until the end of the last century, and in some respects still lingers. Through the machinations of these nonscientific commentators, all manner of complexities in the identification of the animals originally mentioned in the Bible arose.

Modern science has added further confusion. The proper identification and classification of animals (called "systematics or the science of taxonomy as applied to animal life"), though precise, is still undergoing refinement. Moreover, adjustments have had to be made in practically every aspect of classification since Linnaeus founded our modern bi-

nomial system. He knew only four and a half thousand kinds of animals; today we know between 1 and 2 million. In his day, little was known of nine tenths of the earth's surface, outside of Europe. Therefore, even if the translators who prepared the King James Version named the animal properly, and the nineteenth-century commentators did not change their decision, modern systematic zoology may have altered its Latin or scientific name several times in the past hundred years.

As was mentioned briefly in the Introduction, these matters raise very real problems. To solve them we have adopted the following plan. First, our list of the animals (see pages 87, 135, 173, and 181) was compiled from the King James Version, though old English titles—such as “glede” for kite and “ossifrage” for the osprey—have been converted to their current names. The resulting list proved to be fairly short and simple. There are fewer than 100 “kinds” of animals mentioned in the Bible. These kinds varied from individual *species* to *families* and even—in cases such as “frogs,” “fish,” and “songbirds”—to much larger associations. All but a few on the list appear to be named correctly. Less than 5 per cent are really obscure.

Armed with this list, we can take each of these kinds of animals in turn and discuss just what they must be, what they might be, and what the various commentators and translators have said they thought they were, and thus track each one down. This entails, first, going back to the ancient Hebrew name for the animal and ascertaining what Hebrew philologists say the animal was and, second, investigating those names which are recorded only in the Greek or Latin originals. The Greeks were no better translators of Hebrew than were the seventeenth-century English scholars, and there are several animals mentioned in the New Testament that do not appear in the Old Testament. What is more, the Latin version is of little help because it occasionally misinterpreted the Greek. A striking example is the confusion on the part of the Romans concerning the animal named by the Greeks *ailuros*. They called or translated this as *felis*, or “Cat,” when it actually referred to the Polecat or Ferret (*Putorius putorius*), which the Greeks had domesticated to keep down mice. When they finally obtained *real* cats from Egypt, they at first called them “Egyptian Weasels.” These “weasels” were actually Genets (*Genetta*), which the Egyptians, the Sicilians, and the Corsicans had long before domesticated. They were not weasels at all, but Civets!

When all the confusions and complications have been put on record, we can sum each up and suggest just which animal may *really* have been originally referred to. These suggestions are not intended to be in any way definitive or authoritative but are founded solely on current published knowledge of just what animals live in the Bible lands today, and which are positively known to have lived there when the Bible was being

written. Luckily the list of fauna is not great and does not contain large numbers of closely related kinds of animals. In fact, the majority of the animals so listed are represented by but a single species. This naturally makes our task both easier and less susceptible to error. Then, too, we always have the original Hebrew philology and the findings of experts in that field. The Ancient Hebrews were consummate naturalists; they loved their animals; and their language is astonishingly precise from a semantic point of view.

PHOTO CREDITS

On the following pages are photographs of animals in the Bible. Most of them were taken by the author in the Holy Land. Others were obtained by him through the efforts and cooperation of individuals, photographers, and institutions throughout the world. The author wishes to credit the following and thank them for their help in the difficult task of rounding up the animals of the Bible:

The Sperm Whale, from Ivan T. Sanderson's *Follow the Whale*; Red Deer, Fallow Deer, Wolf, Fox, Weasel, Badger, Mole-Rat, Elephant, Ostrich, Heron, Lammergeier, Quail, Crane, Lapwing, Scorpion: *Zoological Society of London*. The Aurochs, Bubal, Falcon, Lizard, Skink, Carp, Fly, Leech: *Courtesy, American Museum of Natural History*. The Addax, Bat, Mouse, Kite, Osprey, Peacock: *New York Zoological Society*. Lion: *SATour*. Baboon: *Chris Pisart*. Bittern: *Simon de Waard*. Swan: *Rudolph E. Leppert, Jr.* Cuckoo, Swallow: *Georg Schutzenhofer*. Cobra, Frog, Hornet, Clothes Moth: *Walter Jarchow*. Mosquito: *Walther Rohdich*. Spider: *Harald Doering*. Sparrow: *François Merlet*. Flea, Louse: *M. B. Mittleman*. Frank W. Lane of London was especially helpful in tracking down many of these photographs.



1. Horses were regarded as war “machines” rather than draft or riding vehicles by the Ancient Hebrews.



2. The mule was held in high esteem as a work animal.



3. Asses, or donkeys, and especially white ones, were the steeds of both important persons and the peasants.

3. The Wild Ass of Asia is called the Onager. Now rare, it was once hunted and possibly tamed throughout the Near East.





4. Wild Boars are still found in limited numbers in a few wild parts of Palestine. They were plentiful in Biblical times.



5. The Domestic Pig was "an abomination unto the Lord;" yet swine were kept by the Israelites of old.



6. Hippopotamuses were not found in Palestine in Biblical times, but the Hebrews knew them from Egypt.

7. Above all other animals, the camel dominates the countries of the Near East today as it did in ancient times. There have always been many distinct breeds developed for different purposes.





8. The Red Deer (*Cervus elephas*) is the Eurasian representative of our Wapiti or Elk. It was always the principal object and symbol of the hunt in Europe and the Near East.



9. Fallow Deer appear to be indigenous to the Mediterranean area, whence they were transported to western Europe as park animals.



10. The Aurochs was one of the species of Wild Cattle left in western Eurasia after the last retreat of the ice. It was probably the ancestor of most of our domestic breeds.

11. A picture of cattle today. The exact breeds of ancient times and their appearance are not known.





12. The Bupal Hartebeest (*Alcelaphus buselaphus*) was once common across North Africa and possibly in Palestine. It is now thought to be extinct, the last one having died in Paris in 1923.

13. The Addax, a screw-horned Horse-Antelope, is a rare denizen of the Sahara and probably occurred in northern Arabia in ancient times.





14. The Arabian Oryx, one of the rapier-horned Horse-Antelopes, is now verging on extinction in southern Arabia, but once apparently ranged as far north as Lebanon.



15. This delicate little antelope is still found in western and southern Arabia. Gazelles appear to have been well known to the Hebrews.

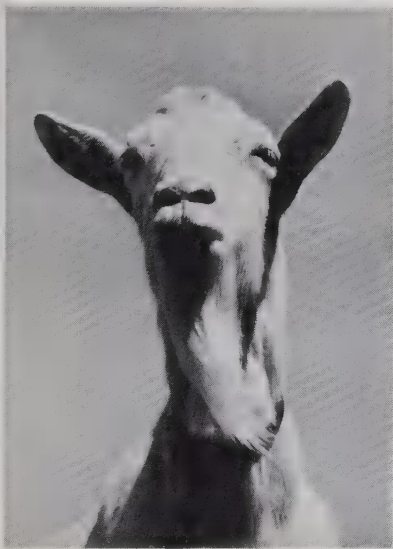


16. Domestic sheep were perhaps the early Hebrews' most valuable possessions. Their ancestors in Mesopotamia were basically sheep herders and these animals held a prominent place in their symbolism.



17. The Aoudad, also called Maned or Barbary Sheep, are magnificent inhabitants of the North African mountains and were apparently indigenous to Mt. Sinai and even parts of Palestine in ancient times.

18. There are several distinct types or species of ibexes, a form of wild goat, distributed from the Alps to Ethiopia and southern Arabia.



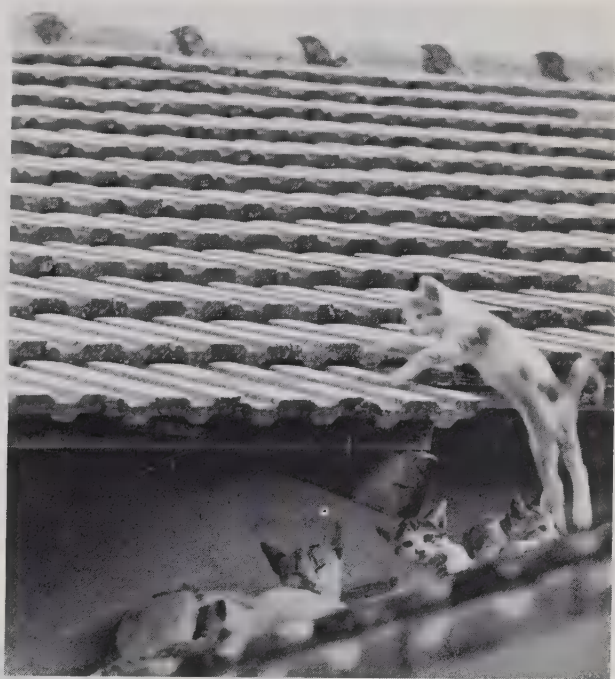
19. Domestic Goats were well known to the inhabitants of the Near East from prehistoric times. They have probably done more to destroy the vegetational cover of these countries than even man himself.



20. There were lions in Palestine, and even in Greece, in Biblical times, but they are now confined to Africa and a small pocket in what is now Pakistan.



21. Leopards are still found in some remote mountainous districts of the Near East, and even in the Caucasus. They were ever marauders of domestic animals.



22. The Ancient Hebrews had a loathing for the domestic cat that almost exceeds reason. This is probably due to their being sacred animals in the abominated temples of both Egypt and Assyria.



23. The original "bear" of western literature is the Brown Bear (*Ursus*) of Eurasia, of which one species is indigenous to the lands of the Bible. They are related to our Grizzlies.

24. Whether wolves still exist in the Levant is a moot point but in Biblical times they were fairly common. Apart from the Indian Wolf and the little Coyote, all are of one species, though they vary in size and color, like dogs.





25. One of the most interesting creatures of the Near and Middle East is the so-called Pariah Dog. They were "an abomination" to the Hebrews, but it is now believed that they constitute a true breed if not subspecies of the dog tribe.

26. Jackals are the little wild lurchers of the Bible Lands. They are useful scavengers and still very numerous.





27. There is a representative of our common Red Fox in Palestine and it was well known to the early Hebrews.

28. The Striped Hyaena (*Hyaena hyaena*) is still not uncommon in Palestine and adjacent areas. It is a nocturnal scavenger and can be dangerous, but it also is easily tamed.





29. There are a number of different kinds of weasels found all over Eurasia, North and Central America, and the Middle East.

30. The badger of Europe and the Near East (*Meles taxus*) is quite unlike our North American animal. Its pelts were of great value to the Hebrews and were extensively used in their sacred tabernacles.





31. Just what monkey (ape) is meant by the writers of the Old Testament is not known, but it is most likely that the Rhesus Monkey of India is implied, as it is said to have arrived with "peacocks and ivory." On the other hand, various baboons were well known in Ancient Egypt.



32. There are half a hundred species of bats indigenous to the Palestinian area. This is a very notable fruit-eating species.



33. Likewise, there are innumerable species of mice found in the area. Apart from the common House Mouse, this wild species is not only common but behaves much like our field mice.

34. The question of the mole-rat in the Bible is a great mystery. There are many kinds of several genera. They are digging animals like moles, and may well have been known to the Hebrews.



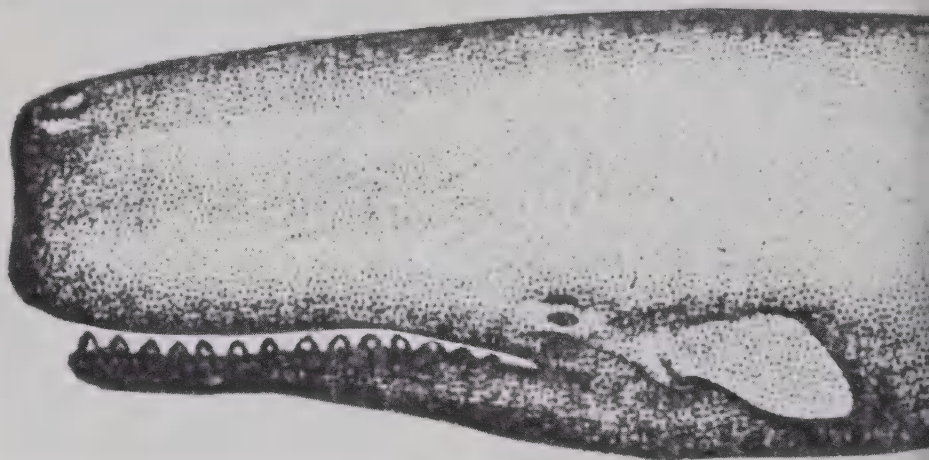
35. There are no true rabbits (either *Cuniculus* of Europe or the cottontails—*Sylvilagus*—of the New World) in Palestine. The animals so called by the early English translators of the Bible were hares (*Lepus*), related to our Snowshoes and Jacks.





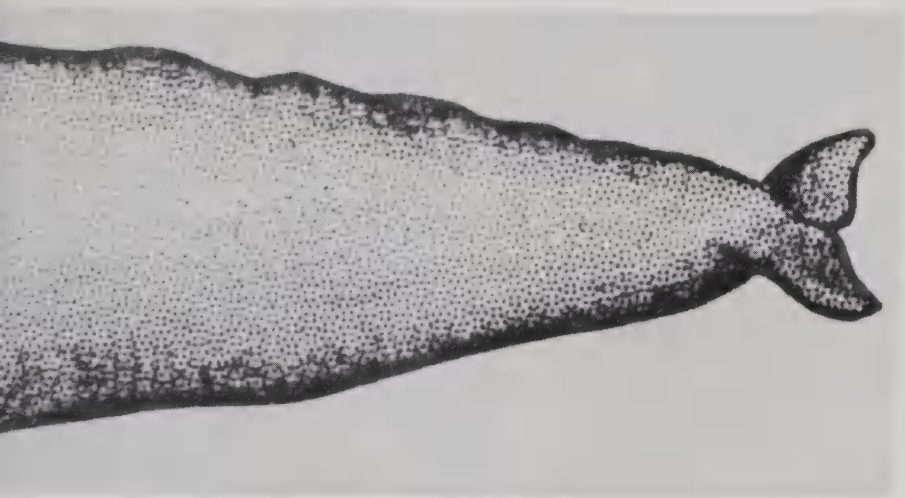
36. Elephants are mentioned in the Bible only in connection with ivory. There was a large trade in this both from India in the east and via Egypt in the west.

38. Whales are mentioned in the Bible, but in several different contexts. There was a Phoenician whaling industry on the coast of Palestine in ancient times and the whale they pursued was the Sperm Whale shown here.





37. The "Feeble Folk," or coney, of the Bible were the strange little hoofed animals related to elephants, and known to us as hyraxes.





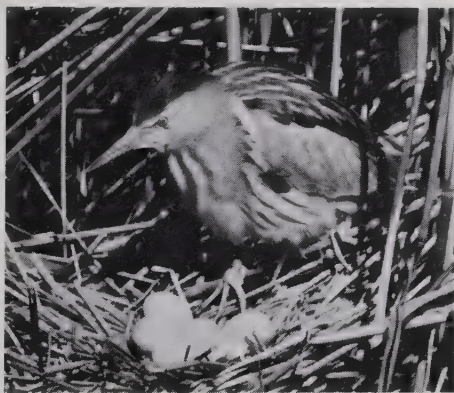
39. There are two species of ostrich. One at least was common in the Biblical lands in early days.

40. Pelicans are thought of—and rightly—as being seacoast divers for small fish. However, they delight in inland lakes, and especially in desert areas, both in the Orient and in our West.





41. The Heron of the Mediterranean is the common species of Europe.



42. Bitterns are mysterious birds in that they are almost perfectly camouflaged but make strange ghostly noises. They appear to have greatly impressed the ancients.

43. Storks are still common features of the Holy Land. Their migratory passages through various countries may have caused their association with human birth.



44. There is much doubt as to whether the swan is actually implied by certain passages in the Bible. Swans were and are indigenous to the area, and they may have been prime game.





45. Kites form a numerous group of small Birds-of-Prey and some are still very numerous in the Bible lands, where they prey on rodents and other small pests.

46. The Golden Eagle has ever been the royal bird of empires. The Ancient Hebrews regarded it in two separate lights—as a symbol of freedom and majesty; and as the national symbol of the hated nations of Mesopotamia.





47. There are at least four quite distinct kinds of vultures found in Palestine and the adjacent countries. This Griffon Vulture was photographed in Israel.

48. Lammergeiers are the largest of the Old World vultures though they are in themselves rather distinct. They are possibly the highest-flying of all birds and awed the ancients.





49. The Osprey is an almost universally distributed fish-eating eagle. It is also one of the most graceful birds in flight.



50. Of hawks and falcons there are many species indigenous to the Mediterranean and Arabian areas. Perhaps the best known is the Peregrine Falcon (or Duck-Hawk), trained since time immemorial to hunt small game for man.



51. There is no doubt that the peacock of India was well known to the early Hebrews. It was regularly imported via Mesopotamia and seems to have been kept as an ornamental pet and for food.



52. There are at least two quite distinct kinds of partridges found in the Palestinian area. One is the Red-legged, the other the Sand. This is the Sand partridge.



53. The tiny Quail (*Coturnix coturnix*) would seem to have suffered the most appalling fate of all animals. For centuries it has migrated annually for great distances but seems always to have been netted by men as food, every time it moved.



54. The origin of the Domestic Fowl—obviously a direct descendant of the wild Jungle Fowl of the Orient—is lost in the mists of prehistory. The Egyptians had them and so did the Israelites.



55. There are many species of cranes distributed throughout the world, and all migrate north-south-to-north annually. The Common Crane of Eurasia (*Grus grus*) passes through Palestine twice a year.



56. The Lapwing is not known to Americans. It is a form of plover common to most of Eurasia. A beautiful bird with a distinctive down-sweeping crest, it is a common marsh bird of Eurasia.



57. What we call the "common pigeon" is really the Rock Dove (*Columba livia*) of the rocky crags of Europe. It has been semi-domesticated since time immemorial, and has been spread all over the world. Today, it comes in dozens of exotic forms. The bird shown here is called a pigeon in Israel today.

57. "The voice of the turtle" in the Bible meant, in actual fact, the cooing of the Turtle Dove (*Streptopelia turtur*) which, like the Rock Dove, was domesticated by man in very ancient times.



58. Many species of cuckoos are distributed almost all over the world. The commonest in western Europe and the Mediterranean is a bird that "parasitizes" other birds, forcing them to rear its young. This shows small foster parent feeding young cuckoo.



59. There are several species of owls in the eastern Mediterranean area and the ancient peoples of that region were much impressed with their strange nocturnal and, to us, curious habits. This is an Eagle Owl (*Bubo bubo*).

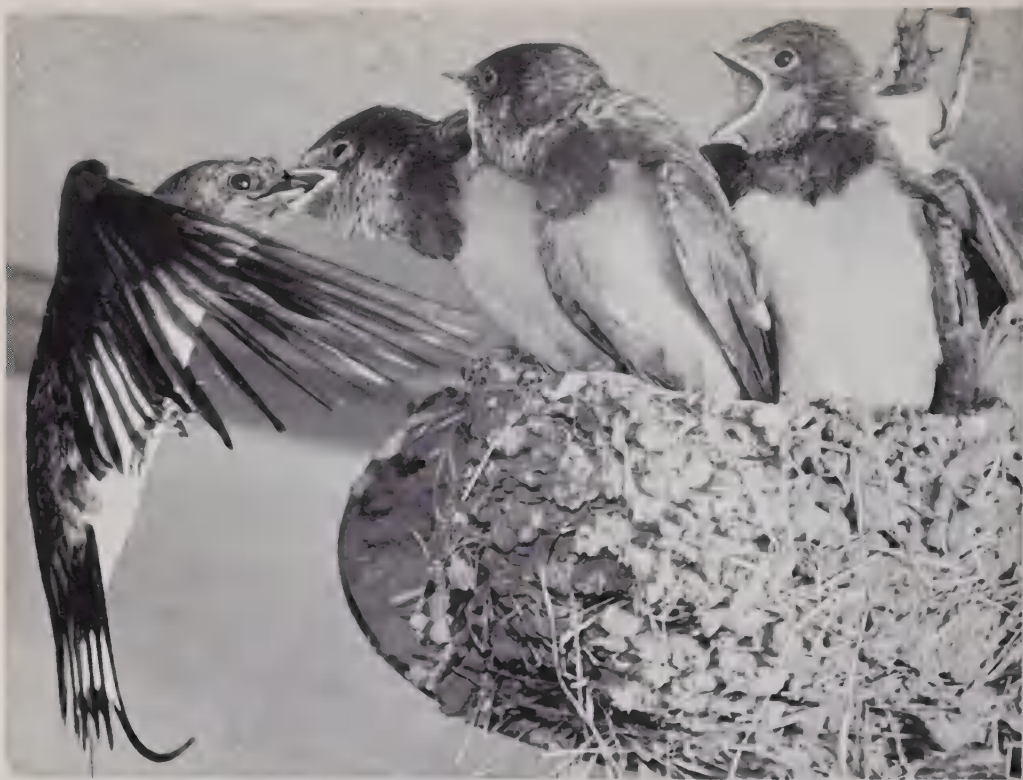


60. The Hoopoe (*Upupa epops*) is a beautiful, perky, but somewhat extraordinary bird. The Hebrews did not like its habit of foraging in garbage dumps.



61. The Raven is often said to be the "Top Bird," in that it is the largest and most aggressive of the crow family that, in turn, appears to head the list of all living birds.





62. The Common Swallow of the Mediterranean is a charming little bird (*Hirundo rustica*) that since time immemorial has nested in and on the houses of men. All the ancients felt kindly toward swallows.

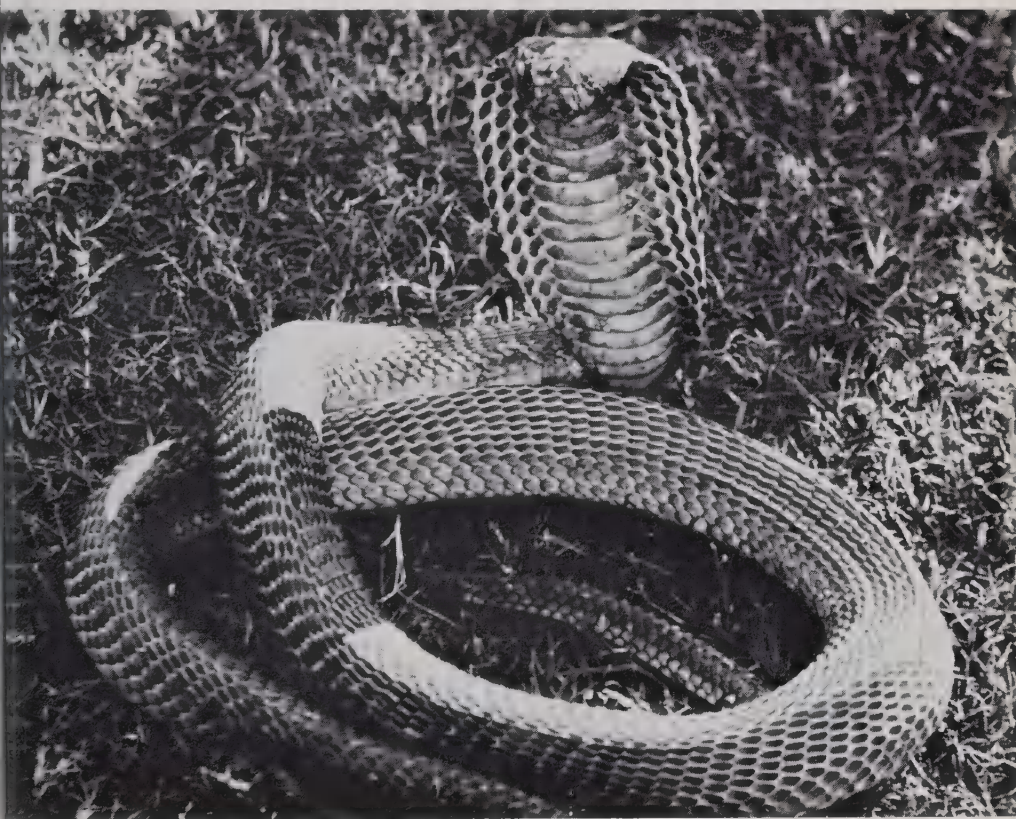


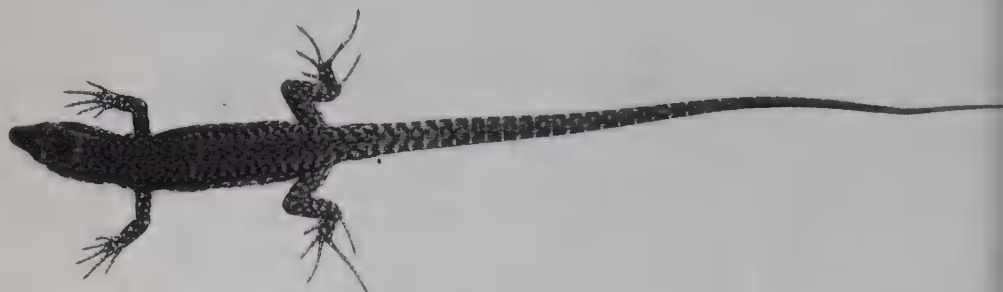
63. It seems that sparrows, of some kind, are indicated in the Bible in several passages. There are dozens of different kinds found all over the world, but the so-called "English House Sparrow"—actually a weaver-finch—is the best known. They do occur in Palestine today.



64. The question of the "viper" of the Bible is a difficult one to answer. There are several genera of these snakes (*Vipera*, *Cerastes*, *Pseudocerastes*, etc.) found in the Bible lands. They are today, and always have been, a considerable menace to travelers in the dry areas, especially travelers without shoes or wearing sandals.

65. There has been much debate as to just what the "asp" was in the early English translations of the Bible. It is now generally agreed that it was, basically, the Egyptian Cobra (*Naja haje*).





66. It seems that some lizard (or lizards) was intended by a few passages in the Bible. There are many forms of mere "lizards" found in the area. This is *Lacerta muralis*, one of the common forms.

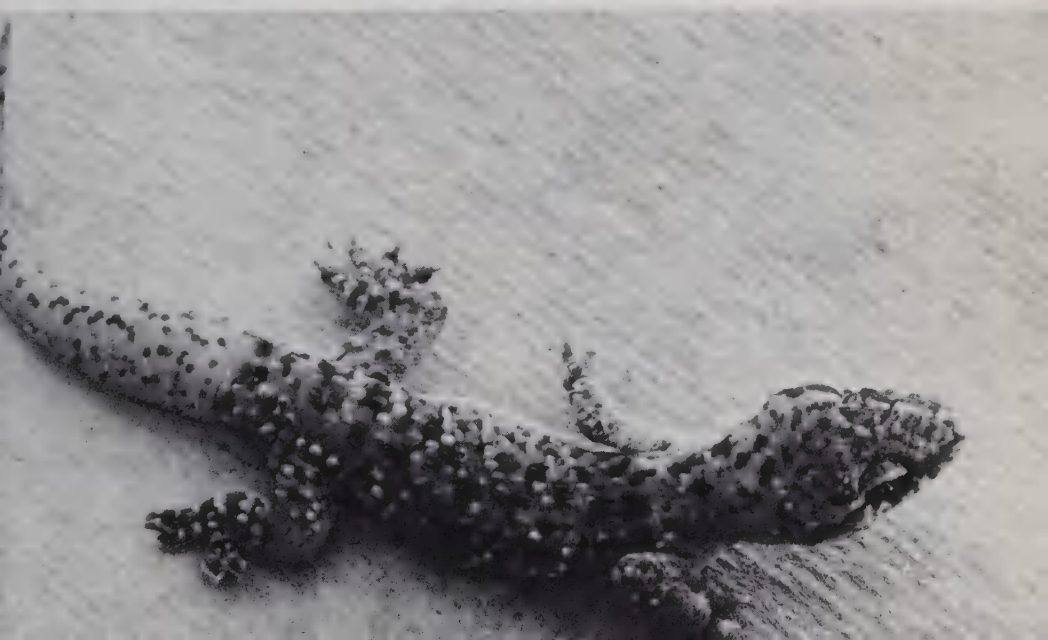
66. Skinks are, to the average non-specialist, lizards but they are of a very special type. Mostly they dig in sand, are nocturnal, and move very swiftly.





67. One species of true Chameleon is found in the Palestinian area. This is known as *Chameleon communis*. It does change color to a limited extent and this greatly impressed the people of old.

68. There is a gecko common to the Near Eastern region. These animals are lizards but of a very strange type. They can climb up a glass window and walk upside-down on a ceiling.





69. The Nile Crocodile (*Crocodylus niloticus*) was, and still is, a most fearsome beast that accounts for many human lives in Africa. In ancient times, it was very prevalent in the lower Nile and well known to the Hebrews.



70. There are, of course, many kinds of frogs indigenous to the Egypt-to-Armenia area. One of the commonest is what is called in Europe the Common Frog (*Rana esculenta*).

71. "Fish," per se, become of importance in the New Testament. Just which fish were referred to is not known but the Carp has played a prominent part in Hebrew and Christian symbolism.





72. Bees and the honey they provided were an important aspect of the economy of the peoples of the ancient world. In the Bible lands, this appears to have been collected mostly if not entirely from wild bees' nests.

73. The references to the Hornet may seem strange to Americans. The animals referred to by this name, in English, are not the same as those found in the New World. This is a True Hornet, a kind of huge "yellow-jacket."





74. Ants are as widespread and as numerous of kind in the Bible lands as elsewhere. Their industrious habits have always intrigued thinking men.



75. It is highly probable that the "moths" referred to in the Bible were, above all, the Clothes Moth, which indeed does "corrupt" by eating woolen and other clothes.

75. The larva—or caterpillar—of the Clothes Moth is the real destroyer of clothing and other materials. It makes a sort of "sleeping-bag" for itself.





76. Again, there are innumerable species of flies (i.e., Two-winged or True Flies—*Diptera*) in the eastern Mediterrean area, but there, as elsewhere, the Common Housefly (*Musca domestica*) is predominant and a great pest as a disease carrier, and most notably of eye diseases.



77. Several species of mosquitoes are found in Palestine, including the common *Culex* and the yellow-fever carrier *Aedes*. The first British translators of the Bible sometimes used the name "gnats" for these insects, an English term that covers many small kinds of pestilential insects.

78. Fleas have been a scourge to man since he started living in permanent encampments and houses. In some marvelous way, the Ancient Hebrews seemed to have sensed that they were connected with disease.



79. The body lice that infested men before our modern age of strict bodily hygiene often multiplied to such proportions that clothing became almost intolerable. The Hebrews were pioneers in the formulation of hygienic counter-measures.



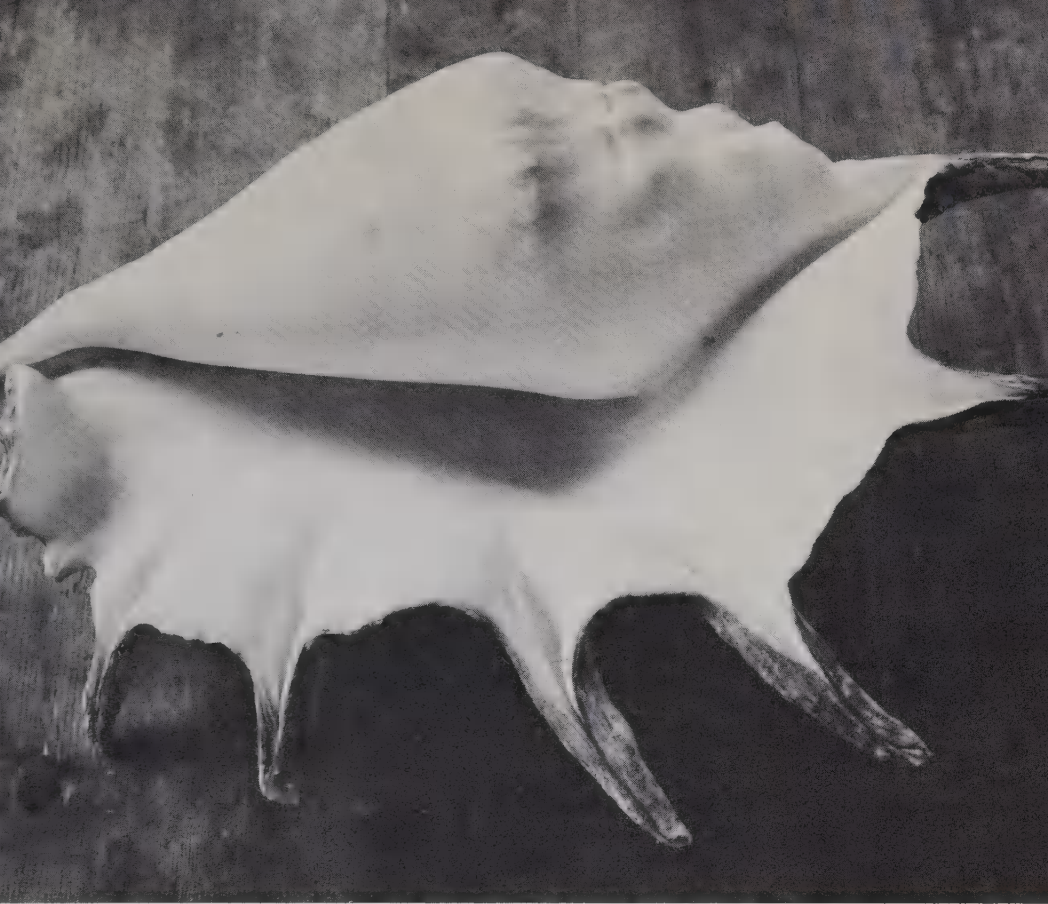


80. Locust plagues swept over the Biblical lands in ancient times as they do today. The country was also sometimes ravished by plagues of mere grasshoppers.

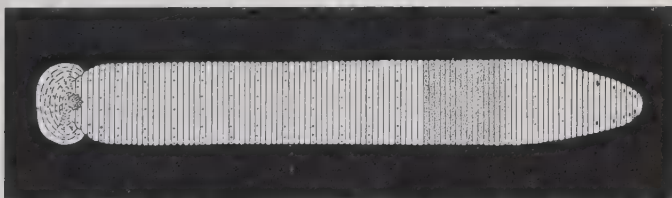
81. The spider seems to have been somewhat respected by the Hebrews as an apparently intelligent destroyer of noxious insects. There are many species found in Palestine.



82. Several species of scorpion are found in Palestine. It has been known from time immemorial that all are potentially hurtful and some highly dangerous.



83. Shells, as opposed to what we call generally "shellfish," are mentioned in the Bible. Ancient Israel, however, was not a coastal nation and shells were looked upon as ornaments.

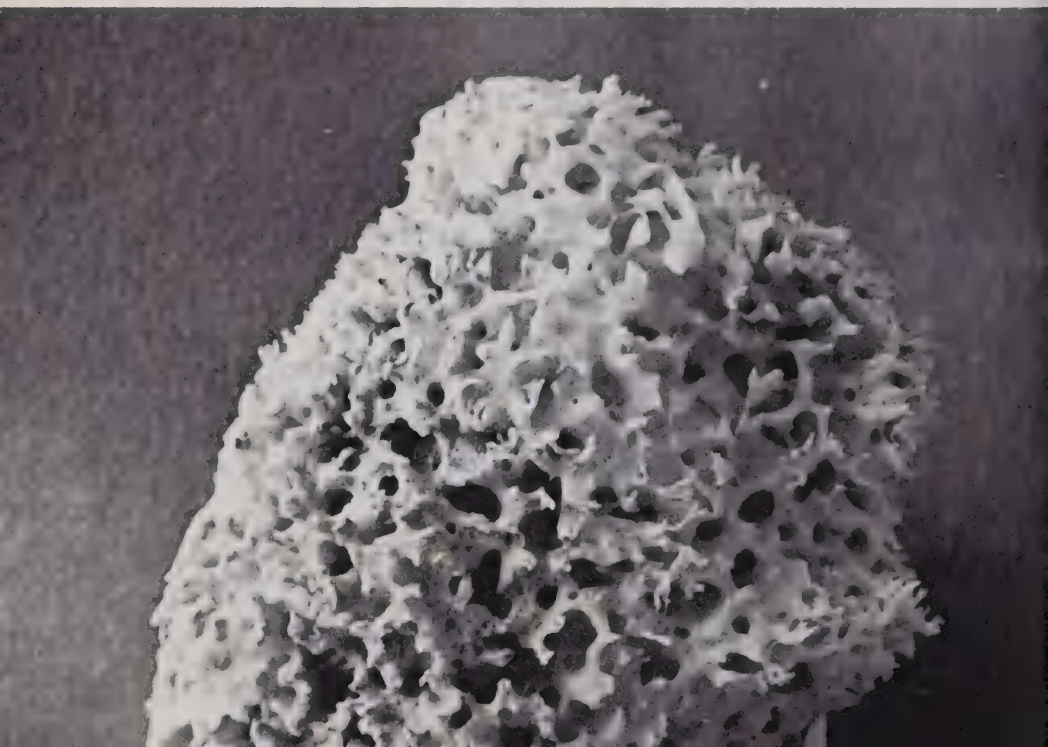


84. The Horse Leech (*Haemopsis sanguisuga*) is mentioned in the Bible and was doubtless well known as an unwelcome inhabitant of wells and water holes.



85. This is the species of coral mentioned in the Bible, according to modern Israeli scholars. It probably came from the Indian Ocean.

86. This is an example of the type of sponge apparently used commercially in ancient times and which would have been used to offer vinegar to Christ on the Cross.



Chapter 7

Mammals of the Bible

[The scientific names of the domestic animals are after E. Laurence Palmer, *FIELDBOOK OF NATURAL HISTORY*, 1949, and F. E. Zeuner, *A HISTORY OF DOMESTICATED ANIMALS*, 1963.]

UNGULATES

<i>Equidae</i>	1. Horse	Sus	<i>Equus caballus</i>
	2. Mule	Pered	—
	3. Ass (Donkey)	Chámôr	<i>Equus asinus</i>
	3. Onager (Wild Ass)	Arodh	<i>Equus hemionus onager</i>
<i>Suidae</i>	4. Wild Boar	Chazir b'er	<i>Sus scrofa scrofa</i>
	5. Swine	Chazir	<i>Sus scrofa</i> (var: <i>domestica</i>)
<i>Hippopotamidae</i>	6. Hippo	Sus ha-yorm	<i>Hippopotamus amphibius</i>
<i>Camelidae</i>	7. Camel	Gamal	<i>Camelus dromedarius</i>
<i>Cervidae</i>	8. Red Deer	Horah-yoal	<i>Cervus elephus</i>
	9. Fallow Deer	Yahmur (?)	<i>Dama dama</i>
<i>Bovidae</i>	10. Aurochs	Re'em	<i>Bos primigenius</i>
	11. Cattle	Elef, Abbir	<i>Bos taurus</i>
<i>Antelopinae</i>	12. Bubal	Yahmur	<i>Alcelaphus buselaphus</i>
	13. Addax	Dishon	<i>Addax nasomaculatus</i>
	14. Oryx	Têo	<i>Aegoryx algazel</i>
	15. Gazelles	Tsvi	<i>Gazella arabica</i> , <i>G. dorcas</i>
<i>Ovidae</i>	16. Sheep	Tzon	<i>Ovis aries</i>
	17. Aoudad	Zemer	<i>Ammotragus lervia</i>
<i>Caprinae</i>	18. Ibex	Ako	<i>Capra nubiana</i>
	19. Goat	Ya'el	<i>Capra hircus</i>

CARNIVORES

<i>Felidae</i>	20. Lion	Ari	<i>Panthera leo</i>
	21. Leopard	Namer	<i>Panthera pardus</i>
	22. Cat (Domestic)	Chatul	<i>Felis domesticus</i>
<i>Ursidae</i>	23. Bear	Dob	<i>Ursus syriacus</i>
<i>Canidae</i>	24. Wolf	Zeeb	<i>Canis lupus</i>
	25. Dog	Keleb	<i>Canis familiaris</i>
	26. Jackal	Than, Iyyim	<i>Thos aureus</i>
	27. Fox	Shu'al	<i>Vulpes aegyptiaca</i>
<i>Hyaenidae</i>	28. Hyena	Zabua	<i>Hyaena hyaena</i>
<i>Mustelidae</i>	29. Weasel	Choled	<i>Mustela</i> sp., <i>Poecilictis</i> sp.
	30. Badger	Takhash	<i>Meles taxus</i>

PRIMATES

31. Ape	Kof	(unknown)
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BATS

32. Bat	Atellef	(numerous)
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RODENTS

33. Mouse	Akbar	<i>Mus musculus</i> and others
34. Mole-Rat	Chephor- peroth	<i>Spalax</i> sp.

LAGO-
MORPHS

35. Hare	Arnebeth	<i>Lepus syriacus</i>
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PROBOSCID-
EANS

36. Elephant	Pil	<i>Elephas indicus</i> , <i>Loxodonta</i> spp.
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HYRAXES

37. Hyrax	Shāphān	<i>Procavia syriaca</i>
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CETACEANS

38. Whales	Tanninim	(Larger whales)
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We will now discuss the animals listed above one at a time, and in the particular sequence in which they are arranged in that list. This is, in scientific parlance, their systematic order, the method adopted for the classification of all animals and plants; it is the only one which brings like animals together, and thus as far as possible represents relationships. The order is roughly a descent from the most highly evolved in the sense of complexity to ever more simple forms. (The mammals come first.)

It was once customary to start the mammals with the Great Apes, but the modern findings of comparative anatomists have shown that the so-called Primates (lemurs, monkeys, and apes) are really very primitive, generalized forms. They are in many respects not far removed from the basic mammalian plan. On the other hand, animals that have hoofs (known as the *Ungulata*) are very specialized. Thus most modern systematic accounts of the mammals either begin with the Ungulates and end with the Platypus, or the reverse, for such over-all descriptions may run either one way or the other without loss of clarity. We begin with the hoofed mammals.

HOOFED MAMMALS (Superorder, *Ungulata*)

The Ungulates are entirely adapted to life on land, with toes which are in most cases enclosed in solid, horny hoofs. A few forms, however, are provided with broad, flat nails. In all living members of the order the number of functional toes is reduced from five to four, three, two, or even one. Although a few generalized forms are omnivorous, all of the more specialized Ungulates feed strictly on vegetation. To facilitate

crushing of leaves and branches, the cheek teeth are equipped with broad crowns and often with a complex system of ridges. Many members of the order are characterized by the development of horns. As will be seen, these horns vary greatly in both size and shape, and very often are found only on the male members of the species. Ungulates are divided into two very unequal major groups according to whether they have an odd or an even number of toes. The former are called the *Perissodactyla* and the latter the *Artiodactyla*. (These long words mean odd and even number of toes, in a Latinized form of Greek.) The first group today contains only the Rhinoceroses, the Tapirs, and the Horse Tribe.

This tribe contains the true horses, both wild and domestic, the donkeys or asses, and the zebras. The horse and the ass have probably played a more important role in the history of man than any other animals.

THE HORSE FAMILY (*Equidae*)

The chief characteristic that sets this group apart from other mammals is that in all existing forms the number of toes on each foot is reduced to one. This single toe, which in the fore-leg corresponds to the human middle finger and in the hind-leg to the middle toe, is supported on the end of a long cannon bone. In most forms, small splints on either side of the cannon bone are the remnants of the digits on either side which have been lost in the process of evolution. The animals are well adapted for grazing, and in the wild state they travel in large groups over open plains and grasslands.

1. Horses

“And they brought their cattle unto Joseph: and Joseph gave them bread *in exchange* for horses, and for the flocks, and for the cattle of the herds, and for the asses: and he fed them with bread for all their cattle for that year” (Gen. 47:17).

“And they brought every man his present, vessels of silver, and vessels of gold, and garments, and armour, and spices, horses, and mules, a rate year by year” (I Kings 10:25).

“And David took from him a thousand chariots, and seven thousand horsemen, and twenty thousand footmen: David also houghed all the chariot *horses*, but reserved of them an hundred chariots” (I Chron. 18:4).

“Hast thou given the horse strength? hast thou clothed his neck with thunder? Canst thou make him afraid as a grasshopper? the glory of his nostrils *is* terrible. He paweth in the valley, and rejoiceth in *his* strength: he goeth on to meet the armed men. He mocketh at fear, and is not affrighted; neither turneth he back from the sword. The quiver rattleth

against him, the glittering spear and the shield. He swalloweth the ground with fierceness and rage; neither believeth he that *it is* the sound of the trumpet. He saith among the trumpets, Ha, ha; and he smelleth the battle afar off, the thunder of the captains, and the shouting" (Job 39:19-25).

"An horse is a vain thing for safety: neither shall he deliver *any* by his great strength" (Ps. 33:17).

"I have compared thee, O my love, to a company of horses in Pharaoh's chariots" (Song of Sol. 1:9).

Horses are named 153 times in the Bible, horsemen are named 61 times, horseback 5 times, horsehoofs once. Several Hebrew words are used by the different Biblical writers to signify the horse representing the different qualities of the animals just as our words do today; e.g.: "charger," "pony," "mare," etc.

The chief distinction of the horse in Biblical days lay in its value for purposes of war. Not only was it splendid for riding but it was also necessary for pulling the heavy, springless war chariots. Naturally, these two functions required different kinds of animals. This difference is clearly revealed in Scripture, for the Hebrews used the word *Sus* for chariot horses and *Parash* for cavalry horses.

It is interesting to note that almost all of the Scriptural references to the horse refer to its functions in war. There is a surprising lack of detail about the animal, particularly concerning its personal qualities. It is remarkable that even the Book of Proverbs, which is so rich in the description of various animals, makes very little mention of the horse.

Early in the Israelites' history, they were prohibited by Mosaic law from the breeding of horses, but the demands of war caused both David and Solomon to import horses from Egypt and to breed them, thus disregarding the command against a plurality of horses just as they did the one against a plurality of wives.

Horses as a group were evolved in North America, but the original habitat of the wild horses that gave rise to the domesticated breeds remains controversial. The majority of naturalists hold that the horses of Mesopotamia, Palestine, and Egypt originated somewhere in Central Asia. It is thought that the horse then spread eastward to Mongolia and the northern plains of China; southwestward into Persia, India, and Arabia, whence it was taken by man into Egypt and North Africa. The same type of horse also appeared at an early date in Greece and then fanned out along the northern shores of the Mediterranean. Western Europe had its own species. It was not until about the third millennium B.C. that the horse was first domesticated, probably in southwestern Siberia. The first historical record is on a Babylonian tablet of the period of Hammurabi, about 2100 B.C., and the horse is referred to as "the ass

from the East." Horses are also depicted in some of the cave paintings discovered in southern France dated thousands of years before this, but these were unquestionably wild horses, like the other beasts shown in the cave paintings. Domestication took place independently in three areas: southwestern Asia (the Tarpan); Mongolia (Przewalski's Horse); and western Europe (the European Wild Horse). Ancient Chinese records suggest that the horse was first tamed there as an addition to the food supply.

The shepherd kings of the Hyksos Dynasties probably brought the horse to Egypt. The Egyptians thus already had the horse when the Children of Israel moved to Egypt.

When the Romans conquered Britain, they found a native breed of horse already on the island, with which their heavier horses interbred. Some authorities contend that the Exmoor pony is a descendant of the original British stock, although it is generally considered that other blood, either by accident or by design, was introduced from time to time. William the Conqueror's horse was of Spanish blood, while chargers of various types were ridden by his men. When the Crusaders returned from the Holy Land they brought further new blood, including the Arab, and history relates that Charles II sent emissaries abroad to get new stock for the royal stud.

As a result of these centuries of selective breeding from a wide range of mixed stock—the best available from many different countries—Britain ultimately produced the great variety and high quality seen today, from the Shire horse, standing over 17 hands and weighing a ton, to the Shetland pony of 8 or 9 hands. (The "hand" used by horsemen to determine size measures 4 inches.)

Despite the inroads of mechanization, the horse is used even today for a great number of purposes—for work, for pleasure, and for ceremonial occasions.

The breed distinctions in horses, apart from the four main breeds of heavy draught horses—the Shire, Clydesdale, Suffolk Punch, and Percheron—are not as definite as those typical of the cows. Even the Thoroughbred, which is a definite variety bred for speed, is found in considerable variation in both color and size. The same applies to Hackney horses and Hunters.

The word "pony" is so vague as to be almost meaningless, since it is commonly applied to a whole series of small horses ranging from a tiny Shetland to a polo pony standing nearly 5 feet high. Some authorities in the field insist that no less than 8 distinct types are recognized by serious horse breeders—namely, Highland, Dales, Shetland, Fell, Dartmoor, Exmoor, New Forest, and Welsh. The Welsh pony is probably the strongest animal in the world in proportion to its size, reputedly

able to pull 27 times its own weight. (An elephant is estimated to be able to haul 4 times its own weight.)

2. Mule

"And these *are* the children of Zibeon; both Ajah, and Anah: this *was that* Anah that found the mules in the wilderness, as he fed the asses of Zibeon his father" (Gen. 36:24).

"And the servants of Absalom did unto Amnon as Absalom had commanded. Then all the king's sons arose, and every man gat him up upon his mule, and fled" (II Sam. 13:29).

"And they brought every man his present, vessels of silver, and vessels of gold, and garments, and armour, and spices, horses, and mules, a rate year by year" (I Kings 10:25).

"Be ye not as the horse, *or* as the mule, *which* have no understanding; whose mouth must be held in with bit and bridle, lest they come near unto thee" (Ps. 32:9).

"They of the house of Togarmah traded in thy fairs with horses, and horsemen, and mules" (Ezek. 27:14).

"And so shall be the plague of the horse, of the mule, of the camel, and of the ass, and of all the beasts that shall be in these tents, as this plague" (Zech. 14:15).

The mule is named 22 times in the Bible, although it is mentioned only once before the time of King David.

The mule is the result of crossing a jackass and a mare. This hybrid makes a most useful animal, combining the size and strength of the horse with the patience, endurance, and sure-footedness of the donkey. The production of mules goes back to prehistoric times; the crossbreeding is believed to have been tried very soon after the domestication of the horse. The Greeks and Romans used mules extensively for centuries. The animals seem to thrive best in hot, dry climates.

The mule was held in high esteem by the Israelites. It was not long after it became known in the Holy Land that it superseded the ass as a riding animal for princes and kings and other people of rank.

Despite its use as a riding animal for royalty, the mule was still employed for the mundane task of transporting burdens. These divergent roles, however, can be explained by the different types of mules employed for each task. A special and costly type of handsome mules, probably much like those of Andalusia, was reserved for the saddle, while the smaller and less beautiful mules were employed as beasts of burden. Even today mules are quite common in the Bible lands as work animals, particularly for simple farming.

Mules have no offspring. They have been described rather cynically

as "without pride of ancestry or hope of posterity," inasmuch as they are sterile in both sexes. Some ancient writers have made references to fertile mules, and similar claims have been made by others from time to time, but they are not generally accepted. Mules must be bred from the male ass and a mare; when the sexes of the parents are in the opposite order, the offspring is of little value because of its inferior size, and is called a "hinny."

Mules have long enjoyed a reputation for obstinacy, but the Bible, surprisingly, makes no mention of the trait.

3. Ass

"And if a man shall open a pit, or if a man shall dig a pit, and not cover it, and an ox or an ass fall therein; The owner of the pit shall make *it* good, *and* give money unto the owner of them; and the dead *beast* shall be his" (Exod. 21:33-34).

"Speak, ye that ride on white asses, ye that sit in judgment, and walk by the way" (Judg. 5:10).

"And he had forty sons and thirty nephews, that rode on threescore and ten ass colts: and he judged Israel eight years" (Judg. 12:14).

"For vain man would be wise, though man be born *like* a wild ass's colt" (Job 11:12).

"A whip for the horse, a bridle for the ass, and a rod for the fool's back" (Prov. 26:3).

"The oxen likewise, and the young asses that ear the ground, shall eat clean provender, which hath been winnowed with the shovel and with the fan" (Isa. 30:24).

The ass was a very valuable animal in Biblical cultures. The Bible describes both the domesticated and the wild ass, the former being useful as a work animal and the latter, known as the Onager, as a hunter's prize.

The origin of asses found in Palestine is uncertain. Probably they derived from the African rather than any Asiatic wild form. It is interesting to note that Webster's Dictionary suggests that the word "ass" may be of Semitic origin from the Hebrew word *athon*.

Asses were domesticated even earlier than horses or camels. Monuments have been found from the early Sumerian civilization, about 4200 B.C., which depict the ass. On the whole, the Eastern ass is a more graceful and handsome creature than the one found in America and Western Europe.

The possession of asses was a mark of a man's wealth in Biblical days. In determining the riches of an Israelite, asses had the same rank as other domestic animals such as sheep, cattle, camels, and goats. Their value consisted in their uses as burden bearers, for riding, and as a

source of food. Asses were employed to carry the household goods when the nomadic peoples of the Near East changed location. Asses also carried a heavy work load by drawing plows, raising water from the wells, and turning millstones to grind the grain.

The ass was used as a riding animal and men of wealth would ride the superior asses. White asses were considered to be the swiftest and strongest, and therefore were greatly prized. Men of rank such as judges rode on white asses (Judg. 5:10).

She-asses were valuable for their production of the young and for milk. Asses' milk has always been a common food in the Holy Land, and is thought to be particularly beneficial for people with tubercular, scrofulous, and dyspeptic disorders.

That the ass was a highly prized beast in Biblical Palestine is evident from the fact that it is mentioned over 130 times in the Scriptures, and also from the fact that Hebrew, a language not noted for its extensive vocabulary, has a number of words to designate the beast, depending on color, age, sex, etc. The most common of these names is *hámôr*, meaning "reddish," the most common color of the Eastern ass.

An early custom which still prevails is to paint the most shapely and valuable donkeys in stripes of various colors.

In many parts of the Near East the pedigrees of the best breeds of asses are carefully preserved.

The customary mode of riding the ass was to place a cloth on the animal's back, on which the owner then sat. If an entire family was traveling, the women and children rode while the father walked alongside. This has been popularized by Christian painters in depicting the flight of the Holy Family into Egypt.

According to Flavius Josephus, the Jewish historian, the ass was used in the Near East in the threshing of wheat.

From both the Scriptures (Isa. 21:7) and Greek writers we learn that part of the Persian and probably also the Syrian cavalry used asses for war. Nothing of this sort existed among the Hebrews, where the animal was retained only for peaceful uses; in fact, it was a symbol of peace just as the horse was a symbol of war.

The ass was considered "unclean" by the early Jews and the eating of its flesh was forbidden by law. However, in times of famine, necessity sometimes took precedence over the law, for we find in II Kings 6:25 that during the reign of Joram, when Benadad laid siege to Samaria, the head of an ass was sold for 80 pieces of silver—more than twice what Judas received for Christ.

The names for the wild ass are found in the Old Testament. These are *péré* and *arodh*. It is not known if they refer to two species, or if one is the original Hebrew and the other Aramaic. The wild ass or Onager,

which is larger and more shapely than the domestic, is one of the most untamable of animals. It survives today only in northern Iran and Afghanistan.

THE PIG FAMILY (*Suidae*)

The pigs or swine make up a very familiar group that differs in many respects from the other Ungulates. Probably their most conspicuous characteristic is a truncated mobile snout, terminating in a disk-shaped surface on which the nostrils are located. The terminal disk is supported by an additional small, separate bone (called the prenasal) at the end of the skull. Although each foot is composed of four completely developed toes, the middle pair are the largest and most functionally important. Their inner surfaces are flattened and have the appearance of a cloven hoof. Most swine have large tusks in both jaws which grow continuously throughout life. The tusks of the upper jaw are unique in that they curve upward instead of pointing downward, as in other animals.

4. *The Wild Boar*

"The boar out of the wood doth waste it, and the wild beast of the field doth devour it" (Ps. 80:13).

The wild boar is specifically referred to only in this one passage from the Psalms. It is used figuratively to represent a destructive foe. The word "beast" in this passage probably also refers to the boar to complete the parallel structure of the verse.

The boar is probably the best possible example of a destructive animal. A party of wild hogs can destroy an entire vineyard or a field of crops in a single night. They devour, trample, and ravage everything within reach.

Wild boars were once common throughout Palestine, and they were particularly abundant in the mountainous regions of Lebanon and Anti-Lebanon, the cavernous Jordan Valley, and in wooded sections such as Mount Tabor. The boar population has been greatly reduced in Palestine since the forests have been cut away and the land more widely cultivated.

The law of the Old Testament forbade the Jews to eat swine flesh, but in the early days the people had eaten it. The flesh of the wild boar is a superior meat to that of tame swine. In later times, as indicated in the New Testament, some Jews probably violated this law by eating swine, and it appears that some even raised them.

5. *Swine*

"And the swine, because it divideth the hoof, yet cheweth not the cud, it is unclean unto you: ye shall not eat of their flesh, nor touch their dead carcase" (Deut. 14:8).

"As a jewel of gold in a swine's snout, so is a fair woman which is without discretion" (Prov. 11:22).

"Which remain among the graves, and lodge in the monuments; which eat swine's flesh, and broth of abominable things is in their vessels" (Isa. 65:4).

"He that killeth an ox is as if he slew a man; he that sacrificeth a lamb, as if he cut off a dog's neck; he that offereth an oblation, as if he offered swine's blood; he that burneth incense, as if he blessed an idol. Yea, they have chosen their own ways, and their soul delighteth in their abomination" (Isa. 66:3).

"Give not that which is holy unto the dogs, neither cast ye your pearls before swine, lest they trample them under their feet, and turn again and rend you" (Matt. 7:6).

"But it is happened unto them according to the true proverb, The dog is turned to his own vomit again; and the sow that was washed, to her wallowing in the mire" (II Pet. 2:22).

The word "swine" is used 20 times in Scripture, although the words "hog" and "pig" are never used. It is difficult to understand the intensity of the ancient Hebrews' hatred of swine. The older, stricter Jews would not even mention the name of the animal, but would always substitute in its place the term "the abomination."

The Israelites considered themselves polluted if they were even touched by a swine's bristle. Since the Jews hated the swine so fiercely, it seems strange that the latter was found in such abundance in Palestine. One would have thought they would have been exterminated, but instead they roamed the plains and the hills of the Holy Land in huge herds. At times they were even herded by the less strict Jews.

It has been a general belief in countries with hot climates that the flesh of swine is unclean and may be a direct cause of various diseases. Leprosy was one disease which many attributed to the eating of pork.

During the days of the Apocrypha, when Antiochus Epiphanes, the Syrian, had captured the Holy Land, the Israelites were forced to offer swine upon their altars for religious sacrifice and then to eat the flesh. The Greeks, to whom pork was a great delicacy, also forced the Jews to eat swine's flesh in an effort to Hellenize them. Many of the Jews suffered martyrdom for refusing to break their laws by eating pork. The story is told of one mother who saw her seven sons killed for refusing to eat hog's meat, and then was herself martyred for adhering to the ancient laws of her people regarding swine's flesh.

THE HIPPO FAMILY (*Hippopotamidae*)

Of all the Ungulates, the hippopotamus or "river horse" is the best adapted for a partially aquatic life. With their lungs filled with air, their large bulky bodies have a specific gravity exactly equal to that of

water, thus enabling the beasts to float at the surface almost indefinitely. Their nostrils are located on the upper surface of a large, transversely expanded muzzle which bears no trace of the terminal disk found in the *Suidae*. Both the nostrils and ears can be closed at will when the animals are submerged. The feet are equipped with four short, well-developed toes which are partially connected by webs. The hippopotami have rough, enormously thick skin that is devoid of hair, except for a few bristles on the head, neck, and tail.

6. *Hippopotamus*

"Behold now behemoth, which I made with thee; he eateth grass as an ox. Lo now, his strength *is* in his loins, and his force *is* in the navel of his belly. He moveth his tail like a cedar: the sinews of his stones are wrapped together. His bones *are as* strong pieces of brass; his bones *are* like bars of iron. He *is* the chief of the ways of God: he that made him can make his sword to approach *unto him*. Surely the mountains bring him forth food, where all the beasts of the field play. He lieth under the shady trees, in the covert of the reed, and fens. The shady trees cover him *with* their shadow; the willows of the brook compass him about. Behold, he drinketh up a river, *and* hasteth not: he trusteth that he can draw up Jordan into his mouth. He taketh it with his eyes: *his* nose pierceth through snares" (Job 40:15-24).

Bible scholars were once divided as to whether this lengthy passage in Job, the only Scriptural reference to the behemoth, referred to the elephant or the hippopotamus. Both of these animals are thick-skinned creatures known as pachyderms. Today commentators and naturalists agree that the hippopotamus is the animal intended by the word "behemoth."

The passage in Job does not describe an elephant, for the latter does not lie among the reeds and fens, nor does it eat grass like an ox. Also, it seems unlikely that any description of an elephant would fail to refer to the uniqueness of its trunk.

The passage seems to describe a hippopotamus perfectly. The description of the anatomy, place of habitation, and drinking habits all point to a hippopotamus. Furthermore, the Egyptian word for behemoth means "river ox," and the English word "hippopotamus" means river horse.

The hippopotamus is an extremely difficult animal to kill. As indicated in the Scriptural passage, snares are often set in the path of the animal with a spear poised above. When the hippopotamus strikes the rope the spear falls and severs its spinal cord. Another method of killing a hippopotamus is to dig a pitfall at the place where the animal leaves the water at night. The pitfall is camouflaged, and sharp stakes are placed at the bottom.

Excavations in Egypt have revealed that spears were also used to kill

the hippopotamus. Repeated harpooning would eventually weaken a hippopotamus and cause it to bleed to death. Arrows cannot penetrate the thick hide of this mammoth animal, and so are effective only if shot through the eye into the brain.

Though a bulky animal of great weight, the hippopotamus could not be used for food by the Israelites because it was neither cloven-hoofed nor a cud-chewer. Furthermore, it was not found in Palestine.

THE CAMEL FAMILY (*Camelidae*)

The *Camelidae* are represented in the New World by the llamas, and in the Old World by the one- and two-humped camels. Because the camels are well suited to life in dry, desolate areas, they have proved valuable to man as beasts of burden in the deserts of Africa, Arabia, and central Asia. The group is characterized by a relatively large body with long, powerful legs which terminate in two-toed feet. The vertebrae which comprise the neck are greatly elongated in relation to the rest of the body, and the upper lip is split much like that of a hare. The stomach is divided into three sections, the first two of which are equipped with a number of pouches which can be closed by the action of muscles, and which are used to store water. Camels are also able to store up food, which takes the form of large fatty humps on their backs.

7. *Camel*. (*Dromedary*)

"And he entreated Abram well for her sake; and he had sheep, and oxen, and he asses, and menservants, and maidservants, and she asses, and camels" (Gen. 12:16).

"And they sat down to eat bread: and they lifted up their eyes and looked, and, behold, a company of Ishmeelites came from Gilead, with their camels bearing spicery and balm and myrrh, going to carry *it* down to Egypt" (Gen. 37:25).

"Then Zebah and Zalmunna said, Rise thou, and fall upon us; for as the man *is*, *so is* his strength. And Gideon arose, and slew Zebah and Zalmunna, and took away the ornaments that *were* on their camels' necks" (Judg. 8:21).

"And he wrote in the king Ahasuerus' name, and sealed *it* with the king's ring; and sent letters by posts on horseback, *and* riders on mules, camels, *and* young dromedaries . . ." (Esther 8:10).

"His substance also was seven thousand sheep, and three thousand camels, and five hundred yoke of oxen, and five hundred she asses, and a very great household; so that this man was the greatest of all the men of the east" (Job 1:3).

"And their camels shall be a booty, and the multitude of their cattle a

spoil; and I will scatter into all winds them *that are* in the utmost corners; and I will bring their calamity from all sides thereof, saith the Lord" (Jer. 49:32).

The camel, one of the first animals to be mentioned in the Bible, was ranked in importance with sheep, cattle, and asses in Old Testament days. Of the 66 references to the camel, one third list the animal with all or two of these other animals.

Camels were valuable in the Holy Land because of their amazing adaptability to desert life. They are a hardy breed that can stand great privations of food and water. Further value lay in their varied usage. They were used for riding, transporting goods, for agricultural work, and for their products, such as milk, wool, hair, dung, and leather.

Camel trains were the common means of commercial transport between Arabia, Egypt, and Assyria. In fact, the camel is still commonly used in the Near East for desert travel. In Biblical days, Petra, now famous for the grandeur of its ruins, was the center of the caravan routes that crossed the desert to the ports on the Mediterranean, the Persian Gulf, and the Red Sea. Petra lies near Mount Hor, where the priest Aaron died. It was accessible in those days only by camel because of its rugged terrain and narrow passes.

Every land-owning farmer had at least one camel to help him. They were an invaluable source of aid, for they could carry heavy loads of harvested grain, draw the plow, turn the waterwheel for irrigation purposes, and drag the threshing board.

The products of the camel's body had varied uses. The camel's hair was woven into a thick cloth which was used to make heavy mantles for bad weather, cordage, sackcloth, carpets, and tent curtains. The hair of one camel might weigh as much as 10 pounds. The best quality of hair for weaving purposes is found about the hump. The camel's dung, in addition to being used for fuel, is an ingredient in roofing. The milk of the camel is a rich, strong drink that usually is curdled. Butter and cheese are also made from camel's milk.

According to Hebrew law the camel was an unclean animal, and therefore could not be eaten. But many of the neighboring nomadic tribes would eat camels, particularly when stranded on a desert. Water, in addition to food, would be yielded from the dead camel's stomach reservoirs in an emergency.

The name Dromedary, often applied to the Arabian or One-humped Camel as if it were a synonym, denotes only a very special type or breed; a long-legged, lightly built riding camel as opposed to the heavier pack animal. It is interesting to note that this fact was recognized in ancient times and that a distinction is made in the book of Esther, as quoted above.

THE DEER FAMILY (*Cervidae*)

Including such forms as the deer, elk, moose, and reindeer, the *Cervidae* constitute one of the most distinctive groups of mammals. The chief and most obvious characteristic of most species is the annual development in the males of large, branched antlers. Only in the reindeer are they found in both sexes. When fully developed, the antlers are devoid of any covering of skin or horn, and for all practical purposes may be regarded as a mass of dead bone carried for a certain time by a living animal. The end of the muzzle is naked in all species. The *Cervidae* belong to a division of Ungulates known as Ruminants, for they possess certain peculiarities in stomach construction and digestion. The stomach is divided into a series of compartments, some of which are used to store partially chewed food. The food is later regurgitated, rechewed, and finally swallowed into a section of the stomach where true digestion takes place.

8. Red Deer (*Hart and Hind*)

"Notwithstanding thou mayest kill and eat flesh in all thy gates, whatsoever thy soul lusteth after, according to the blessing of the Lord thy God which he hath given thee: the unclean and the clean may eat thereof, as of the roebuck, and as of the hart" (Deut. 12:15).

"Ten fat oxen, and twenty oxen out of the pastures, and a hundred sheep, beside harts, and roebucks, and fallowdeer, and fatted fowl" (I Kings 4:23).

"As the hart panteth after the water brooks, so panteth my soul after thee, O God" (Ps. 42:1).

"My beloved is like a roe or a young hart: behold, he standeth behind our wall, he looketh forth at the windows, shewing himself through the lattice" (Song of Sol. 2:9).

"Then shall the lame *man* leap as an hart, and the tongue of the dumb sing: for in the wilderness shall waters break out, and streams in the desert" (Isa. 35:6).

"And from the daughter of Zion all her beauty is departed: her princes are become like harts *that* find no pasture; and they are gone without strength before the pursuer" (Lam. 1:6).

The hart, or male Red Deer (*Cervus elephas*), is referred to 11 times in the Bible, and it seems evident from these allusions that it was an animal both plentiful and valuable in Biblical days.

Only the hart and not the hind, the female red deer, was listed for food. Although its flesh was probably not as good as that of the Fallow Deer, the Bible reports that it was daily fare at Solomon's royal table.

The Psalmist, in speaking of the hart's panting, employs a word used only one other time in the entire Bible. He was referring to the strange

braying of the hart when it was in an agony of thirst during a drought.

The hart is used in the Song of Solomon to portray the lover of the bride. The animal is probably utilized for such symbolism because of its grace, beauty, and fleetness.

The hind is mentioned 10 times in the Bible. Three of the passages speak of the hind's feet, probably referring to the animal's graceful movements. The writers may also have had in mind the hind's sure-footedness, for she can safely traverse the most rugged mountain terrain. The hind was obviously well respected by the Israelites. Although the hart was allowed as food, the hind was not.

Several names are derived from the Hebrew word for hind, *ayyalah*. Ayalon was the name of one or more cities in Palestine, and it meant "the place of deer." Today a place with a similar name exists only 14 miles from Jerusalem. It is called Yalo and means "doe or wild she-goat." *Ophrah*, meaning hind or fawn, was the name of both a man and two towns (Josh. 18:23, Judg. 6:11). The title of Psalm 22 uses the expression *Aijeleth Shahar*, which meant "hind of the dawn," probably a popular tune which David's psalm was to follow. This phrase refers to the hind's habit of searching for food at the break of day.

9. Fallow Deer

"And Isaac loved Esau, because he did eat of *his* venison; but Rebekah loved Jacob" (Gen. 25:28).

"Now therefore take, I pray thee, thy weapons, thy quiver and thy bow, and go out to the field, and take me *some* venison . . ." (Gen. 27:3).

"These *are* the beasts which ye shall eat: the ox, the sheep, and the goat, The hart, and the roebuck, and the fallow deer, and the wild goat, and the pygarg, and the wild ox, and the chamois" (Deut. 14:4-5).

"And Solomon's provision for one day was thirty measures of fine flour, and threescore measures of meal, Ten fat oxen, and twenty oxen out of the pastures, and an hundred sheep, beside harts, and roebucks, and fallowdeer, and fatted fowl" (I Kings 4:22-23).

The fallow deer is listed in the Bible as one of the chief wild animals that was clean, and therefore available to the Israelites as food. The Hebrew word in the Bible for this animal was *yakmur*. It is not certain that "fallow deer" is really the proper translation, for some scholars feel that other animals were intended. Since the fallow deer was not able to live in the southern regions of Palestine around Sinai because of its need for ample amounts of food and water, it is hardly possible that this was the animal named by Moses. Fallow deer were found only in northern Palestine.

Some scholars have suggested that *yakmur* should be translated as

“roebuck,” but there is doubt as to whether this animal ever inhabited the area. Many Biblical scholars believe that the Bubal, actually a hartebeeste, an antelope also known as the “wild cow” to the Arabs, was the animal intended by the word *yahmur*. The Bubal lived in the arid areas of Egypt, on the border of the Sahara desert, and may then have extended into northern Arabia, the Sinai region and southern Palestine. Therefore, it could have easily been the animal that supplied venison to the Israelites during their wilderness wanderings.

Regardless of what animal was intended, the *yahmur* formed a large portion of the Israelites’ meat diet. It was even part of the daily supply for King Solomon’s table, and apparently was one of the dainties at any great banquet held by the Israelites.

THE OX FAMILY (*Bovidae*)

Comprising the largest and most important group of ungulates, the family *Bovidae* gathers together such animals as cattle, bison, sheep, antelope, gazelles, and goats. As in the *Cervidae*, the most outstanding characteristic of this group is the existence, in the male (and sometimes also in the female), of some sort of horns which, however, differ from those of the deer tribe in both structure and form. The horns are formed by a pair of bony projections from the skull that in life are covered with hollow sheaths of horn which are never branched and not shed. They vary in size and shape from the simple spikes of the duikers to the enormous structures of buffalos and large antelope. In some domestic forms of cattle, sheep, and goats horns may be lacking in both sexes. One tiny antelope and one domestic breed of sheep have four. The *Bovidae* also make up the largest group of ruminating animals. The stomach is divided into four chambers, and the process of regurgitating the food for additional chewing is known as “chewing the cud.”

Subfamily *Bovinae*

These are large, heavy-bodied ruminants with horns in both sexes. The muzzle is broad, naked, and moist; the tail is usually long and tufted. Included are the aurochs, and all other forms of cattle, including the yak, gaur, banteng, and couprey, the buffalos, and the bison.

10. The Aurochs (or *Urus*)

“God brought him forth out of Egypt; he hath as it were the strength of an unicorn: he shall eat up the nations his enemies, and shall break their bones, and pierce *them* through with his arrows” (Num. 24:8).

“His glory *is like* the firstling of his bullock, and his horns *are like* the horns of unicorns: with them he shall push the people together to the ends of the earth: and they *are* the ten thousands of Ephraim, and they *are* the thousands of Manasseh” (Deut. 33:17).

"Will the unicorn be willing to serve thee, or abide by thy crib? Canst thou bind the unicorn with his band in the furrow? or will he harrow the valleys after thee? Wilt thou trust him, because his strength is great? or wilt thou leave thy labour to him? Wilt thou believe him, that he will bring home thy seed, and gather *it into* thy barn?" (Job 39:9-12).

"Save me from the lion's mouth: for thou hast heard me from the horns of the unicorns" (Ps. 22:21).

"But my horn shalt thou exalt like *the horn of* an unicorn: I shall be anointed with fresh oil" (Ps. 92:10).

"And the unicorns shall come down with them, and the bullocks with the bulls; and their land shall be soaked with blood, and their dust made fat with fatness" (Isa. 34:7).

The word "unicorn" is used 9 times in 8 different Scriptural passages, but, as the poet Wordsworth said, "the word unicorn ought to be expunged from our version of the Bible in all places where it occurs." It is an obviously wrong translation of the Hebrew word *re'em*. The one-horned monster of classical mythology had no relation to the animal intended by the Biblical writers under this name. Apparently, the animal concerned was one perfectly well known to the Israelites, for abundant detail of its qualities and habits are given in these passages.

The Jewish Bible translates the word *re'em* as "buffalo," and there is no doubt that this was generally the type of animal intended. Today, nearly all Bible scholars and naturalists are agreed that the animal meant was the Aurochs, Urus, or Wild Ox (*Bos primigenius*) which is now extinct.

The Urus can be distinguished from a modern ox by its curious horns (see picture). Apparently these were often used as drinking vessels by the Israelites, and some were large enough to hold 4 gallons.

The enormous size of the animal caused Julius Caesar to remark in his famous *Commentaries* that "the Uri are little inferior to elephants in size, but are bulls in their nature, color, and figure."

This comparison with the elephant by Caesar was apparently justified, for a curious Rabbinical legend exists which portrays the Urus as being too large to pass through the door of Noah's Ark. Therefore, it was necessary for Noah to tie a rope to the Urus' huge horns and to tow the animal behind the ark.

11. Cattle

"And Abram *was* very rich in cattle, in silver, and in gold. And he went on his journeys from the south even to Beth-el, unto the place where his tent had been at the beginning, between Beth-el and Hai; Unto the place of the altar, which he had made there at the first: and there Abram called on the name of the Lord. And Lot also, which went with Abram, had flocks, and herds, and tents. And the land was not able

to bear them, that they might dwell together: for their substance was great, so that they could not dwell together. And there was a strife between the herdmen of Abram's cattle, and the herdmen of Lot's cattle: and the Canaanite and the Perizzite dwelled then in the land" (Gen. 13:2-7).

"For the children of Joseph were two tribes, Manasseh and Ephraim: therefore they gave no part unto the Levites in the land, save cities to dwell *in*, with their suburbs for their cattle and for their substance" (Josh. 14:4).

"So David and his men went to Keilah, and fought with the Philistines, and brought away their cattle, and smote them with a great slaughter. So David saved the inhabitants of Keilah" (I Sam. 23:5).

"Also the firstborn of our sons, and of our cattle, as *it is* written in the law, and the firstlings of our herds and of our flocks, to bring to the house of our God, unto the priests that minister in the house of our God . . ." (Neh. 10:36).

"I got *me* servants and maidens, and had servants born in my house; also I had great possessions of great and small cattle above all that were in Jerusalem before me . . ." (Eccles. 2:7).

"How do the beasts groan! the herds of cattle are perplexed, because they have no pasture; yea, the flocks of sheep are made desolate" (Joel 1:18).

Many names are used in the Bible to describe the members of the bovine family. In addition to the word "cattle" there are mentioned beeves, bulls, bullocks, calves, cows, fatlings, heifers, and kine. Many different kinds of cattle were spread over the Holy Land in Biblical days. Small, black or brown, short-legged, short-horned cattle were found in the southern part of Judah. This type of cattle easily submitted to the yoke and was prominent in agricultural operations. Along the coast a larger variety was found, and the wild districts east of the Jordan River were populated with a huge, black breed of cattle. The bullock was the most prized member of the bovine family because of its importance for religious sacrifice.

The calf was also greatly valued by the Hebrews. It was used for sacrifice, was important as food, as booty, as a figure in prophecy, and was on occasion even made an object of worship. The calf was also a popular representation of the Deity among the Canaanites, the golden calf that the Hebrews set up when Moses went to receive the Ten Commandments being an example.

There are 48 references in the Bible to the calf or calves. The cow is mentioned 7 times, and its Biblical plural, kine, is mentioned 23 times. Fatlings are named 6 times and heifers are named 20 times. There are 151 references to cattle. Cattle products are also frequently mentioned

in the Bible. Milk is mentioned 48 times, butter 11 times, and cheese 3 times.

Subfamily *Hippotraginae*

The great family *Bovidae* is divided into a number of subfamilies. In addition to the True Oxen (*Bovinae*), there are the Deer-Oxen (*Boselaphinae*), the Twist-horned Oxen or Antelopes, such as the Elands and Bushbucks (*Strepsicerossinae*), and seven others. One of these is the *Hippotraginae* or, literally, "The Horse-Antelopes" which includes the addax, oryx, and sable antelope. They have hairy muzzles and ringed, backward-curving horns in both male and female.

12. *Bubal* (*Hartebeest*)

The Hebrew word *yahmur*, which is used twice in the Bible, both times describing a beast that could be eaten, has puzzled scholars for many years. Modern commentators generally agree that the animal referred to is the Bubal, a rare antelope of North Africa which is a species of hartebeest.

The Bubal was well known to the ancients. They described it, rather accurately, as a cross between a calf and a stag, which, with its thick body, short horns, and drawn-out head, it indeed looks like. It was considered to be a wild cow, thus separating it from the several species of antelope known to the Hebrews. Actually, this classification is a misrepresentation, for despite its strange appearance the Bubal is a full-fledged antelope.

The two mentions of the Bubal are in Deuteronomy (14:5), where it is listed among the hooved animals that could be eaten under the Mosaic law, and in I Kings (4:23) where it is mentioned as having graced the table of Solomon. Many versions of the Bible still use other translations for the word, such as "wild cow" and so on. It is quite likely, though, that the writer of the Bible was not so vague—that he had a specific animal in mind, and probably that animal was the Bubal.

13. *Addax Antelope* (*Pygarg*)

"These *are* the beasts which ye shall eat: the ox, the sheep, and the goat, The hart, and the roebuck, and the fallow deer, and the wild goat, and the pygarg, and the wild ox, and the chamois" (Deut. 14:4-5).

The Pygarg is named in the Bible as one of the clean beasts which could be eaten by the Israelites. The Hebrew word that was translated as "pygarg" is *dishon*, which was left untranslated in the Jewish Bible. However, its literal meaning is either "trader" or "leaper." The *Septuagint*, the Greek translation of the Bible, translated *dishon* as "pygargos." The first English translators used the word "pygarg" in their version.

"Pygarg" has the literal meaning of "white-crouped," and many scholars have therefore felt that the animal intended was a white-rumped antelope because "*croup(e)*" in Old English meant "rump." The most common white-rumped antelope of that day would probably have been the Addax. This graceful animal inhabited North Africa but its range extended into western Asia. Certainly it would have been a familiar animal in Palestine, for it can still be found there in considerable numbers.

It was probably hunted by the same method used to hunt wild bulls: the animal would be chased into a net, and then camouflaged hunters would spring from their hiding places and kill it.

Several persons in the Old Testament had names that were the same as this animal's, or were obviously derived from it. Both *Dishon* and *Dishan* appear often in the Old Testament as proper names. Three of the dukes of Edom, who were descendants of Esau, had these names.

14. *Oryx (Wild Bull, Wild Ox)*

"Thy sons have fainted, they lie at the head of all the streets, as a wild bull in a net: they are full of the fury of the Lord, the rebuke of thy God" (Isa. 51:20).

The Hebrew word *teô* is found twice in the Bible, once being translated as "wild bull" and the other time as "wild ox." The Jewish Bible preserves these renderings, thus affirming the ambiguity of the word. This is a perfect example of the type of mistranslation mentioned earlier. The Hebrew word (*teô*) is quite distinct (from *re'em*) and definitive. The latter definitely applied to the Aurochs or true Wild Ox, though the English translators called it the "Unicorn." Thus, the *teô* must be another animal.

From the expression of Isaiah it is evident that this animal must have been a strong one which demanded the use of nets in catching it. This method of hunting was used only for the larger game. It involved stretching a rope tightly along the ground in some ravine close to the favorite haunts of the animal being hunted. Then a net with a smaller rope was attached along this, and allowed to droop over poles *not* fixed tightly in the ground. When the animal was driven into the net it collapsed upon him, and he became tangled within it. The waiting hunters could then make an easy kill.

Most scholars believe that *teô* meant one of the three large antelope species, namely the leucoryx, or, as it is more commonly called, the White Oryx. This antelope, related to the pygarg discussed earlier, once roamed the entire range of desert land from Persia to the Sahara. In Biblical days, it was common throughout Palestine; but it is probably now extinct there.

Subfamily *Gazellinae*

These are small or medium-sized hoofed animals, which are characterized by narrow teeth, hairy muzzles, and, in most species, ringed horns in both sexes.

15. *Gazelles*

The word "roe" occurs 12 times in the Bible. Eleven of these times it appears as the word *tsebi*, a Hebrew word that the English translated as "roebuck"; and once it is written *ya'alah*, the feminine form, in Hebrew (Prov. 5:19). However, scholars now seem to agree that a gazelle was the animal intended by the Biblical writers. There is real confusion concerning the identity of this animal, again due, for the most part, to the lack of zoological knowledge on the part of the European, and notably the English, translators of the Bible. An animal known as the Roedeer (*Capreolus*) is one, if not the commonest, of the deer of Europe. It is a true deer and its range today extends from Scotland to the Tien Shan and Siberia. It is a woods dweller and it is possible that it may have inhabited the northern Levant coast when that area was forested. However, there is no direct evidence of this. The Roebuck—of which the female is commonly known simply as the Doe, as for all deer—is not an antelope, or even a member of the Bovine family. However, one (possibly two) species of gazelle (*Gazella arabica*) was, in Biblical times, the commonest game animal of Palestine. Even today this species is quite common throughout the desert and steppe areas of the land.

Where the translators say "Roebuck" they mean the male gazelle and this was listed among the clean animals that could be eaten by the Israelite people. The doe was omitted both from the lists of clean animals and the lists of meat served at Solomon's feast. The roebuck, on the other hand, is specifically listed in both instances.

This was one of the most hunted of all game animals. Extremely fleet of foot, they were trapped by various means. They were encircled with nets, driven into enclosures with pitfalls, or forced into narrow valleys and shot with arrows. Later, falcons and greyhounds were trained to hunt them. These learned to delay the gazelles by their feints until the hunter could kill them. Sometimes falcons and greyhounds were used simultaneously.

THE SHEEP FAMILY (*Ovidae*)

The last great family of hoofed animals is that of the *Ovidae*, which means sheep. However, this is divided into two subfamilies; that of the goats (*Caprinae*) and of the sheep (*Ovinae*). There are several inter-

mediate types, and two animals previously grouped with the gazelles—the Saiga and the Chiru—are now associated with the former as the Gazelle-Goats.

Subfamily *Ovinae*

16. *Sheep*

“And Abimelech took sheep, and oxen, and menservants, and women-servants, and gave *them* unto Abraham, and restored him Sarah his wife” (Gen. 20:14).

“And David spake unto the Lord, when he saw the angel that smote the people, and said, Lo, I have sinned, and I have done wickedly: but these sheep, what have they done? let thine hand, I pray thee, be against me, and against my father’s house” (II Sam. 24:17).

“Also king Solomon, and all the congregation of Israel that were assembled unto him before the ark, sacrificed sheep and oxen, which could not be told nor numbered for multitude” (II Chron. 5:6).

“Thou madest him to have dominion over the works of thy hands: thou hast put all *things* under his feet: All sheep and oxen, yea, and the beasts of the field . . .” (Ps. 8:6-7).

“Like sheep they are laid in the grave; death shall feed on them; and the upright shall have dominion over them in the morning; and their beauty shall consume in the grave from their dwelling” (Ps. 49:14).

“Thy teeth *are* like a flock of *sheep that are even* shorn, which came up from the washing; whereof every one bear twins, and none *is* barren among them” (Song of Sol. 4:2).

Sheep occupy the largest space of any animal in the Bible. They are directly referred to, by some name such as ewe, lamb, or ram, or some fact is given concerning them, a total of 742 times. The Israelites were original shepherders of these steppes. Further, the shepherds of those days could have enormous flocks of sheep because pasture was free and unlimited. The animal assumed a vital role in Hebrew culture, bound up indivisibly with the religious, civil, and domestic life of the Israelites.

The flesh of sheep was a luxury in the Biblical culture. Although King Solomon required a daily provision of 100 sheep for his table, the common people ate it only on festive occasions.

A young ram was almost always chosen, for his death was not as great a loss to the future prospects of the herd as the death of a young ewe would have been. It was cooked in a huge caldron filled with water.

The principal food supplied by the sheep was its milk. An extremely rich milk, it was usually allowed to curdle before drinking. This custom

still persists today, and this curdled milk is known as *leben*. Although butter was sometimes made from the milk of sheep, cow's or goat's milk was generally used for this purpose.

Since in ancient times nearly all clothing was made from wool, the value of the sheep's fleece cannot be underestimated. According to John G. Wood, "the wool of the sheep of Palestine differed extremely in value; some kinds being coarse and rough, while others were long, fine, and soft." Wool was taken from sheep of various colors, but the most valuable color was pure white. Still, sheep wool was often died various colors, blue, purple and scarlet being the most popular hues.

Even the sheep's horns were utilized. The Hebrew trumpet, called the *shofar*, which was used to announce the Feast of Trumpets, was made from the left horn of the broad-tailed sheep. Wood states that "the old Rabbinical writers have a curious saying about the ram. 'The ram in life has one tone, in death six.' This they explain in the following way. When the animal is living the only sound which it can produce is the bleat, but when it is dead it is made into musical instruments: 1. Of the horns are made trumpets; 2. Of the leg-bones are made flutes; 3. Of the large intestines are made lute-strings; 4. Of the small intestines are made harp-strings; 5. Of the skin is made the drum-head; 6. Of the wool are made the pomanders which hang between the golden bells of the High Priest's garment."

Sheep were also the fundamental animal in the religious sacrifices of the Jews. It was a lamb which was offered at the greatest of the religious feasts of the Israelites, the Passover. At this time lambs would be offered by all the people in commemoration of their escape from slavery in Egypt.

17. *Aoudad*

"These *are* the beasts which ye shall eat: the ox, the sheep, and the goat, The hart, and the roebuck, and the fallow deer, and the wild goat, and the pygarg, and the wild ox, and the chamois" (Deut. 14:4-5).

Chamois is not the proper translation of the Hebrew word *zemer*, used in Deuteronomy. The chamois lives in the high mountain ranges of Europe. No evidence is available to show that it ever lived in Palestine.

Most Bible scholars and naturalists today agree that the wild sheep of North Africa known as the Barbary sheep is the animal intended by the Hebrew word *zemer*. This animal is also known by its Moorish name of *aoudad*. It is related to the Big Horn, or Rocky Mountain sheep, and was apparently a familiar animal to the Israelites.

These mountain sheep lived in small flocks in rugged mountain areas in Barbary, Egypt, and Mount Sinai. They were possibly abundant in the last, in Moses' time, but they were heavily depleted by the Israelite

hunters. The Bedouins also know the animal well, but it has become practically extinct in the desert areas where it used to live, east of Libya.

This particular kind of mountain sheep has massive, gracefully curving horns about 2 feet in length. Since the Israelites used horns to make trumpets for pastoral, religious, and warring purposes, no doubt they frequently used the horns of the aoudads.

Subfamily *Caprinae*

This subfamily includes all the animals commonly known as goats, as well as the tahrs, the markhors, and the tur of the Caucasus. The *Caprinae* are usually characterized by horns in both sexes. Their horns are triangular in cross section and are usually ridged or knobbed. The muzzle is narrow and hairy, the tail short and flattened.

18. *Ibex*

"Then Saul took three thousand chosen men out of all Israel, and went to seek David and his men upon the rocks of the wild goats" (I Sam. 24:2).

"Knowest thou the time when the wild goats of the rock bring forth? or canst thou mark when the hinds do calve?" (Job 39:1).

"The high hills *are* a refuge for the wild goats, *and* the rocks for the conies" (Ps. 104:18).

The words "wild goat" are used four times in the Bible to translate two Hebrew words: *ako* and *azelim*. But *azelah*, a variant of the word *azelim*, was mistranslated as "roe" (Prov. 5:19) in the King James First Version.

Azelim meant literally "the climber," and therefore it would be logical to assume that the animal intended by this name was a climbing one. Almost all naturalists are convinced that the animal intended was an ibex, or the *Beden* of the Arabs.

The *Beden* lived in small herds of eight or ten. They can still be found in Palestine, in such areas as the weird-looking En-gedi, known as the "Fountain of the Goats." The Bible scholar Henry B. Tristram suggested that David and his followers, while outlaws, lived at En-gedi for a period of time in order to capture wild goats for food.

The flesh of the wild goat is excellent; far superior to the dry meat of the gazelle. The problem lies in catching one. *Beden* are extremely wary creatures and take refuge high in the craggy mountains when they are pursued.

Several proper names in the Bible are derived from the meaning of wild goat. They are Aran (wild goat), Jaala (wild she-goat), and Jael (mountain goat). Jael was the woman who killed Sisera, leader of the Canaanites, by nailing his head to her tent floor.

19. Goats

"Go now to the flock, and fetch me from thence two good kids of the goats: and I will make them savoury meat for thy father, such as he loveth . . ." (Gen. 27:9).

"These *are* the beasts which ye shall eat: the ox, the sheep, and the goat . . ." (Deut. 14:4).

"And Michal took an image, and laid *it* in the bed, and put a pillow of goats' *hair* for his bolster, and covered *it* with a cloth" (I Sam. 19:13).

"The lambs *are* for thy clothing, and the goats *are* the price of the field; And *thou shalt have* goats' milk enough for thy food, for the food of thy household, and *for* the maintenance for thy maidens" (Prov. 27:26-27).

"If thou know not, O thou fairest among women, go thy way forth by the footsteps of the flock, and feed thy kids beside the shepherds' tents" (Song of Sol. 1:8).

"Behold, thou *art* fair, my love; behold, thou *art* fair; thou *hast* doves' eyes within thy locks: thy hair *is* as a flock of goats that appear from mount Gilead" (Song of Sol. 4:1).

The writers of the Sacred Scripture spoke more often of the sheep than the goat (*Capra hircus*) but were very well acquainted with the latter.

The word "goat" appears 136 times in the Bible, and the word "kid" 51 times. Also, 11 direct references are made to the milk, hair, and skin of the goat.

The goat was a very necessary animal to the Hebrews. Since goats survive far better than animals like sheep in rocky, craggy land, they were particularly valuable animals to raise on rough terrain in the Holy Land. Almost every part of the goat's body was utilized in some beneficial way. The whole goat would be used for religious sacrifice, its flesh for food, its milk for drinking, its hair for cloth, its hide for leather, water bags, and even clothing, and its horns for trumpets.

The goat is mentioned in Dan. 8:5 as the symbol of the Macedonian empire. The silver drachmas and tetradrams of the Hellenistic kingdoms often depicted, on the obverse, the head of Alexander the Great wearing a ram's horn.

Goats were herded with sheep in Biblical days, but each group remained separate, following its own bell-laden leader. The Bible uses this herding habit symbolically, referring to the good people as the group of sheep, and to the evil as the goats. This does not mean that the goat was of inferior value to the Israelites. The goat was more generally used as food than the sheep, even though its meat was drier.

Adult male goats could not be eaten because of their strong flavor and toughness, and also because they were necessary to insure the flock's

increase. But the young kid was usually the chief meat for a feast, and it would be offered to any visiting stranger as a symbol of Israelite hospitality. Goats also provided extremely good milk. It was richer than the milk of both cows and sheep, and apparently had broader uses.

The average Hebrew family could have lived almost entirely on a single goat's products. A good goat gives 3 quarts of milk a day from which a rich butter and buttermilk can be made. In Biblical days the milkmen would drive their goats from door to door to be milked by families who did not own a goat. This custom has been retained in some parts of the Holy Land even to the present.

Goatskins were important in the construction of Hebrew musical instruments. The *nebal*, a large harp, was made with goatskin for its sounding base, and drums had goatskin coverings.

THE CARNIVORES (Order, *Carnivora*)

In the Order *Carnivora* scientists have grouped an extensive array of animals including the cats, civets, bears, dogs, hyenas, raccoons, and weasels, together with their aquatic cousins, the walruses, sea lions, and seals. Probably the most distinctive Carnivore characteristic is that members of the order subsist mainly on the flesh of other animals which they track down and kill. Although this is generally the case, there are exceptions. Bears, for example, augment their diet with fruits, berries, honey, and even insects. In line with their general flesh-eating habits, most Carnivores have large, well-developed teeth that have sharp cutting edges. The canines are usually long and well adapted for seizing and holding prey. There are never less than four functional toes and frequently they number five. In all cases the toes are equipped with sharp, curved claws that have no resemblance to the hoofs of the Ungulates.

THE CAT FAMILY (*Felidae*)

Including lions, leopards, tigers, pumas, jaguars, and lynxes, as well as the domestic cats, the *Felidae* are Carnivores par excellence. Their long, powerful bodies are well adapted for killing prey much larger than themselves. They are differentiated from other members of the order by having a short muzzle and a reduced number of teeth. The canines and flesh teeth are well developed. Another distinctive characteristic of this family is that their sharp, strongly curved claws are retractile and can be withdrawn into protective sheaths. Their tongues are furnished with a number of flat, stiff processes, called papillae, which point backward and enable the organ to be used as an effective rasp, both for licking meat from bones and for cleaning their heavy fur. Fringing the muzzle are a series of long whiskers provided at their bases with special

nerves. These act as an extra set of sense organs that help the cats find their way about at night.

20. *Lion*

"Judah is a lion's whelp; from the prey, my son, thou art gone up: he stooped down, he couched as a lion, and as an old lion; who shall rouse him up?" (Gen. 49:9).

"And after a time he returned to take her, and he turned aside to see the carcase of the lion; and, behold, *there was* a swarm of bees and honey in the carcase of the lion" (Judg. 14:8).

"The roaring of the lion, and the voice of the fierce lion, and the teeth of the young lions, are broken. The old lion perisheth for lack of prey, and the stout lion's whelps are scattered abroad" (Job 4:10-11).

"The young lions roar after their prey, and seek their meat from God" (Ps. 104:21).

"The burden of the beasts of the south: into the land of trouble and anguish, from whence *come* the young and old lion, the viper and fiery flying serpent, they will carry their riches upon the shoulders of young asses, and their treasures upon the bunches of camels, to a people *that* shall not profit *them*" (Isa. 30:6).

"And she brought up one of her whelps: it became a young lion, and it learned to catch the prey; it devoured men" (Ezek. 19:3).

The lion is mentioned in the Bible more often than any other undomesticated animal. It is named 157 times in 31 of the 66 books of the Bible. Lions are treated in the Bible both as natural animals and as symbols of power and strength. The lion was the ensign of the tribe of Judah, and was used by Solomon in the decoration of his house and temple.

The lion found in Biblical days in Palestine was indigenous and was described by Pliny and Aristotle, and was carved on the Assyrian monuments. The Bible records several instances where men killed them singlehanded.

According to the Bible, the mountains of Lebanon in northern Palestine provided a naturally safe home for lions (Song of Sol. 4:8, Isa. 30:6). In addition to these natural dens, lions also lived in artificial pits maintained by Oriental monarchs as places of execution (Ezek. 19:1-9, Dan. 6:7-16). These lions were caught in camouflaged nets or pits. In Bible times, they were not pitted against each other or against gladiators, as was the later practice of the Romans.

It is interesting to note the different Biblical names that derive from the words for lion. The following are examples: Ahasuerus (lion-king), Ara (lion), Arieah (lion), Ariel (lion of God), Laish (lion), Arisai (lion-

like), Lebaoth (lionesses), Beth-lebaoth (house of lionesses), the cult of Nergal (lion), and Othni (lion of God, powerful).

21. *Leopard*

"Come with me from Lebanon, *my* spouse, with me from Lebanon: look from the top of Amana, from the top of Shenir and Hermon, from the lions' dens, from the mountains of the leopards" (Song of Sol. 4:8).

"The wolf also shall dwell with the lamb, and the leopard shall lie down with the kid; and the calf, and the young lion, and the fatling together; and a little child shall lead them" (Isa. 11:6).

"Can the Ethiopian change his skin, or the leopard his spots? *then* may ye also do good, that are accustomed to do evil" (Jer. 13:23).

"After this I beheld, and, lo, another, like a leopard, which had upon the back of it four wings of a fowl; the beast had also four heads; and dominion was given to it" (Dan. 7:6).

"Therefore I will be unto them as a lion; as a leopard by the way will I observe *them* . . ." (Hos. 13:7).

"Their horses also are swifter than the leopards, and are more fierce than the evening wolves: and their horsemen shall spread themselves, and their horsemen shall come from far; they shall fly as the eagle *that* hasteth to eat" (Hab. 1:8).

The leopard is mentioned only 8 times in Scripture, and in only 2 of these places is the animal literally signified. Despite this brevity, the Bible so clearly delineates the attributes of the leopard it cannot be doubted that the animal was well known in Palestine. Its ferocity, color, craft, swiftness, and dwelling place are all touched upon in the few, short references. The craftiness of the leopard as a truly predaceous creature is alluded to more than once in the Bible. The Israelite shepherds were terrified of this animal, for it constantly ravaged their sheep and goats. With its stealth and cunning, the leopard was adept at stalking a stray goat or sheep over the most rough terrain. In this respect it was even more dangerous than the lion, which would only attack herds and which customarily proclaims itself loudly when hunting.

The peculiar localities loved by the leopard are mentioned in the Song of Solomon. It dwelt almost exclusively in the large forests of pine, oak, and cedar which covered the mountains of Lebanon. The few leopards that remain in Palestine today are found in the remote regions of Mount Tabor and Mount Carmel.

Several Biblical names are derived from *namer*, the word for leopard. Nimrah (leopardess) was the name of a fenced city; Beth-Nimrah (house of leopardess) was a variant of the same name; and Nimrim (leopards) was the name of a district northeast of the Dead Sea.

22. Cat

The word "cat" is not mentioned in the whole of the canonical Scriptures and only once in the Apocrypha. The one reference occurs in the Book of Baruch, in which the gods of Babylon are denounced as false gods "of silver and of gold, and of wood . . . They are as one of the beams of the temple, yet they say their hearts are gnawed upon by things creeping out of the earth; and when they eat them and their clothes they feel it not. Their faces are blacked through the smoke that cometh out of the temple. Upon their bodies and heads sit bats, swallows, and birds, and the cats also. By this ye may know that they are not gods; therefore fear them not."

The passage is not very complimentary to cats, but perhaps it explains why the animals were confined to noncanonical works. The scene of the passage is Jerusalem at the beginning of the seventh century B.C., shortly after the Babylonian king, Nebuchadnezzar II, had crushed the Jewish rebellion, destroyed the city, and carried the leading Jews into exile. Chapter 6:22 from the Book of Baruch, from which the passage is taken, is the epistle which Jeremy "sent unto them which were to be led captives unto Babylon by the king of the Babylonians to certify them, as it was commanded him of God."

Thus, the Israelites, whose tribes had formerly been enslaved by the Egyptians, a cat-worshipping people, found that their latest tormentors, the Babylonians, also kept cats in their temples. It is no wonder, then, that the Israelites chose to leave the little beasts out of the Sacred Scripture of the Old Testament, and mentioned them in so uncomplimentary a fashion in the Apocrypha.

THE BEAR FAMILY (*Ursidae*)

The bears constitute a unique group of Carnivores that closely resemble one another in body form. They are characterized by a heavy, massive build, with thick limbs and short tails. Their five-toed feet are armed with powerful, nonretractile claws well suited for digging. Unlike the other Carnivores, bears possess cheek-teeth with nearly flat crowns that they use for grinding vegetation and insects. In most cases the fur is coarse, long, and shaggy, and some shade of brown.

23. Bear

"And David said unto Saul, Thy servant kept his father's sheep, and there came a lion, and a bear, and took a lamb out of the flock; And I went out after him, and smote him, and delivered *it* out of his mouth: and when he arose against me, I caught *him* by his beard, and smote him, and slew him. Thy servant slew both the lion and the bear; and this

uncircumcised Philistine shall be as one of them, seeing he hath defied the armies of the living God" (I Sam. 17:34-36).

"And he turned back, and looked on them, and cursed them in the name of the Lord. And there came forth two she bears out of the wood, and tare forty and two children of them" (II Kings 2:24).

"Let a bear robbed of her whelps meet a man, rather than a fool in his folly" (Prov. 17:12).

"As a roaring lion, and a ranging bear; *so is* a wicked ruler over the poor people" (Prov. 28:15).

"We roar all like bears, and mourn sore like doves: we look for judgment, but *there is* none; for salvation, *but* it is far off from us" (Isa. 59:11).

"And behold another beast, a second, like to a bear, and it raised up itself on one side, and it had three ribs in the mouth of it between the teeth of it: and they said thus unto it, Arise, devour much flesh"

The bear is portrayed in the Bible as a dangerous animal. Often it is coupled with the lion as one of the two animals to avoid at all costs. According to the Bible, the most dangerous bear is the mother bereft of her cubs. The Hebrew word for the mother bear who has lost her cubs literally meant "bereaved." Such a mother will attempt anything to recover her cubs, and is indeed a fearsome foe.

Bears were quite plentiful in Palestine in early days before the advent of modern weapons and the destruction of forests. But today they are much more limited in number, being confined to the regions of Lebanon and Anti-Lebanon north of Palestine. Many lived along the steep walls of the canyon in which the river Leontes flows to the Mediterranean Sea above Tyre. The color of the Palestinian bear varied from dark brown as a cub, to yellowish brown as an adult, to dirty white in old age.

In the book of Job reference is made to "Arcturus with his sons." Arcturus, meaning bear-guard or bear-keeper, is a fixed star of the first magnitude in the constellation Boötes. It is popularly conceived as representing the constellation Ursa Major, which is known as the Great Bear. The North Star is in Ursa Minor, known as the Little Bear, and is in line with the Great Bear. Thus "Arcturus with his sons" probably refers to the sky-bear with his star-train, the sons being the three stars that form his tail.

THE DOG FAMILY (*Canidae*)

Together with the domestic dogs, the *Canidae* includes wolves, foxes, jackals, the Cape hunting dog, and wild dogs or dholes. They constitute a well-defined group, the wild members of which cannot be confused

with any other group. All are characterized by long, pointed muzzles, moderately long tails, and feet furnished with blunt, nonretractile claws. With the exception of the Cape hunting dog, all wild members of the family exhibit a more or less uniform, somber coloration which varies from gray to a yellowish or reddish brown. The sense of smell is highly developed and acts as an aid in hunting. The *Canidae* differ markedly from the cats in that they tend to live and hunt in packs rather than singly. Most members subsist solely on flesh; some eat lizards, mice, snails, and even insects, while the jackals live largely on carrion.

24. Wolf

"Benjamin shall ravin *as* a wolf; in the morning he shall devour the prey, and at night he shall divide the spoil" (Gen. 49:27).

"Wherefore a lion out of the forest shall slay them, *and* a wolf of the evenings shall spoil them, a leopard shall watch over their cities: every one that goeth out thence shall be torn in pieces; because their transgressions are many, *and* their backslidings are increased" (Jer. 5:6).

"Her princes in the midst thereof *are* like wolves ravening the prey, to shed blood, *and* to destroy souls, to get dishonest gain" (Ezek. 22:27).

"Their horses also are swifter than the leopards, and are more fierce than the evening wolves: and their horsemen shall spread themselves, and their horsemen shall come from far; they shall fly as the eagle *that* hasteth to eat" (Hab. 1:8).

"Her princes within her *are* roaring lions; her judges *are* evening wolves; they gnaw not the bones till the morrow" (Zeph. 3:3).

"Beware of false prophets, which come to you in sheep's clothing, but inwardly they are ravening wolves" (Matt. 7:15).

The Hebrew word *zeeb* and the Greek word *lykos* are rightly translated as "wolf" in the Bible, although all references are made metaphorically without any wolf ever actually being mentioned.

In 12 verses wolves are named 30 times. The name is used as a symbol of a treacherous enemy. Never does a Biblical writer mention an act performed by a wolf. Unlike other beasts of prey, such as the lion and bear, there are no instances recorded in the Bible of a wolf attacking either animals or men.

Individually, the wolf is a rather timid animal—it would much rather avoid a man than encounter him. But collectively the wolf can be one of the most dangerous animals alive. Swiftmess of foot avails nothing against a wolf pack's pursuit, because the animals can maintain their long, loping gallop for hours at a time.

Proper names derived from the wolf appear frequently in the Bible.

For example, Zeeb was the name of a Midianite chieftain, and Lycaonia, the name of a village in Asia Minor, apparently derived from *lykos* (the Greek word for wolf).

25. Dog

"But against any of the children of Israel shall not a dog move his tongue, against man or beast; that ye may know how that the Lord doth put a difference between the Egyptians and Israel" (Exod. 11:7).

"Thou shalt not bring the hire of a whore, or the price of a dog, into the house of the Lord thy God for any vow: for even both these are abomination unto the Lord thy God" (Deut. 23:18).

"And the Philistine said unto David, *Am* I a dog, that thou comest to me with staves? And the Philistine cursed David by his gods" (I Sam. 17:43).

"After whom is the king of Israel come out? after whom dost thou pursue? after a dead dog, after a flea" (I Sam. 24:14).

"But now *they that are* younger than I have me in derision, whose fathers I would have disdained to have set with the dogs of my flock" (Job 30:1).

"And at evening let them return, *and* let them make a noise like a dog, and go round about the city" (Ps. 59:14).

"There be three *things* which go well, yea, four are comely in going: A lion *which* is strongest among beasts, and turneth not away for any; A greyhound; an he goat also; and a king, against whom *there* is no rising up" (Prov. 30:29-31).

The dog is referred to 41 times in the Bible, and almost without exception with strong disfavor. This attitude is common among all Near Eastern people, and it persists even today. It is difficult for us in the Western world, where the dog is one of the most cherished of all animals, to understand this attitude toward dogs.

The disapproval of dogs by the Israelites probably stemmed from the fact that packs of dogs ran wild through the streets of all Near and Middle Eastern cities, including those of Palestine. They would run through the streets at night howling, hungry, and snarling, after having slept all day. They were considered cowardly, filthy creatures; to call a Hebrew a dog was one of the most terrible insults possible; however, if the Hebrew called himself a dog, it was considered a display of the deepest humility.

The Israelites did not consider dogs completely useless, for there is some Scriptural evidence that they were used to guard the flocks (Job 30:1). Dogs are spoken of figuratively throughout the Bible. Solomon makes reference to them in his proverbs. ("As a dog returneth

to his vomit, so a fool returneth to his folly"—Prov. 26:11.) In the Book of Isaiah the lax priests of that day were compared to dumb dogs.

It seems as though the dogs spoken of in Scripture are more like their cousins, the wolves and jackals, than the domesticated animals we know today. Apparently packs of dogs would often attack the Israelite people, and sometimes even ravaged freshly buried corpses.

Today in Palestine and the East the dog is still regarded with the general contempt accorded it in Biblical times. Arabs refer to Christians as "dogs," as the Jews once did to the Gentiles. Packs of half wild pariah dogs still roam the streets and countryside in many areas, although their number is fast decreasing.

Though usually considered mongrel, the pariah dog is, in fact, a rather well-defined form of *Canis familiaris* and has remained relatively pure bred. These packs are very interesting scientifically, for they enable us to study the canine type in a semiwild state. In the Near East most of the research on the pariah dog has been carried out by Drs. R. and R. Menzel of Israel. They have shown the dogs to be of medium size, and to vary in head and body shape from the sheepdog type to a greyhound type. In behavior it has been found that these animals occupy the full range between absolute wildness and full domestication. Any animal, regardless of its place by birth within this range, can adapt itself to a changing environment, either toward wildness or domestication. Drs. Menzel tamed a number of wild pariahs which, later, could not be distinguished from animals born in captivity.

The word "greyhound" occurs only once in the Bible, and it is questionable whether this is really the proper way of translating the Hebrew word *zar-zir-mathmain*. Bible scholars have varied greatly in their ideas as to the best translation of this Hebrew word. The literal meaning of it is "one with the loins well girded." Thus most critics have thought an animal sleek and comely in appearance was intended. Some of the suggested meanings besides the greyhound have been the zebra, the leopard, the horse, a proud cock, and the starling. Some have even suggested that a human athlete or warrior was intended!

Such a problem as this will probably never be fully resolved. However, "greyhound" remains a good translation, for it is certainly a beautiful, graceful animal that deserves to be spoken of as "comely in going." Also no doubt it was a dog that was familiar to the Israelites, since it was among the first varieties of dogs known to man. It was a favorite of the Egyptians and has been found etched upon some of their ancient monuments, commemorating the sport of hunting. Greyhounds were kept by the Egyptians in huge kennel systems because of their value in hunting wild animals. The greyhounds would also ac-

company their aristocratic masters on inspection tours for the purpose of determining the efficiency of the slaves' work output.

The Israelites would also have been familiar with the greyhound from another source. The Assyrians, who lived northeast of Palestine, also honored the greyhound. Proof of this is evident in their monuments. Solomon, who wrote the proverb which speaks of four comely things, was a man of wide knowledge, and may well have intended to use an animal revered far and wide such as the greyhound as one of his examples of comeliness.

26. *Jackals*

The jackal is frequently alluded to in Scripture, though its name appears in no Western translation due to the fact that the animal does not exist in Europe and was unknown to the translators. "Fox" is regularly substituted. The jackal seems to be designated by several Hebrew names:

iyyim—the howlers (translated as "fawn" in the Douay Version)

tan—the stretcher

than—denizen of desolate places (often wrongly translated as dragon!)

There are numerous Biblical references to the howling and gregariousness of jackals.

27. *Fox*

"And Samson went and caught three hundred foxes, and took firebrands, and turned tail to tail, and put a firebrand in the midst between two tails" (Judg. 15:4).

"Now Tobiah the Ammonite *was* by him, and he said, Even that which they build, if a fox go up, he shall even break down their stone wall" (Neh. 4:3).

"They shall fall by the sword; they shall be a portion for foxes" (Ps. 63:10).

"Take us the foxes, the little foxes, that spoil the vines: for our vines *have* tender grapes" (Song of Sol. 2:15).

"Because of the mountain of Zion, which is desolate, the foxes walk upon it" (Lam. 5:18).

"O Israel, thy prophets are like the foxes in the deserts" (Ezek. 13:4).

Foxes are mentioned 9 times in the Bible. The common fox found in Palestine was much like the Red Fox found in Europe and North America today. However, two additional kinds also occurred there: the Egyptian Fox, a small animal found abundantly in southern Palestine

and east of the Jordan River; and the Syrian Fox, a larger animal found in the northern forests of Palestine.

The foxes had an interesting habit of living in the old, deserted ruins of Palestine, particularly around Mount Zion and Jerusalem. Although foxes are treated in the Bible with contempt, they are considered very clever and cunning animals.

THE HYENA FAMILY (*Hyaenidae*)

The hyenas are massively built animals, with the fore-legs longer than the hind-legs. The coarse, shaggy fur is marked with either vertical stripes or blackish spots. Both fore- and hind-feet have four toes equipped with strong claws similar to those of dogs. The molar teeth of hyenas resemble those of cats, but the premolars are unique. Tall and nearly conical, they are set in jaws that are probably more powerful than those of any other Carnivore. Hyenas can crush the shinbone of an ox as easily as a dog can crush the bones of a chicken.

28. *Hyena*

"And another company turned the way to Beth-horon: and another company turned to the way of the border that looketh to the valley of Zeboim toward the wilderness" (I Sam. 13:18).

"Mine heritage is unto me as a speckled bird; the birds round about are against her; come ye, assemble all the beasts of the field, come to devour" (Jer. 12:9).

Although no English translations of the Bible include the word "hyena," it is evident that two passages in the Old Testament refer to that animal. The Hebrew word *zabua*, meaning "something streaked," is rendered "hyena" in the Septuagint, the Greek version of the Bible. Most scholars agree that rather than a speckled bird (Jer. 12:9), this was the animal intended.

The Striped Hyena was plentiful in ancient Egypt and was often depicted on their monuments. It was then also found in parts of Persia, Syria, India, and Arabia. In Palestine it was once extremely abundant, and even today a few apparently remain there.

Many superstitions prevailed among the Israelites concerning the hyena. For example, when one was killed its hide was stripped away, tanned in the Dead Sea, made into leggings and sandals, and worn as a magical charm to defend the wearer against the hyena's bite. The Israelites would also take the carcass of a hyena to leeward from the tents before stripping off the skin, because they believed a dead hyena's scent would corrupt the air. A further superstition found in Palestine was that if a hyena met a solitary man at night, it could charm him in such a manner that he would be its unresisting prey. But if another

person were present this power of the hyena would be absent. This superstition was so strong that the Palestinians always demanded company for their night journeys.

Since the hyenas were notorious for raiding the graves of the dead, all Israelites who could afford it arranged for burial in tombs protected by massive stone doors. Absalom, the son of David who was killed by Joab, was buried under a huge pile of stones to protect his corpse from the attacks of hyenas.

THE WEASEL FAMILY (*Mustelidae*)

The Family *Mustelidae* includes a number of related animals that often differ markedly in external characteristics. Among the members of the group are the weasels, badgers, otters, martens, mink, skunks, and wolverines. *Mustelidae* are characterized by their rather elongated bodies and short limbs. Most are of medium or small size. None are large, and one can slip through a hole the size of a quarter. In all cases the feet have five toes. Many members of the family are clothed with furs of great brilliance and beauty that are of high commercial value.

29. Weasel

"These also *shall be* unclean unto you among the creeping things that creep upon the earth; the weasel, and the mouse, and the tortoise after his kind . . ." (Lev. 11:29).

The word "weasel" occurs only once in the Bible, and since there is nothing in the context to define the appearance or habits of the animal, there is considerable controversy as to its identification. The passage in which it is named (see above) is a listing of animals that are unclean for eating purposes. Since weasels were apparently plentiful in Palestine during Biblical days, it could easily have been the particular animal intended by the Hebrew word *choled*. The Septuagint favors this translation. It could be, however, that a variety of other animals was meant. Such an animal as the Ichneumon or Mongoose may have been included within the meaning of *choled*.

The proper name Huldah definitely meant weasel, and this was the name of the prophetess who was consulted by King Josiah when Hilkiah found the Book of the Law (II Kings 22:14, II Chron. 34:22).

30. Badger

"And this *is* the offering which ye shall take of them; gold, and silver, and brass, And blue, and purple, and scarlet, and fine linen, and goats' *hair*, And rams' skins dyed red, and badgers' skins, and shittim wood . . ." (Exod. 25:3-5).

"And he made a covering for the tent of rams' skins dyed red, and a covering of badgers' skins above *that*" (Exod. 36:19).

"And they brought the tabernacle unto Moses, the tent, and all his furniture, his taches, his boards, his bars, and his pillars, and his sockets, And the covering of rams' skins dyed red, and the covering of badgers' skins, and the vail of the covering . . ." (Exod. 39:33-34).

"And when the camp setteth forward, Aaron shall come, and his sons, and they shall take down the covering vail, and cover the ark of testimony with it; And shall put thereon the covering of badgers' skins, and shall spread over *it* a cloth wholly of blue, and shall put in the staves thereof" (Num. 4:5-6).

"And they shall bear the curtains of the tabernacle, and the tabernacle of the congregation, his covering, and the covering of the badgers' skins that *is* above upon it, and the hanging for the door of the tabernacle of the congregation" (Num. 4:25).

"I clothed thee also with brodered work, and shod thee with badgers' skin, and I girded thee about with fine linen, and I covered thee with silk" (Ezek. 16:10).

It is apparent from the Scriptural references that the badger's value in Biblical days lay in the use of its skin as a covering for tents. Its skin is mentioned 14 times in the Bible as being a useful covering for tents. Yet, the Hebrew name *takhash* is regarded by various writers as meaning a dolphin, seal, or dugong of the Red Sea! (There is no seal indigenous to the Red Sea.)

Badger skins were particularly used as the outermost covering of the Israelites' tabernacle. Since this covering would probably stretch over the entire structure, this would necessitate this badger-skin covering being 75 feet long and 45 feet wide.

Badger skins were also used to cover the tabernacle furniture when it was being carried. In fact, badger skins were listed along with gold, jewels, scarlet-dyed rams' skins, and rare shittim woods as the costliest articles for religious offerings.

THE MONKEY ORDER (*Order, Primates*)

As a group, the Primates contain some of the most highly specialized forms of animal life. Although the Order of Primates includes such diverse creatures as man, apes, monkeys, lemurs, and tarsiers, there are certain characteristics that are found in most, if not all, of the members. Generally speaking, there are always five digits on the feet, and the relation of the first digit to the other four represents one of the most important peculiarities of the group. In most cases the first digit is placed so that it opposes the others, thus transforming the feet into "hands," which serve as efficient grasping and holding organs so that

the apes can be said to be four-handed. The opposable feature of the first digit has been lost in the human foot, thereby reducing man to a two-handed status. Some of the most advanced Primates have developed the ability to rise up on their hind legs and walk in an upright position. In keeping with their herbivorous habits, the cheek-teeth of the higher Primates have broad, flattened crowns that are adapted for grinding.

31. Ape

"For the king had at sea a navy of Tharshish with the navy of Hiram: once in three years came the navy of Tharshish, bringing gold, and silver, ivory, and apes, and peacocks" (I Kings 10:22).

"For the king's ships went to Tarshish with the servants of Hiram: every three years once came the ships of Tarshish bringing gold, and silver, ivory, and apes, and peacocks" (II Chron. 9:21).

The word "ape" appears only twice in the Bible. In both instances it is in connection with King Solomon's collection of wealth. Apparently apes were part of the treasure collected for the king's court from southern India and Ceylon by the ships which went southward through the Red Sea and then eastward into the Indian Ocean. Other monkeys may also have been brought from Abyssinia.

The belief that Solomon's treasures came from India and Ceylon was strongly substantiated by Sir James Emerson Tennent, a British author, who pointed out that in the Tamil language spoken in both these countries the names for apes, ivory, and peacocks are identical with the Hebrew names. This seems to indicate that the Hebrews imported the names along with the other treasures.

The kind of monkeys secured for Solomon is not certain, but they most probably were not an Eastern species of *ape*, such as a gibbon or orangutan. More likely they were Indian monkeys such as a rhesus, the Wanderoo or langur. *Kophim*, the Hebrew word for "apes," is a general term which applies to all simians. Therefore both monkeys and apes, tailed and tailless, could be referred to in the Bible by the single word *kophim*.

Neither monkeys nor apes were native to the Biblical lands, but no doubt the Israelites had been made aware of the creatures quite early, for the nearby Egyptians prized several kinds of monkeys, notably the Hamadryas baboon, which they trained.

In Egypt, this baboon was considered sacred to the god Thoth. The male of the species was revered primarily in the temples, while the more docile female was often kept as a house pet. Quite often these pet baboons had some of their teeth removed or ground down, as in the case of one belonging to Thothmes III, in order to lessen the danger

of their bite. That these creatures were highly prized by their owners is evident from the fact that quite often they were mummified and buried with great honors. It is interesting to note that examination of these mummies has revealed that they frequently suffered from the crippling diseases of rickets, tumors, and tubercular rheumatism.

The Israelites were probably also familiar with the Barbary apes of North Africa, and with the African true baboons, which the Biblical scholar Tristram believed was the species referred to by the term "satyr" in Isa. 13:21, 34:14.

THE BAT ORDER (*Order, Chiroptera*)

The bats are the only group of mammals ever to attain the power of true flight. In order to facilitate this, the fore-limbs display a unique construction. The bone of the upper arm is only moderately extended but the fore-arm is considerably elongated with one of its bones (the ulna) two thirds atrophied and fused with the other (the radius). With the exception of the thumb, the bones of the hand form long, slender rods which support the delicate membrane constituting the soft part of the wing. The thumb is free and terminates in a single, hooked claw that is used for climbing and hanging. The hind-feet have five toes all pointing the same way. In many forms the hind limbs are connected to the tail by a membrane similar to that of the wing. The chest of the bat is large, to accommodate the powerful muscles needed for flying. In most species the sense of hearing is very well developed. The creatures are able to fly in close quarters in total darkness by using the echo of their high-pitched squeaks as a sort of sonar.

32. *Bats*

"And these *are they which* ye shall have in abomination among the fowls; they shall not be eaten, they *are* an abomination; the eagle, and the ossifrage, and the ospray . . . And the stork, the heron after her kind, and the lapwing, and the bat. All fowls that creep, going upon *all four, shall be* an abomination unto you" (Lev. 11:13, 19-20).

"But these *are they* of which ye shall not eat: the eagle, and the ossifrage, and the ospray . . . And the stork, and the heron after her kind, and the lapwing, and the bat. And every creeping thing that flieth is unclean unto you: they shall not be eaten" (Deut. 14:12, 18-19).

"In that day a man shall cast his idols of silver, and his idols of gold, which they made *each one* for himself to worship, to the moles, and to the bats . . ." (Isa. 2:20).

The Hebrew word for bat, like its Greek and Latin counterparts, means "night flyer." However, the Arabic word for bat means "weak-sighted," since most bats have great difficulty seeing in the light. Even

though the bat is a mammal (not a bird), the Hebrew word for fowl is still applicable to it, since the word means "winged."

Many species of bats are found in the Holy Land. Most of them are of insectivorous varieties, and sleep in caves during the day and fly for food at night. Fourteen species exist today in Palestine. They vary in size from that of a mouse to one the size of a rat which measures more than 20 inches across the wings.

Bats are classified in the Bible as unclean "birds" which should not be eaten by man, but some real birds, such as the eagle, owl, heron, stork, and swan are also included in this class of scavengers which feed on flesh and carrion.

THE GNAWING MAMMALS (Order, *Rodentia*)

Grouped under the title of rodents is a large assemblage of small- to medium-sized animals whose chief characteristic is their habit of gnawing. In all members of the Order, such as rats, porcupines, beaver, and squirrels, the incisors are of great length and are curved to form a segment of a circle; they grow throughout life. In most cases, enamel is limited to the outer edge of the incisors. Since, in the process of gnawing, the top and bottom incisors rub against each other, their size is kept constant and the edges are honed to a chisel-like edge. If one of the incisors is lost, the corresponding tooth will grow unchecked, eventually curving back, penetrating the skull, and killing the unfortunate animal. Another curious feature of many rodents is the presence of pouches in the sides of the mouth, which are used to store and carry food. Often the inner lining of the pouches is covered with soft hair. All in all, the rodents constitute a well-defined group that today is more numerous both in terms of individuals and species than any other mammalian order.

33. Mouse

"These also *shall be* unclean unto you among the creeping things that creep upon the earth; the weasel, and the mouse, and the tortoise after his kind" (Lev. 11:29).

"Then said they, What *shall be* the trespass offering which we shall return to him? They answered, Five golden emerods, and five golden mice, *according to* the number of the lords of the Philistines; for one plague *was* on you all, and on your lords" (I Sam. 6:4).

"And they laid the ark of the Lord upon the cart, and the coffer with the mice of gold and the images of their emerods" (I Sam. 6:11).

"And the golden mice, *according to* the number of all the cities of the Philistines *belonging to* the five lords, *both* of fenced cities, and of country villages, even unto the great *stone of* Abel, whereon they set

down the ark of the Lord; *which stone remaineth* unto this day in the field of Joshua, the Beth-shemite" (I Sam. 6:18).

"They that sanctify themselves, and purify themselves in the gardens, behind one *tree* in the midst, eating swine's flesh, and the abomination, and the mouse, shall be consumed together, saith the Lord" (Isa. 66:17).

Mice are referred to only 6 times in the Bible. No doubt the Hebrew word *akbar* for "mouse" was a generic term that connoted several different species of tiny animals. The meaning of *akbar* is literally the "destruction of corn," so it is evident that some allusion is being made to an animal which existed in sufficient numbers to make it a formidable foe of the field crops—and therefore to rodents as a whole.

The fact that *akbar* signified a large number of different species of mice seems to indicate that its meaning included *all* the varieties found in Palestine. Tristram, the nineteenth-century Bible scholar, stated that "no less than twenty-three species of this group were ascertained by us to inhabit Palestine. Among them are three species of the dormouse* . . . four to five species of short-tailed voles, six species of sand rats (i.e., mole-rats) and the hamster."

Some commentators translate *akbar* as "jerboa." This small animal was and still is common in Palestine. It, along with the hamster, is eaten by both the Arabs and the Syrians. Israelites in Isaiah's day apparently also ate these tiny animals, in violation of Mosaic law.

34. Mole-Rat

"These also *shall be* unclean unto you among the creeping things that creep upon the earth; the weasel, and the mouse, and the tortoise after his kind, And the ferret, and the chameleon, and the lizard, and the snail, and the mole" (Lev. 11:29-30).

"In that day a man shall cast his idols of silver, and his idols of gold, which they made *each one* for himself to worship, to the moles, and to the bats" (Isa. 2:20).

The word "mole" appears only twice in the Bible, in English. It is, however, translated from a different Hebrew word on each occasion. One of these was *tinshemeth*, and signified an unclean animal. The meaning of this word is so clouded with obscurity that scholars have despaired of ever defining it precisely. In other parts of the Bible the same word was translated as "swan," which was also an unclean food. Others have conjectured that it might have meant chameleon, salamander, land monitor, ibis, centipede, or even a true mole (*Talpa sp.*), a mammal of the Order known as the *Insectivora*.

* Dormice (*Gliridae*) are not mice, but one form—the European Hazelmouse—is mouse-sized.

The second word, *chephor-peroth*, used by Isaiah, probably referred to the mole-rat (*Spalax*), which is a rodent. This animal evidently was quite common throughout Palestine in Biblical times. It lives a subterranean life.

THE HARES, RABBITS, AND PIKAS (Order, *Lagomorpha*)

The rabbits and the hares are distinguished by their long ears and long, powerfully developed hind-limbs. Unlike the rodents, they possess enamel on both sides of the incisor teeth. All are timid creatures that subsist primarily on vegetation. In all species, the fore-limbs have five toes and the hind-limbs have four. They breed with great rapidity, the young attaining sexual maturity 6 months after birth.

35. Hare

"Nevertheless, these shall ye not eat, of them that chew the cud, or of them that divide the hoof: *as* the camel, because he cheweth the cud, but divideth not the hoof; he *is* unclean unto you. And the coney, because he cheweth the cud, but divideth not the hoof; he *is* unclean unto you. And the hare, because he cheweth the cud, but divideth not the hoof; he *is* unclean unto you" (Lev. 11:4-6).

"Nevertheless these ye shall not eat of them that chew the cud, or of them that divide the cloven hoof; *as* the camel, and the hare, and the coney: for they chew the cud, but divide not the hoof; *therefore* they *are* unclean unto you" (Deut. 14:7).

Hares are mentioned only twice in the Bible, and both instances involve their being tabooed for eating purposes by the Mosaic law.

Their legitimacy as food was denied because they were not cloven-footed (hoof wasn't split). Moses further stated that they did, however, chew the cud. Anatomical analysis of the hare reveals that they do not re-chew their food, but Moses' error was a very natural one, for they give the appearance of rumination with their constant moving of the jaws. One commentator stated it was fortunate that the hare wasn't allowed as a food because their meat might have proved harmful due to a poisonous plant they sometimes eat. The statement is itself open to grave doubt.

Hares were quite plentiful in Palestine, and at least two species could be found. Some naturalists believe that as many as five kinds of hares ranged throughout the Holy Land. Others have thought rabbit was probably intended by the Biblical word "hare," but this seems highly unlikely, for no species of rabbit is indigenous to Palestine or surrounding countries.

THE ELEPHANTINES (Order, *Proboscidea*)

Aside from its huge size, which exceeds that of all other terrestrial mammals, the elephant's most striking characteristic is its long, flexible proboscis. This organ, with the nostrils located at its lower end, is used for grasping objects, as well as for conveying both food and water to the mouth. The males—and sometimes also the females—have large tusks in the upper jaw which correspond to one of the pairs of incisors in other mammals. In many cases these tusks grow to considerable length and are a valuable source of ivory. Elephants have short, broad feet with the toes enclosed in a common skin. Their position is indicated by broad, flat nails. The true elephant (*Elephas indicus*) inhabits India, Ceylon, and southeast Asia; in Africa there are two species of a related genus (*Loxodonta*).

36. *Elephant*

"Moreover the king made a great throne of ivory, and overlaid it with the best gold" (I Kings 10:18).

"For the king's ships went to Tarshish with the servants of Hiram: every three years once came the ships of Tarshish, bringing gold, and silver, ivory, and apes, and peacocks" (II Chron. 9:21).

"All thy garments *smell* of myrrh, and aloes, *and* cassia, out of the ivory palaces, whereby they have made thee glad" (Ps. 45:8).

"His hands *are as* gold rings set with the beryl: his belly *is as* bright ivory overlaid *with* sapphires" (Song of Sol. 5:14).

"And I will smite the winter house with the summer house; and the houses of ivory shall perish, and the great houses shall have an end, saith the Lord" (Amos 3:15).

Although the elephant is never specifically mentioned in the Bible, it is directly inferred by the 9 references to ivory. In fact, some Hebrew translations of *shen-ab-biem* have marginal references to "elephants' teeth" in 2 instances where ivory is mentioned. In Job 40:15, where the word "behemoth" is used, there is also a marginal translation which states "or the elephant, as some think"; however, hippopotamus' teeth were considered better ivory than that of the elephants.

In the Bible, ivory is presented as a precious substance indeed. It is named in connection with gold, and is listed as one of the chief wonders to be seen in the palace of Solomon, who was purportedly the wealthiest monarch of his day. Apparently Solomon obtained his ivory from India and Ceylon, even though his neighbor Egypt had large treasures of ivory obtained from the African elephant. As mentioned in the section on the ape, the Hebrew names for apes, peacocks, and ivory (I Kings 10:22) are almost identical with the Singhalese language spoken in southern India and Ceylon.

In the Apocryphal books, some of which are disputed as being canonical, the elephant itself is mentioned. It is described as an engine of war, a most apt title for the role the elephant came to play in the wars that occurred in late Biblical history.

Iron chains would be wrapped around the elephant and a number of men would climb on its back; it would then be given strong wine and shown a white cloth to incite its rage; then, at the sound of a trumpet, it would charge with a terrible force which set the opposition in panic. Eventually, the vulnerable nature of the elephant's proboscis was discovered, and ingenious military men began to find ways to thwart the elephant's attack, such as cutting its tender trunk with sharp swords attached to long handles.

THE CONIES (Order, *Hyracoidea*)

The Hyraxes are small proto-ungulates that in many ways have the appearance of rodents. They differ from the rodents, however, in most features of their teeth and skeletal construction. In the upper jaw are a pair of incisors that grow throughout life in the rodent manner; instead of being chisel-like, however, they are triangular in cross section and terminate in sharp points. The number of functional toes on the fore-foot is reduced to four, of which the outermost is smaller than the others. Only three toes are present on the hind-foot. The other two hind-toes, like those of the fore-foot, have broad, short nails similar to those of the rhinoceros.

37. Coney (*Hyrax*)

"And the coney, because he cheweth the cud, but divideth not the hoof; he *is* unclean unto you" (Lev. 11:5).

"Nevertheless these ye shall not eat of them that chew the cud, or of them that divide the cloven hoof; *as* the camel, and the hare, and the coney: for they chew the cud, but divide not the hoof; *therefore* they *are* unclean unto you" (Deut. 14:7).

"The high hills *are* a refuge for the wild goats, *and* the rocks for the conies" (Ps. 104:18).

"There be four *things which are* little upon the earth, but they *are* exceeding wise: The ants *are* a people not strong, yet they prepare their meat in the summer; The conies *are but* a feeble folk, yet make they their houses in the rocks . . ." (Prov. 30:24-26).

The coney is mentioned only 4 times in the Bible, and twice it is in connection with the law regarding what animals should be eaten.

"Coney," or *damon* (*Hyrax syriacus*), corresponds to the Hebrew *shāphān*. This latter term has, at times, been wrongly translated as

"urchin," "rabbit," and even *cherogrillus*, which is a transliteration of the Greek word for porcupine.

The hyrax lives in holes in the rocks where it can find refuge from predators, for it is comparatively defenseless. In Palestine it is often known as the "bear-rat" because of its resemblance to a vast tailless rat. Strangely enough, this little creature is related to the manatees (or sea cows), the dugongs, and the elephants. It was for some time believed by zoologists to be related to the rhinoceros.

Many people consider the flesh of coney a delicacy, but the animals are difficult to catch. As stated in the Bible, the coneys are "exceeding wise," for they make "their houses in the rocks." The coneys are a "feeble folk," but, if cornered, will fight back and can inflict painful bites with their incisors.

The hyrax was forbidden as food to the Israelites. Its small body is clothed in soft, fine fur. The head is very like that of a vast rat: the ears are rounded and the tail almost nonexistent.

THE WHALES (Order, *Cetacea*)

Included in the Order *Cetacea* are the whales, porpoises, and dolphins, which differ from all other mammals (except the manatees and the dugong) in being fully adapted for aquatic life. Their bodies are characterized by a fishlike form; the head joins directly to the trunk with no trace of a neck, and the posterior section tapers to a forked, finlike tail arranged horizontally. The fore-limbs are present as flippers which show no outward indication of digits, and with no trace of nails or claws. There is no external indication of the hind-limbs. The thick skin is hairless, with the exception of a few bristles around the mouth of some species, and is underlaid by a thick layer of blubber. Most species have a fin on the back which has no corresponding skeletal structure. The nostrils are located on the top of the head so that the animal may breathe while mostly submerged. Although they do resemble fish in body form, the cetaceans are of course true mammals; they produce live young which are nourished by milk from the mother's body.

38. *Whale*

"And God created great whales, and every living creature that moveth, which the waters brought forth abundantly, after their kind, and every winged fowl after his kind: and God saw that *it was* good" (Gen. 1:21).

"*Am I* a sea, or a whale, that thou settest a watch over me?" (Job 7:12).

"Son of man, take up a lamentation for Pharaoh king of Egypt, and say unto him, Thou art like a young lion of the nations, and thou *art* as a whale in the seas; and thou camest forth with thy rivers, and

troubledst the waters with thy feet, and fouledst their rivers" (Ezek. 32:2).

"Now the Lord had prepared a great fish to swallow up Jonah. And Jonah was in the belly of the fish three days and three nights" (Jonah 1:17).

"For as Jonas was three days and three nights in the whale's belly; so shall the Son of man be three days and three nights in the heart of the earth" (Matt. 12:40).

Only 4 times is the whale named directly in the Bible. The Hebrew word *tanninim* for "whale" can also be rendered as "sea monster," or even as "dragon." Therefore it is not certain that "whale" is literally intended in such stories as that of Jonah and the whale.

Two or three species of whales existed in the Mediterranean with which the Israelites could have been familiar. Today, the skeletons of two species of baleen whales are kept in a museum at Beirut; one of the animals was brought ashore at Beirut and the other at Sidon, the place where Jonah was supposed to have landed.

The Greek word used in the Septuagint for the sea monster in the Book of Jonah was *ketos*. It was the same as *cetus* in the Latin, which meant any large sea animal. It was from these words that the whales and their related kind derived the name of their order—*Cetacea*.

One of the best stories found in the Old Testament is the story of Jonah and his travels. When one hears of Jonah a whale comes to mind, for this is presumably the "great fish" that swallowed that ancient prophet. However, among persons interested in the matter and those scientists and theologians who have bothered to look deeper, there is a wide divergence of opinion as to which animal did swallow Jonah (if any ever did). Though many agree with the old myth that it was a whale, many others have tried to prove that a large shark was the culprit.

A whale is not a fish, and the Bible specifically writes that it was a "great fish" that ingested Jonah. It may be presumed that the ancient sailors already knew the difference between a fish and a whale, for there are records even of a king of ancient Assyria going to sea to hunt whales off the Palestinian coast.

The story of Jonah is not a very unusual one for the ancient world, there being many similar myths about monsters swallowing men and the men coming out alive.

One large group of whales is definitely ruled out of the Jonah story, and these are the whalebone or baleen whales, of which the Blue Whale, the largest living animal, is a member. These animals have a very limited capacity when it comes to swallowing large objects. They feed by straining out the numerous small sea life in the water by means of a great number of parallel horny plates of whalebone, or baleen, suspended on the sides of the upper jaw. Their gullets are small, hardly capable of swallowing a large mouse, much less a grown man.

Toothed whales, of which the largest is the Sperm Whale (*Physeter catodon*), can reach a length of over 60 feet, with teeth about 7 inches long (in the lower jaw only). This is the whale normally thought of when the story of Jonah and the whale is related.

Sperm whales feed on much larger food than their relatives the baleen whales, swallowing giant squids in great numbers. Undigested fragments of squids of enormous size have been found in the stomachs of these whales by their captors.

Herman Melville in *Moby Dick* mentions the battles between the squid and the sperm. If food of this size can be swallowed, then the possibility of a man meeting the same fate is not altogether impossible. There is even an authenticated report of a whale being opened in whose stomach a 10-foot shark was found intact, so that a man would not have had too much trouble fitting into such a whale. However, whether he could survive the ordeal of being swallowed (alive) is another matter.

Actually, there is a *reported* case of a man being swallowed by a whale and living to tell about it. This was supposed to have happened in February, 1891, to a whaler by the name of James Bradley. He was eaten by a whale, and when on the next day the whale was captured he was taken out of it, still alive. He had lain unconscious in the stomach and his rescuers had difficulty in restoring him to his senses. It is alleged that it took a month of recuperation before he regained his sanity.

According to Roy Chapman Andrews, a former director of the Museum of Natural History and an authority on whales: "Many people asked me if the Bible story of Jonah and the whale is true. Could a man be swallowed by a whale? So I pushed my body partly down the throat of a dead sixty foot sperm whale. I could just squeeze through. A fat man couldn't have made it."

Sharks can also swallow men and other large animals, whole. A Great White Shark (*Carcharodon carcharias*) was captured on the California coast which had an entire sea lion weighing 100 pounds in its stomach, and in another case, a large Newfoundland dog was found in the stomach of another man-eater. These sharks are large, sleek fish of a predatory nature which might go after a man tossing about on the waves.

The Challenger Expedition, a scientific voyage, dredged some teeth from the Pacific Ocean which were 5 inches long, so that the shark would have been almost 100 feet long, easily capable of swallowing a man. Fossils of Eocene and Miocene sharks also indicate that these fish once reached enormous sizes.

Linnaeus, the Swede who is called the father of modern zoology, thought that the Great White Shark was the "great fish" mentioned in the Bible, though other types of sharks have also been credited with the feat. The Basking Shark is another candidate, and the one living species,

Cetorhinus maximus, can grow to a length of about 40 feet. It has a large mouth with minute teeth, and feeds through hoop-like gill arches 4 to 6 inches long. The Norwegian Bishop Gunner, in 1765, tried to prove this fish the culprit, but it has too small a gullet.

The largest shark is the Whale Shark (*Rhincodon typus*) which can weigh scores of tons spread over a 50-foot length. This fish has a huge mouth with tiny teeth, and though its size might indicate that a man could possibly be swallowed by it, once again it is a plankton feeder and has too small a throat.

One author, writing on this subject, said: "In certain theological commentaries we find the remarkable statement that, in 1758, a sailor fell overboard in the Mediterranean and was swallowed by a shark. The captain commanded to train a gun upon the man eater, and the monster was hit by a cannon ball. The shark vomited out the sailor who was picked up by a boat; he had hardly suffered any injury."

We now have seen several animals which might fit the specifications of the great fish that swallowed Jonah. If we look at the natural habits of these animals there is one that has the greatest likelihood of being the one referred to: the Great White Shark. First of all, most commentaries on the Bible and other sources seem to think that it was this fish, and not the whale, that did the swallowing.

Finally, there is quite a different theory by way of explanation of the myth. This stems from the fact that the Phoenicians carried on a regular and thriving whaling industry out of several ports along the Palestinian coast. There are references to this in classical literature. It has been pointed out that Jonah ostensibly left Israel for "the east" but appears to have gone *west*. The theory supposes that he actually left by ship for North Africa and later returned by a Phoenician whaling ship and the statement that he had been swallowed, then regurgitated, by a whale was an allegorical way of stating that he had been with the whalers and then was "disgorged by a whaling ship." Semitic storytellers delight in cloaking their meaning by saying something parallel, as it were. Hebrew poetry (typified by the Psalms) does not scan: instead, the couplets all say the same thing twice, but in different words. Finally, in support of this theory it has been pointed out that Jonah had very real political reasons for explaining his long absence, and particularly *where* he had spent this time.

Most whales would not make a meal of a man because they usually stick to a pretty rigid diet; the sperm, for example, feeds mostly on squid; others on small fish; and the baleen whales on tiny creatures that make up the plankton. The man-eating sharks, on the other hand, are found in this sea, and are not as choosy about their meals, and so might conceivably go for a person helpless in the water.

Chapter 8

Birds of the Bible

RATITES	39. Ostrich	Ranan	<i>Struthio camelus</i>
PELICANS	40. Pelican	Ka'ath	<i>Pelecanus onocrotalus</i>
WADERS			
<i>Ardeidae</i>	41. Heron	Anafash	<i>Ardea</i> spp.
	42. Bittern	Kippod	<i>Botaurus stellaris</i>
<i>Ciconiidae</i>	43. Stork	Chasidah	<i>Ciconia ciconia</i>
WATER-FOWL	44. Swan or Ibis	Tinshemeth	<i>Cygnus olor</i> or <i>Threskiornis aethiopica</i>
BIRDS OF PREY			
<i>Accipitridae</i>	45. Kite	Dayah	<i>Milvus milvus</i>
	46. Eagles	Nesher	<i>Aquila</i> spp. and <i>Circetus gallicus</i>
<i>Vulturidae</i>	47. Vultures	Rawkam	<i>Gyps fulvus</i> , <i>Neophron percnopterus</i> , and <i>Aegypius monachus</i>
<i>Pandionidae</i>	48. Lammergeier	Peres	<i>Gypaetus barbatus</i>
<i>Falconidae</i>	49. Osprey	Azniyyah	<i>Pandion halietus</i>
	50. Falcon	Netz	<i>Falco</i> spp., et al. gen.
GAMEBIRDS	51. Peacock	Tucci	<i>Pavo cristatus</i>
	52. Partridges	Kore	<i>Ammoperdix heyi</i> , and <i>Alectoris graeca</i>
	53. Quail	Shelev	<i>Coturnix coturnix</i>
	54. Chickens	Tarnegol	<i>Gallus domesticus</i>
CRANES	55. Cranes	Agur	<i>Grus grus</i>
PLOVERS	56. Lapwing	Or-goor	<i>Vanellus vanellus</i>
PIGEONS	57. Doves	Yonah, Tor	<i>Columba livia</i> and <i>Streptopelia turtur</i>
CUCKOOS	58. Cuckoo	Shachaph	<i>Cuculus canorus</i>
OWLS	59. Eagle Owl	Yanshooph	<i>Bubo bubo</i>
	Little Owl	Cos	<i>Athene noctua</i>
	Scops Owl	Kippoz	<i>Otus scops</i>
	Tawny Owl	Lilith	<i>Strix aluco</i>
EXOTICS	60. Hoopoe	Dukipath	<i>Upupa epops</i>
SONGBIRDS			
<i>Corvidae</i>	61. Raven	Oreb	<i>Corvus corax</i>
<i>Hirundinidae</i>	62. Swallows	A-geor	<i>Hirundo rustica</i> , et al.
<i>Fringillidae</i>	63. Sparrows, etc.	Tsippor	(All small finches, weavers, etc.)

THE FLIGHTLESS BIRDS (*Ratitae*)

Under the title Ratites are grouped the flightless, ostrich-like birds. They are characterized by having lost the well-developed keel to the breastbone that serves as a place of muscle attachment in birds endowed with the power of flight. The wings are greatly reduced.

THE OSTRICH FAMILY (*Struthionidae*)

The ostriches are the largest of all living birds. The bulky body is covered with coarse plumage, but the long neck and head are practically naked. The beak has an extended gape which reaches back to the line of the eyes. The eyes are 2 inches in diameter, among the largest known among land vertebrates; this gives them a very wide field of vision. They are also endowed with a keen sense of smell.

A large male ostrich is nearly five feet high at the back and may weigh more than 300 pounds. The female is considerably smaller. The animal runs at speeds up to 40 miles per hour, and can cover 15 feet in a stride. In addition, the ostrich is capable of stretching itself to 7 feet. (It is not true that ostriches hide their heads in sand when confronted with dangerous situations.)

39. Ostrich

"*Gavest thou* the goodly wings unto the peacocks? or wings and feathers unto the ostrich? Which leaveth her eggs in the earth, and warmeth them in dust, And forgetteth that the foot may crush them, or that the wild beast may break them. She is hardened against her young ones, as though *they were* not her's: her labour is in vain without fear; Because God hath deprived her of wisdom, neither hath he imparted to her understanding. What time she lifteth up herself on high, she scorneth the horse and his rider" (Job 39:13-18).

The ostrich referred to in the Bible was probably a form of the African Ostrich, *Struthio camelus*. This species at one time flourished in parts of Asia, and until recent times inhabited Palestine, Syria, and Arabia. The ostrich is mentioned in the Bible more often than we might think. This is because three different Hebrew words have the primary meaning of "ostrich," although in many translations of the Bible they may be rendered "owl" or "peacock." The three words are *ya'anah*, which means greediness, *ranan*, which is the Hebrew word for ostrich (although some scholars have translated it peacock), and *notseh*, which means feathers.

The second of these words is used in the Book of Job in a long description of the large bird. This description is remarkably accurate, although it overrates the ostrich's renowned stupidity. It points out the beauty of the bird's black and white plumage, as well as its remarkable

speed when running at full speed. In the charge of neglecting its young, however, the ostrich is maligned by the passage from Job. The ostrich egg is remarkably hardy and can withstand the high noonday temperatures in the desert. In the evening, when the weather cools, the ostrich returns to its eggs to keep them warm. Although it is true that ostriches will occasionally leave eggs "lying around," this is because the bird usually lays many more eggs than it can hatch. Some of the eggs which are laid outside of the nest, therefore, do not hatch, but serve as food for the birds that do hatch lest they go hungry in the barrenness of the desert. Another reference to the failing of the ostrich as a parent can be found in the Book of Lamentations, where the prophet Jeremiah says: ". . . the daughter of my people *is become* cruel, like the ostriches in the wilderness" (Lam. 4:3).

Because it makes its home in the desert, the ostrich is coupled several times with the dragon in the Bible as a dweller in desolate places. Isaiah says of Babylon that "owls [or ostriches] shall dwell there and satyrs shall dance there" (Isa. 13:21). In the same chapter the prophet foretells that Idumaea will become "an habitation of dragons [*var.* 'wild dogs'], and a court for owls" (Isa. 34:13). A similar reference is found in the Book of Jeremiah (50:39). The ostrich is mentioned in both Leviticus and Deuteronomy as an unclean bird. Its strange cry is compared to the sound of human lamentation in both the Book of Job (30:28-29) and the Book of Micah (1:8). The latter reads: "Therefore I will wail and howl, I will go stripped naked: I will make a wailing like the dragons, and mourning as the owls."

The low, dolorous sound referred to has been compared to "the hoarse lowing of an ox in pain," and is made by the ostrich at night. The daytime feeding sound, contrarily, is a hissing, chuckling noise.

The thighs of the ostrich are naked and powerful. The legs are long and robust, tipped with two short toes with claws resembling hoofs. The plumage of the male is black while the short feathers of the wings and tail are white. Females are grayish brown. In both sexes the neck is covered with down, and in some varieties the skin is red or blue in color. The call of the ostrich is quite penetrating and is suggestive of grief and woe; they also "roar" exactly like lions.

Ostriches cannot live in forests and prefer to remain in open spaces. They usually travel in flocks, in company with mammals such as zebras. In such a relationship each of the animals involved is helpful for the survival of the other. Ostriches are omnivorous. They feed extensively on fruit, seeds, and plants, but will also eat small mammals, reptiles, and insects. Though they enjoy bathing and drinking, they are able to go without water for days. They are among the most primitive of birds in respect to intelligence, with a brain no larger than a walnut.

Ostriches are polygamous. As the breeding season draws near, the males fight each other with their beaks and necks. They are surprisingly powerful animals. Each male usually mates with three or four females. The number of eggs "per harem" can be as high as 20, each egg weighing 3 pounds. The eggs possess strong, thick shells which protect the embryo from the heat of the desert. The female participates in incubation, but only by day and during cold spells. The male performs all of the nightly incubation. The female is endowed with camouflage coloration to protect it while incubating in daylight. Hatching time is 6 weeks, and soon the young are able to travel in coveys with the adults.

The life span of the ostrich is about the same as man's. The animals thrive in captivity. They are carefully protected in a number of African national parks. Otherwise, ostriches are found in desert regions. Unfortunately, the ostriches that used to inhabit the Bible lands have become extinct.

THE SWIMMERS (*Pelecaniformes*)

The Steganopodes are a large group of water birds that include the cormorants, darters, gannets, pelicans, and frigate birds. All are characterized by having very short legs, and by having the four whole toes connected by a web, which extends to their tips. The wings are either long and rounded or very elongated and pointed. All members of the Order are carnivores, living mostly on fish.

THE PELICAN FAMILY (*Pelecanidae*)

The pelicans are the largest members of the Order, and are chiefly characterized by the unique development of the beak. It is very long and flattened, with a large, expandable pouch affixed to the lower mandible. The whole structure acts as a large bag, with the upper mandible forming a lid. The body is massive, the neck long, and the head comparatively small. The wings are broad and large, and the tail broad and rounded. There are 8 species of pelican, 6 of which are found in the Old World. They prefer tropical or subtropical habitats, and live together in large communities.

The pelican's lack of proportion makes it difficult for it to rise from the water. To take off, it must first run awkwardly along the surface, pounding at the water with its legs. Despite their awkward appearance, pelicans are peerless aerial acrobats. This is made possible by the (normal to birds) possession of a skeleton of hollowed-out bones and by the presence of large air reservoirs in the body. The birds fly in groups, usually following a definite formation, with their wings beating in harmony. The flying formation is directed by the leader pelican.

Small fish are the diet of pelicans. Some pelicans hunt these by circling

and diving, frequently disappearing underwater. The majority, however, land on the surface of the water and submerge only the fore-part of the body. White Pelicans (*Pelecanus onocrotalus*) often hunt in large groups, surrounding the fish in a circle. The circle is gradually narrowed and the fish are gobbled up. When underwater, the pelican moves its bill from side to side, the pouch remaining open. The length of the pouch may exceed 15 inches. It can hold up to 3 gallons, and on land it sometimes droops almost to the ground. The primary function of the sac is to assist the bird in catching food. It also helps the bird to keep cool in a very hot environment, because it provides a great deal of surface area for evaporation.

40. Pelican

"And these *are they which* ye shall have in abomination among the fowls; they shall not be eaten . . . And the swan, and the pelican, and the gier-eagle" (Lev. 11:13, 18).

"I am like a pelican of the wilderness; I am like an owl of the desert" (Ps. 102:6).

The pelicans of the Bible are *Pelecanus onocrotalus*, the typical white pelican of Eurasia and Africa. They are inhabitants of large inland lakes. They are capable of nesting in a variety of environments—on bare ground, on ledges, or in trees. The nest may be formed from pebbles or from sticks. Pelicans usually lay 2 to 4 eggs. The incubation time is about 6 weeks, and is performed by both sexes. The young remain another 5 weeks in the nest, and then wander about in company with other young. A number of pelicans feed their offspring partially digested fish, which the young birds obtain directly from their mothers' throats.

During the breeding season, these pelicans begin to sprout horns on the upper side of their bills. There is generally only one horn and it measures about 3 inches long and 3 inches tall. When the breeding season is over it falls off. Also during this season the coloration of the exposed areas of the legs and face of many species changes from gray to bright orange or red. At the same time the white feathers acquire a beautiful pink tint, originating from secretions of the oil gland and spread throughout the plumage by the bird as it preens.

The pelican, because it is a bird that feeds mostly on creatures of blood (fish), is listed in Leviticus and Deuteronomy as an unclean bird. There it goes under the Hebrew name *ka'ath*, which literally means "to vomit." It is believed that this name was given to the pelican because it stores great quantities of fish in its large mandibular pouch, and feeds its young by disgorging. There are several references to the *ka'ath*, in Isaiah (34:11) and in Zephaniah (2:14), where it is usually translated

as "cormorant." It would probably be more accurate in these instances to use "pelican" instead.

One of the most interesting references to the pelican occurs in Psalm 102:6: "I am like a pelican of the wilderness," the Psalmist writes. Since the pelican is a water bird, and the wilderness mentioned in the Bible is usually taken to refer to the desert, some problem arises here. The solution of this apparent anomaly may be twofold. First, there is no reason not to accept wilderness as meaning any desolate place, such as the ocean, as well as the desert. Second, naturalists have on occasion observed that the pelican, when its pouch is full, will fly to some nearby desert area to digest its food. Often it will sit on its breast there for days in a most melancholy attitude, giving the Psalmist's image even further strength. On the other hand, these birds especially favor lakes in deserts such as Walker Lake and the Great Salt Lake in Nevada.

Because of the red tip at the end of its beak, and the strange manner in which it feeds its young, the pelican was thought by the ancients to feed its brood with its own blood. From this misbelief arose the medieval ecclesiastical emblem comparing the pelican to the feeding of the Church.

THE LONG-LEGGED WADERS (*Ciconiiformes*)

This Order contains five families. The best-known are those of the Herons, the Storks, and the Ibises. Apart from islands, they are world-wide in range on the land surfaces of the earth.

THE HERON FAMILY (*Ardeidae*)

The herons, egrets, and bitterns, which make up the Family *Ardeidae*, can generally be distinguished by their thin, compressed bodies and long, thin necks. The beak is straight, narrow, and pointed, with serrated cutting edges at the tip. Medium-length legs end, usually, in three-toed feet; the claw of the third toe being pectinated on the inner side. The heron family, the *Ardeidae*, contains more than 60 species and at least 15 genera. Its members are wading birds whose chief sources of food are fish, and other aquatic animals. All the members are remarkably alike in structure. They have long legs and a long, mobile neck which is S-shaped when drawn back. The bird uses its bill as a spear, triggered by a very powerful thrust.

The plumage of most of the species is soft. On the sides of the chest and rump there are usually small feathers that grow continuously and are crumbled by the bill into a powderlike substance which is used in preening the other feathers. In areas soiled by fish slime, this dust is rubbed in, to soak up the oil, and is finally combed out by the claws. The various groups of the *Ardeidae* are differentiated by the arrangement of these "powder downs."

During the breeding seasons, both males and females have specialized ornamental plumage on some part of the body. The plumage is also a good means of protection for these birds. Herons are communal animals and practice group nesting; with, also, several different species breeding in the same nesting area. Herons are known to migrate for thousands of miles in order to breed. The heron nests in trees and low bushes and lays from two to five eggs. It rests in groups near the water, but may also trespass on suburban lawns and zoological gardens. The nest is made from papyrus or sedge, by bending the living stems in a circle and trampling them down with the feet. The birds arrive in March and leave in September. They feed on fish, frogs, mice, snakes, and beetles. The parents feed the young by regurgitation.

The most successful group of the heron subfamily contains the typical herons. More than half the species of the *Ardeidae* belong to this group. This contains most of the typical (Biblical) herons, including the Blue, Brown, Purple, and White Herons. These four species are contained within the Genus *Ardea*. The typical herons are medium to large in size, with slim bodies and long bills. Most of these species are gregarious.

41. Heron

"And the stork, the heron after her kind, and the lapwing, and the bat" (Lev. 11:19).

The purple heron (*Ardea purpurea*) is one of 11 species of herons found in Israel. It is a summer breeder and found in all parts of Palestine where there is standing water, and it poses something of a threat to fish conservation. Among the species of heron known to the Ancient Hebrews were the Buff-backed Heron (*Buphus russatus*), also called the White Ibis, the most common of the seven species found in the Biblical area.

42. Bittern

"I will also make it a possession for the bittern, and pools of water; and I will sweep it with the besom of destruction, saith the Lord of hosts" (Isa. 14:23).

"But the cormorant and the bittern shall possess it; the owl also and the raven shall dwell in it: and he shall stretch out upon it the line of confusion, and the stones of emptiness" (Isa. 34:11).

"And flocks shall lie down in the midst of her, all the beasts of the nations: both the cormorant and the bittern shall lodge in the upper lintels of it: *their* voice shall sing in the windows; desolation *shall be* in the thresholds: for he shall uncover the cedar work" (Zeph. 2:14).

Because of the shyness of the bittern, it is often used by the writers of the Bible to suggest places of desolation and loneliness.

Some Biblical scholars have said that the use of the word *kippod* in these references indicates not the bittern, but the hedgehog, or porcupine! They base this supposition on the similarity of the Hebrew to the Arab word *kunfod*, which means porcupine. Tristram has pointed out, however, that the bittern, which was particularly abundant in the swamps of the Tigris River, fits more ideally into these descriptions than the hedgehog.

Bitterns differ from herons in the possession of shorter legs and a shorter and more compact body. Most bitterns inhabit marshes, where it is easy for them to hide. Bitterns are remarkably proficient at camouflaging themselves. In situations of danger, they use their plumage to duplicate the color and shape of swamp vegetation. They actually seem to disappear before the observer's eyes. Herons, on the other hand, do not possess this ability and simply take flight when alarmed.

The large bitterns comprise 4 species which occur throughout the world. The members are brown in color and streaked in appearance. The best known of these species is the Old World bittern (*Botaurus stellaris*) and the American bittern (*B. lentiginosus*).

During the mating season the larynx of these birds is modified so as to produce their mysterious-sounding love songs. The body of the bittern twists in an unusual manner in harmony with these notes.

Like the herons, bitterns possess mobile cervical vertebrae which permit them to spear fish by the action of their head and long, pointed bill. They also produce a powder for the purpose of soaking up oil which has been acquired in contact with the fish. Unlike herons, bitterns nest alone in grassy marshes.

THE STORK FAMILY (*Ciconiidae*)

The storks are a group of large birds that can easily be distinguished from the heron family by the lack of pectination on the inner edge of the claw of the third toe, and also by the absence of the powder-down patches on the rump. The beak, which forms a long, compressed, sharply pointed cone, may be either turned up at the end or gaping in the middle. The body is plump, the legs are long, and the toes are connected by a short web. The wings are large, and the 12-feathered tail is short and rounded.

43. Stork

"And these *are they which* ye shall have in abomination among the fowls; they shall not be eaten, they *are* an abomination; the eagle, and the

ossifrage, and the ospray . . . And the stork, the heron after her kind, and the lapwing, and the bat" (Lev. 11:13, 19).

"Where the birds make their nests: *as for* the stork, the fir trees *are* her house" (Ps. 104:17).

Storks are mutes, lacking a voice box. To compensate for this they clap their bills rapidly and loudly. There are 17 species of storks and storklike birds distributed throughout the tropical and temperate regions of the world. They fly in a soaring manner, with neck and legs stretched out. They feed primarily on small animals plucked from the waters of swamps. Their diet includes frogs, eels, lizards, rodents, birds, and insects. Some species prefer to eat carrion. Storks possess considerable communal instincts and hunt in flocks. Their nests are sturdy and may be built in trees, on ledges, or even on houses. Three to five eggs are laid, which are soon covered with stains. Incubation is performed by both parents and lasts a little longer than a month.

The White Stork (*Ciconia ciconia*) is the best-known member of the family. It is found in Europe and Asia and some parts of Africa. It reaches a length of 4 feet. It is a highly cherished bird and believed by some to be a harbinger of good fortune. The White Stork is not completely white. There is some black in its wings, the bill is red, and the legs are pinkish.

The storks which inhabit the more northern areas of Europe and Asia migrate in groups when the cold season approaches. Some, when they return home in the spring, actually return to the same nest they had left. Storks often have permanent mates. The male communicates with the female through a series of grotesque movements of his head, back, and neck.

The common stork of Palestine is this same *Ciconia ciconia*. In the early spring the birds are seen in large flocks, remaining for a while to hunt frogs, lizards, mice, and locusts. In the fall the flights are much less frequent, because of the prevailing west winds which drive the birds farther inland. Some birds remain through the summer. The sexes are very much alike in appearance. Also found in Palestine is the Black Stork (*Ciconia nigra*), which arrives in small flocks in spring and autumn. It is frequently seen in trees. Storks were forbidden as food by the Mosaic law.

The stork has always been one of mankind's favorite birds. Its loyalty to its young, its punctual nesting habits, and its steady migratory instincts have, even in popular terminology of our own day, associated it with human childbirth. It is still believed in many parts of the world that if a stork nests in a man's house good luck will surely follow. The Hebrew word for the stork—*chasidah*—translates literally as "kindness." Man's liking of the stork also has its practical aspect, for the stork feeds on

snakes, other reptiles, and various forms of offal and garbage; thus, it actually purifies the area in which it comes to rest. It is no wonder that many Biblical figures made mention of the stork's fine habits, even going as far as to hold the bird up as an example for man. Jeremiah, for example, contrasts the regularity of the stork's migration with the more wayward habits of the people of his time: "Yea, the stork in the heaven knoweth her appointed times; and the turtle, and the crane, and the swallow, observe the time of their coming: but my people know not the judgment of the Lord" (Jer. 8:7).

The emphasis on the stork's being "in the heaven" alludes to the extraordinary phenomenon of stork migration in the Middle East. Voyaging by daylight (unlike most birds) the storks travel in vast flocks that spread out against the sky in a truly startling and beautiful manner. They rest for a while in the region, scattering over the land, and then continue their migration.

In the Book of Job the fine maternal instincts of the stork are held in contrast to the reputed negligence of the ostrich: "The wing of the ostrich beateth joyously; But are her pinions and feathers the kindly stork's?" (Job 39:13).

The nesting habits of the stork are described by the Psalmist: ". . . as for the stork, the fir trees *are* her house" (Ps. 104:17). This description has less meaning today, when storks often nest in man-made constructions, than it had in Biblical times, when the stork, seeking a nesting place close to its source of food, picked trees tall enough and strong enough to support the large platform of its nest. Of the trees in the Middle East none is more suited to the stork than the fir, and the Psalmist is recording an accurate and quite perceptive account of Nature.

The Biblical writers overestimated the strength of the stork's beautiful wings, as did many ancients in regard to many large birds. In Zechariah we read: "Then lifted I up mine eyes, and looked, and, behold, there came out two women, and the wind *was* in their wings; for they had wings like the wings of a stork; and they lifted up the ephah between the earth and the heaven" (Zech. 5:9). Actually, like most birds, the stork can lift and fly with only a very small weight because of its light construction. Still, the sight of the stork's 7-foot wingspan soaring across the sky remains as impressive for us as it obviously was for Zechariah.

THE WATERFOWL (Order, *Anseriformes*)

This group contains, as well as the swans, geese, and ducks, three large, semi-aquatic birds popularly called "Screamers" that inhabit South America. Apart from these rather aberrant birds, the waterfowl form a somewhat close-knit family.

THE DUCK FAMILY (*Anatidae*)

Although they vary greatly in size, the members of this group, which includes the ducks, swans, and geese, all have quite similar body forms. The legs are always short, and the first toe is generally smaller than the rest. With one exception the toes are completely webbed. The beak is relatively short, straight, and laterally expanded. The dense plumage is characterized by its ability to shed water. There are always 10 primary quills to the wings, although the number of tail feathers is variable. All members of the Order molt annually, and in the true ducks the males shed their contour feathers twice each year.

44. *Swan*

"And these *are they which* ye shall have in abomination among the fowls; they shall not be eaten, they *are* an abomination; the eagle, and the ossifrage, and the ospray . . . And the swan, and the pelican, and the gier-eagle" (Lev. 11:13, 18).

"Of all clean birds ye shall eat . . . But these *are they* of which ye shall not eat . . . The little owl, and the great owl, and the swan . . ." (Deut. 14:11, 12, 16).

The lists of unclean birds in Leviticus and Deuteronomy include the swan. The Hebrew word used is *tinshemeth*, a word that has been translated in some editions of the Bible as "ibis." The latter versions are probably more correct, since the swan is extremely rare in Egypt, while the sacred ibis is quite plentiful. Also, there is little reason to make the swan an unclean animal. Except for these dubious references there is no mention in the Bible of the swan, the goose, or the duck. This could be because of the dry climate of the Middle East; yet migrating waterfowl may swarm in the lakes of the region.

Waterfowl are the descendants of a very old Family, going back to Miocene times (about 35 million years ago). Today the Order is represented by about 140 species, scattered over every part of the world outside of Antarctica. Geese, swans, and ducks are superficially distinct, but quite similar in structure and behavior.

Waterfowl possess short legs—much shorter than their wings. The bill is short and straight. The plumage is thick and heavily underlaid with down. A number of waterfowl pluck their feathers to line their nests and conceal their eggs. There are 10 primary feathers and a variable number of tail feathers. Just after the breeding season, the primary feathers molt and the wing quills are shed at the same time. In this manner, the birds are often rendered incapable of flying for some time.

The eggs laid are uniform in coloration. The incubation period takes as long as 40 days in some species. Between 10 and 20 eggs are deposited.

The young are covered with down and can swim within a day after hatching.

Most waterfowl are gregarious, existing in flocks of great size. The species that nest in the northern areas of the world migrate during the fall and the spring in large numbers. After the breeding season, geese and swans move in family groups to the wintering grounds. The bond between male and female is incredibly strong, sometimes lasting the entire life of the couple. Since swans are known to be able to live to be nearly 100 years old, we can appreciate the intensity of the mating bond. In ducks, on the other hand, the bond lasts no more than a few years. In most species of waterfowl, incubation is the duty of the female, while the male assists in the feeding and protection of the young.

Many types of geese and swans fly by running in the water, pounding the surface with their webbed feet, and striking it with the tips of their wings. The speed of flight is as high as 45 to 50 miles per hour. A number of species fly in patterns guided by a leader.

Waterfowl are generally omnivorous in their eating habits, but a few species feed primarily on fish. Others prefer crustacea and shellfish, but most of them are pure vegetable feeders. The plumage of waterfowl is covered with oil secreted from a gland found near the base of the tail. This keeps the body covering waterproof and also is physiologically associated with the maintenance of the plumage and growth of the body.

In ancient times waterfowl abounded. Following the invasion by man of their habitats, the population of the group diminished woefully. In recent years there has been some effort to prevent these numbers from further diminishing.

THE BIRDS OF PREY (*Falconiformes*)

Generally known as the diurnal birds of prey, the Accipitrines include the vultures, lammergeiers, eagles, ospreys, hawks, falcons, and kites. All members of the Order are well adapted to their way of life, being equipped with a hooked beak and sharp, curved talons. The eyes are always located at the sides of the head, and the fourth toe is never reversible. Although the young resemble the owls in having a soft, downy coat, all develop a firm plumage in the adult. The whole group is carnivorous, but while some members kill their own prey, others live on carrion.

THE HAWK FAMILY (*Accipitridae*)

This, the first family of the Birds of Prey, contains the eagles, the short-winged hawks or buzzards, the kites, the harriers, and a number of tropical forms. The best known of these groups mentioned in the Bible is that of the eagles. The only other is that of kites. This is rather vague, and will be disposed of first.

45. Kite

The Black Kite (*Milvus nigrans*) is one of the most common scavenger birds of prey in Palestine, and is carefully protected by the people. A strong analogy exists between the Hebrew and the Arabic words for the bird. Besides the Black Kite, other species such as *M. regalis* are common in the Holy Land.

46. Eagles

Four species of eagle are found in Palestine: *Aquila chrysaetos*, *A. naevia*, *A. heliaca*, and *Circus gallicus*. Eagles, as a whole, need no description. Scripture often refers to the eagle in terms of its keen sight, its swiftness, its longevity, and its care in training its young. The Jews used the eagle as the symbol of the Assyrian, Babylonian, and Persian kings. The Hebrew word *nesher* occurs with great frequency in the Old Testament. While it is usually translated as eagle, Tristram argues in favor of putting the griffon-vulture, a bird more like the eagle than the vulture in its traits and habits, in its place. The argument need not be resolved to point out the fascination of the ancients with large birds of prey. The griffon-vulture has a head covered with white down, and thus certainly better fits the reference in Micah: "Make thee bald, and poll thee for thy delicate children; enlarge thy baldness as the eagle; for they are gone into captivity from thee" (Mic. 1:16).

Eagles' heads are not bald. Likewise, the other references that follow can apply to either bird.

The strength and swiftness of the eagle in flight are celebrated over and over again in the Bible. The rising up of eagles is equated several times with salvation. A notable example occurs in Isaiah: "But they that wait upon the Lord shall renew *their* strength; they shall mount up with wings as eagles; they shall run, and not be weary, *and* they shall walk, and not faint" (Isa. 40:31).

In Job, the swiftness of the eagle is used in a vivid and moving metaphor: "They are passed away as the swift ships; as the eagle *that* hasteth to the prey" (Job 9:26). And when Moses warns the Children of Israel of the dangers they face when the years in the desert end, he summons forth an eagle image: "The Lord shall bring a nation against thee from far, from the end of the earth, *as swift* as the eagle flieth; a nation whose tongue thou shalt not understand . . ." (Deut. 28:49). (Again, some versions of the Bible say that the bird is a vulture.)

The prophets make reference to the swift birds of prey over and over again. Jeremiah tells his people their persecutors are "swifter than the eagles of the heaven" (Lam. 4:19), and Ezekiel writes of: ". . . A great eagle with great wings, longwinged, full of feathers, which had divers colours, came unto Lebanon, and took the highest branch of the cedar

. . .” (Ezek. 17:3). In the Book of Proverbs (30:19), “The way of an eagle in the air” is said to be one of the three things that are beyond the writer’s understanding. Yet, he still uses the eagle’s flight to make a point: “Wilt thou set thine eyes upon that which is not? for *riches* certainly make themselves wings; they fly away, as an eagle toward heaven” (Prov. 23:5).

The Book of Job, so rich in natural lore, does not omit the eagle. The nesting habits and keen eyesight of the eagle (or vulture) are noted: “Doth the eagle mount up at thy command, and make her nest on high? She dwelleth and abideth on the rock, upon the crag of the rock, and the strong place. From thence she seeketh the prey, *and* her eyes behold afar off. Her young ones also suck up blood: and where the slain *are*, there *is* she” (Job 39:27–30). Jeremiah (49:16) also notes the bird “that dwellest in the clefts of the rock,” and warns, “though thou shouldst make thy nest as high as the eagle, I will bring thee down from thence, saith the Lord.”

Finally, the Bible twice makes a correspondence between the care of the eagle for its young, and the protection God offers the Children of Israel. In Deuteronomy we find: “As an eagle stirreth up her nest, fluttereth over her young, spreadeth abroad her wings, taketh them, beareth them on her wings: *So* the Lord alone did lead him, and *there was* no strange god with him” (Deut. 32:11–12). And in Exodus, God says to Moses: “Ye have seen what I did unto the Egyptians, and *how* I bare you on eagles’ wings, and brought you unto myself” (Exod. 19:4).

THE VULTURE FAMILY (*Vulturidae*)

The Old World vultures are mainly characterized by their large size, and, with the exception of the lammergeiers, by a bare neck and head. Although there may be short, stubby down, true feathers are never found on the crown of the head. Usually the males are as large as, if not larger than, the females. The beak is long and compressed, and always extends straight for some distance, after which it is sharply curved. The third and fourth toes are joined by a membrane at their base; the third toe is always long and the first short. All the toes are equipped with long, slightly curved claws. Most members of the family feed chiefly on carrion. This group of birds is often regarded as a subfamily of the *Accipitridae*.

47. Vultures

The Bearded Vulture, or Lammergeier (*Gypaëtus barbatus*), is one of the largest and most magnificent birds of prey. It feeds on carrion, but will also hunt and kill animals on its own. It manages to eat bones

by carrying them aloft and dropping them on rocks to break them apart.

The Griffon Vulture (*Gyps fulvus*) feeds mostly on carrion, but also on locusts and small tortoises. It is able to go without food for several days with no ill effects, but when it does break its fast it will gorge itself. Tristram describes a pet vulture of his that ate until it could no longer stand, and then rolled over helpless on its side and fell asleep. The strength of the bird's stomach is equal to its capacity. One is known to have eaten a half pound of arsenical soap with no other result than a violent fit of vomiting. Because of its bald head and neck, this vulture is quite possibly the eagle-headed bird depicted on Assyrian sculpture, and referred to in Mic. 1:16.

The confusion that exists among Biblical references to scavenger birds, such as the debate over the proper translation of the word *nesher* (eagle or griffon vulture?), extends here. The Hebrew word *dayah* is usually rendered as vulture, while the word *ayah* is taken to mean kite. Tristram, however, argues that *dayah* is actually a kite, and points out that in at least one place (Job 28:7) it is translated as vulture. In Leviticus and Deuteronomy, the word used in the list of unclean birds (Lev. 11:14 and Deut. 14:13) is *ayah*, and it is followed by the expression, "after its kind," which may indicate that both types of scavenger are taken together generically and may be treated as such. (This also explains the similarity, suggesting a single root, of the two Hebrew words.)

Above the battlefields and carnage of the Old Testament sits the vulture, the most detested of Nature's scavengers. It is not always named, but again and again the phrase, "fowls of the air," is written to describe eaters of dead flesh. In the Book of Kings, for example, it is written: "Him that dieth of Jeroboam in the city shall the dogs eat; and him that dieth in the field shall the fowls of the air eat: for the Lord hath spoken it" (I Kings 14:11). And again, in Psalms: "O God, the heathen are come into thine inheritance; thy holy temple have they defiled; they have laid Jerusalem on heaps. The dead bodies of thy servants have they given to be meat unto the fowls of the heaven, the flesh of thy saints unto the beasts of the earth" (Ps. 79:1-2).

In several places the Bible becomes more specific, but usually uses the vulture in an emblematic or symbolic sense. It represents death, and as such is used by the prophets as a symbol of the desolation that will overtake the wicked cities. Hosea warns the Hebrews in these words: "Set the trumpet to thy mouth: *he shall come* as an eagle against the house of the Lord, because they have transgressed my covenant, and trespassed against my law" (Hos. 8:1).

Both Isaiah and Zephaniah use the vulture similarly. The former, in describing the destruction to befall Edom, says: "There shall the great

owl make her nest, and lay, and hatch, and gather under her shadow; there shall the vultures also be gathered, every one with her mate" (Isa. 34:15). And the latter foresees the downfall of Nineveh in these terms: "And flocks shall lie down in the midst of her, all the beasts of the nations: both the cormorant and the bittern shall lodge in the upper lintels of it: *their* voice shall sing in the windows; desolation *shall be* in the thresholds: for he shall uncover the cedar work" (Zeph. 2:14).

Two other vultures are common in Palestine and were doubtless known to the Hebrews. These are the Black Vulture (*Aegypius monachus*) and Pharaoh's Vulture (*Neophron percnopterus*).

48. *Lammergeier*

"But these *are they* of which ye shall not eat: the eagle, and the ossifrage, and the ospray" (Deut. 14:12).

Peres is the Hebrew word for ossifrage, believed to be the Lammergeier, the largest of the vultures. This word, however, is an old English name for the Osprey of the British Isles. The Lammergeier is also called the "Bearded Vulture," because of the long, stiff hairs emerging from the face area. After the jackals and smaller vultures reduce the carcasses to the bone, this huge bird crushes the bones to obtain the marrow, or swallows the pieces intact.

THE OSPREY FAMILY (*Pandionidae*)

The Osprey or Fish-Hawk seems to occupy a position midway between the vultures and the other birds of prey. They differ from the latter in having the fourth toe reversible, a feature they share with the quite unrelated owls. The tendons of their powerful legs have been found to be more like those of the vultures than the falcons, which latter they resemble in all other respects.

There is only one species of Osprey (*Pandion haliaëtus*) distributed all over the temperate and tropical regions of the world.

49. *Osprey*

The Osprey is mentioned in the Bible only in the lists of clean and unclean birds in Deuteronomy and Leviticus. Its place on the list of the unclean birds, alongside the eagle, the vulture, the pelican, the stork, and others, undoubtedly is due to its carnivorous feeding habits. It is as large as some eagles and possesses a very sharp bill. The bird frequents coastal waters of continents but is also seen along the edges of inland rivers and lakes. It is also found in the islands of Oceania, where few hawks dwell.

The Osprey feeds primarily on fish. Some at times eat other marine life, such as the poisonous sea snakes of the Pacific and Indian Oceans.

When hunting for fish, it flies from 50 to 150 feet over the sea. When it spots the fish it furls its wings and darts down into the water. It pierces the fish with its needle-sharp talons and then rises rapidly from the water, and flies off to a tree or cliff to devour its catch.

The Osprey flies very smoothly, soaring gracefully. Unlike other hunting hawks, it has the outer toe reversible, and the claws are approximately the same in length with a strong curvature. The pads on the underside of the toes are modified with scales to aid the bird in grasping slippery victims.

In America the Osprey usually nests in trees; in Europe it prefers to nest on the edges of a cliff. There may be as many as 30 nests close together. Both sexes participate in the construction of the nest. The same nest may be occupied year after year until it reaches a depth and width of 6 feet. Two or three eggs are laid, which are white with blotchings of purple, orange, red, lilac, and black. The female does most of the incubation, a task which requires 5 weeks. For several weeks following hatching, she performs most of the brooding and feeding. Consequently, the male's chief duty is to hunt and carry food to its mate and the young. The nestlings do not leave the nest for almost 2 months.

Ospreys have a reputation for defending their eggs and young with violence, making it difficult for intruders to rob the nests. The male and the female are alike in appearance; the lower parts, neck, and head are white and the back and wings chiefly dark brown. The chest has a collar of brown spots and the head sports a blackish crest. The female is 2 feet in length, about 4 inches larger than the male.

THE FALCON FAMILY (*Falconidae*)

Comprising the hunting hawks or falcons, the falconets, and the aberrant caracaras of the New World, the *Falconidae* have a number of peculiar characteristics. The feathers have well-developed aftershafts, and the nostrils are separated by a median partition. The head is always covered with true feathers. In many species the females exceed the males in size. Although most of the *Falconidae* exist mainly on the prey they kill themselves, some eat carrion, and a few feed on honeycomb.

The word "hawk" is, in the English language—and more so in the various present-day regional forms of that language—a most ambiguous word. Normally, but by no means exclusively, it is reserved to designate the smaller members of the *Accipitridae* but it is interchangeable with Falcon in many cases; while such names for falcons as Duck-Hawk, Pigeon-Hawk, and so forth are in common usage. While there are short-tailed or true hawks among the 20 or so Accipiters in the region, it seems more likely that falcons are referred to in the Bible. However, the writers of the Bible used the names *raah*, *ayah*, *dayah*, and *daah*, rather indis-

criminally; or, alternatively and more likely the translators did so; while the Hebrew word *netz* seems to cover all of them.

This Hebrew word appears in the Old Testament 3 times, and certainly covers several of the small predatory hawks that inhabit the Biblical lands, including the Kestrel (*Tinnunculus alaudarius*), the Lesser Kestrel (*Tinnunculus cenchris*), the Hobby Hawk (*Falco eleonorae*), and the Black-shouldered Hawk (*Elanus coeruleus*). Two of the 3 mentions of the word appear in the lists of unclean birds in Deuteronomy and Leviticus. Twice the word is followed by the phrase "after its kind," indicating that the writer was well aware that several different species of bird were included in the term. The third appearance of the hawk is in the Book of Job which reads: "Doth the hawk fly by thy wisdom . . . ?" (Job 39:26).

Another mention is in Leviticus: "And these *are they which* ye shall have in abomination among the fowls; they shall not be eaten, they *are* an abomination; the eagle, and the ossifrage, and the ospray . . . And the owl, and the night hawk, and the cuckow, and the hawk after his kind . . ." (Lev. 11:13, 16).

Falcons are predatory birds, feeding upon the flesh of a variety of animals. They come in a remarkable variety of sizes, but they are very similar in structure and habits. They have strong feet with three toes pointing forward and one backward, all bearing long, sharp claws. The bill is sturdy and hooked and the eyes, although laterally located, look straight forward. The eyes are considerably developed. The structure of the eye is so arranged that the hawk is capable of using monocular vision for nearby objects and binocular vision for distant objects. No wonder the expression, "eyes like a hawk's," is so widely used in everyday speech.

The hawk is a powerful flyer. Some types can swoop to the ground or water from a perch in a tree; others are capable of diving from above and killing their prey in the air while in full flight. The claws grasp the prey; the feet hold the victim down and the bill dismembers it.

50. *Falcons (Long-tailed Hawks)*

In most species, the female is considerably bigger than the male. The usual mating relationship is one male per one female. In many species the initial couple remains together for life. Both members take part in building the nest, incubating the eggs, and protecting and feeding the young. Most hawks build their nests in trees, the structure usually consisting of a platform of sticks. Many species build them on cliffs, and some even build them on the ground. The number of eggs varies from 1 to 7. The incubation period is 1 or 2 months. The young are born sightless and often cannot stand until they are 3 weeks old. They remain in

the nest a few months. In many species they are nearly as large as the adults at the time of their departure from the nest, although the plumage is markedly different.

The best-known members of the family belong to the genus *Falco*, which includes the famous Peregrine. These birds are swift, formidable killers. They have been used for hunting since ancient times. The Hebrew did not hunt with hawks, mainly because these animals were considered unclean.

The *Falconidae* are, as has been said, divided into a number of subfamilies. The most primitive of these includes the Laughing Falcons of Central and South America. These birds have a white head and black mask. The Caracaras form an aberrant subfamily, found in the forests of Florida and of Central and South America. They feed largely on carrion. To the third subfamily belong the falconets, which include some of the smallest of the birds of prey. Some of these creatures are no more than 6 inches long. The true falcons, of which there are 37 species found over all the continents and large islands apart from Antarctica, are the most aggressive of all birds. All of them have sharply pointed wings, a short neck, and legs covered with what look like "pants." Some are found in coastal areas, while others prefer dry inland areas.

It is hard to determine what particular species of falcon is being referred to in the Bible. One possibility is the Peregrine. This land bird has one of the widest ranges of any bird in existence. It is found as far north as the Arctic, and as far south as the southern tips of Africa, India, and South America. There are very few varieties within the species, despite its remarkable range. The familiar Duck-Hawk is none other than the American representative of this species.

The sexes of the Peregrine are very much alike. The upper parts are dark grayish in color, with the head and flight feathers much darker. The breast of the bird is white with dark spotting. Around the lower abdomen, legs, and undersurface of the wing, it resembles a zebra. Another possibility for the Biblical falcon is the European Kestrel, which is found throughout Europe and Asia. It has a habit of nesting chiefly in old crow nests. It hovers as it searches for prey, and feeds primarily on insects and small birds. It has a reputation for adjusting well to city life. Its incubation period is about a month and the young remain in the nest for 4 or 5 weeks.

Falcons hunt in a variety of specialized ways. Some feed exclusively on insects which they capture in the air. Others prefer to hover over and pounce on lizards, frogs, beetles, and grasshoppers. Many eat rabbits and small rodents and birds.

The boldest of the falcons live on flying game. Several species of these birds have been trained by man to hunt a variety of game birds,

even birds of greater size than themselves. Some have even been trained to attack other birds of prey. Such fights were once witnessed with enjoyment by spectators, somewhat in the same manner as cockfighting. One of the most important assets of hunting falcons is their ability to reach speeds up to 120 miles per hour.

THE GAME BIRDS (*Galliformes*)

Such game birds and fowl as the peacocks, grouse, pheasants, quails, partridges, turkeys, and chickens are all included in the Order *Gallinae*. All have a compact body, with a rather long neck, and a large, rounded head. The legs vary in length, but are always strong and well adapted for running on land. The four toes are usually equipped with slightly curved, powerful claws. The wings are carried close to the body, and the tail exhibits a great variety in both shape and form. The young, which are able to run soon after being hatched, are covered with either soft down or feathers.

THE PHEASANT FAMILY (*Phasianidae*)

This Family, including the peacocks, pheasants, grouse, partridges, quail, and the true fowl (chickens) comprises the bulk of the typical game birds. All have scaled legs and feet, which are often armed with one or more pairs of sharp spurs.

51. Peacock

The peacock is not a natural inhabitant of the Biblical lands, thus was not known to the Hebrews until the time of Solomon, whose far-flung navy reached India's shores and brought home for the wise king's pleasure several of these beautiful birds. Thus, we find the peacock mentioned only once in the Old Testament. The first book of Kings describes the treasures collected by Solomon's sailors, and lists the peacock among them. "For the king had at sea a navy of Tarshish . . . bringing gold, and silver, ivory, and apes, and peacocks" (I Kings 10:22).

Curiously, the peacock is never used by the prophets to point up a maxim, for in our own day the bird has become a symbol for vanity and pride.

The Hebrew word used in describing Solomon's peacocks is *tuc-ciym*, which most commentators believe is not a Hebrew word at all but a corruption of the Indian word which designated the bird. In Ceylon, the peacock is still called *tokei*, a similarity too strong to be coincidental.

Some versions of the Book of Job have a line translated: "The wings of the peacock beateth joyfully" (Job 39:13). The Hebrew word used

in that instance is *ranan*, which most modern scholars now agree should be translated properly as "ostrich."

After the time of Solomon, the peacock spread throughout the Mediterranean area. It was well known by the Greeks and the Romans, and Alexander the Great so prized the beauty of these birds that he forbade his soldiers to kill any of them. All of this increases the mystery of why the peacock is not mentioned in the later Biblical books.

52. Partridge

The Hebrew word *kore* (meaning "caller") refers to the partridge (and the francolin), and is found twice in the Scriptures. David, remonstrating with Saul for his persecution of the future king, says: "Now therefore, let not my blood fall to the earth before the face of the Lord: for the king of Israel is come out to seek a flea, as when one doth hunt a partridge in the mountains" (I Sam. 26:20). The passage refers to the fact that the partridge was used as food by the Hebrews. In several places the method of hunting birds such as the partridge is told. Jeremiah says of wicked men: ". . . they lay wait, as he that setteth snares: they set a trap, they catch men. As a cage is full of birds, so *are* their houses full of deceit: therefore they are become great, and waxen rich" (Jer. 5:26-27).

And in the Apocryphal book of Ecclesiasticus there is a reference to a "decoy partridge in a cage" (11:30). This probably refers to the method of setting a captured partridge with its eyes sewn shut amidst a snaggle of bird traps, so that its cries would attract its fellows. David's reference may be to another method of hunting partridges: by throwing stones and sticks at the fleeing bird which, when frightened, runs along the ground rather than flying to escape its pursuer.

Another mention of the partridge, in Jeremiah, wrongly accuses the bird of stealing eggs. Speaking of those who win riches "not by right," the prophet uses a bird metaphor: "*As* the partridge sitteth *on* eggs, and hatcheth *them* not; so he that getteth riches, and not by right, shall leave them in the midst of his days, and at his end shall be a fool" (Jer. 17:11).

Tristram argues that the prophet's image refers not to the fact that the bird steals the eggs of others, but rather that it lays many, many eggs which were (and still are) stolen by men and other animals for food, and thus she sits upon a brood that is "not brought forth."

The most familiar partridge, and a likely candidate for the Biblical reference, is the Hungarian or Red-legged partridge. It is medium-sized, with grayish plumage and a black, horseshoe-shaped patch on its abdomen. The bird is a very capable flyer, especially noted for its rapid take-off. It inhabits the middle portions of Europe and Asia between

sea level and 15,000 feet. It was introduced to America a long time ago and to this date nearly a quarter of a million of the birds have entered the country.

Another candidate for the Biblical partridge is the *Ammoperdix heyi* (Hey's Sand Partridge). This is a desert partridge found in North Africa and Palestine. In Palestine, it is seen in the Jordan Valley and the Dead Sea Depression. It is also found in the regions of Sinai. It is very adept at running and jumping, and can ascend nearly perpendicular cliffs.

The bird is medium in size and sandy colored. Underneath, it is brown and white. The female is grayish in color. It deposits a clutch of 8 to 14 eggs during the month of April, placing them in a depression in the ground.

Closely related to the partridges are the Francolins (Genus, *Fraco-linus*) to which belong 35 species extending over Eurasia and Africa. The majority of these birds have sharply spurred legs, some of them possessing twin sets of spikes. The francolins are found in most bushy grasslands. In the Near and Middle East they are known as "black partridges."

53. Quail

Quail also belong to the family *Phasianidae*, in company with the peacocks, pheasants, etc. There are 57 genera and 170 species of quail which vary considerably in size. The majority of these animals have bodies shaped like tiny chickens with naked legs and toes. In most cases the males are more highly colored. The family is divided into a New World subfamily and an Old World subfamily. The New World quails, the *Odontophorinae*, consist of 34 species that are found in most areas of the New World and are believed to be the descendants of an ancient influx from the Old World.

Most of the species are not migratory, the significant exception being the European Quail (*Coturnix coturnix*). This is the quail to which the Bible refers. It has a considerable range in Eurasia and Africa. It is a little smaller than the average American quail, possessing a white throat and brown and black markings on the body. The belly is white. It feeds mainly on weed seeds and insects and for this reason is very helpful to man. It breeds on the ground, depositing 9 to 15 eggs spotted with dark brown. It is possible to capture immense numbers of quail during the fall migration in the Mediterranean regions, by the use of nets. This bird is little bigger than a starling.

The quail is a popular game and table bird in Europe, Asia, and Africa. The animal is characterized by a unique method of defense. A number of the animals gather together in circles on the ground. The members of the circle are usually from the same family. They sit with

their tails in and their heads out. When the attacker approaches, the birds leap into flight in all directions, thus confusing the invader. This technique is not only used for defensive purposes but also is a successful means of procuring warmth. Forms which are related to the European quail include the Australian Stubble-Quail (*C. pectoralis*), the African quail (*C. delegorguei*), and the Indian Rain-Quail (*C. coromandelica*). "*The people asked, and he brought quails, and satisfied them with the bread of heaven*" (Ps. 105:40).

Although quails occur in only one important Biblical incident, their importance is great. When the Hebrews left Egypt and entered the desert, fears arose among the people that they had been led there to starve. The Hebrews complained to Moses, and, as the Bible tells us, were heard by God who miraculously sent down a rain of manna from the heavens. The narrative continues: "And the Lord spake unto Moses, saying, I have heard the murmurings of the children of Israel: speak unto them, saying, At even ye shall eat flesh, and in the morning ye shall be filled with bread; and ye shall know that I *am* the Lord your God. And it came to pass, that at even the quails came up, and covered the camp; and in the morning the dew lay round about the host" (Exod. 16:11-13). Years later, while still in the desert, the Hebrews again tell Moses of their hunger: "And there went forth a wind from the Lord, and brought quails from the sea, and let *them* fall by the camp, as it were a day's journey on this side, and as it were a day's journey on the other side, round about the camp, and as it were two cubits *high* upon the face of the earth. And the people stood up all that day, and all *that* night, and all the next day, and they gathered the quails: he that gathered least gathered ten homers: and they spread *them* all abroad for themselves round about the camp" (Num. 11:31-32).

The Biblical scholar William Gladstone has estimated from these passages that 9 million quail were gathered by the hungry Israelites. While this figure is probably a distortion, there is nothing impossible about the story. Quails migrate in great flocks, flying with the wind at low heights because of their weak wings. (That explains the reference to two cubits, approximately 40 inches.) Furthermore, quails are excellent food sources. The position taken by some scholars that the bird was actually a stork, whose meat is tough and difficult to eat, seems quite untenable.

The Psalmist remembers the Lord's bounty to the wandering Hebrews. Psalm 78 reads: "He rained flesh also upon them as dust, and feathered fowls like as the sand of the sea . . ." (Ps. 78:27), while Psalm 105 recalls how "*The people asked, and he brought quails, and satisfied them with the bread of heaven*" (Ps. 105:40).

54. Chickens (Domestic Fowl)

There is no mention in the Old Testament of what are today the most well-known species of birds—that is, the barnyard fowl or chicken. This is primarily because the Israelites did not domesticate birds. At times they did semi-domesticate doves and pigeons (*see* Doves, page 161), keeping them in cages, but they did not purposefully raise birds as sources of food. This is not denied by the mention of eggs in the Book of Job (“ . . . or is there *any* taste in the white of an egg?”, (Job 6:6), for the eggs of several wild birds were readily available to the nomadic Hebrews. In fact, the dietary laws in Deuteronomy (22:6–7) tell specifically when the eggs of a wild bird may be taken from the nest.

In the New Testament, which was written at a later date, hens, cocks, and chickens are all mentioned, indicating that the art of domesticating this species had been introduced. A well-known New Testament story—the prophecy of Jesus that Peter would deny him three times before the morning crow of a rooster—is told in the Book of Matthew.

All our present-day domestic fowl appear to have been developed from one or two species of Jungle Fowl indigenous to the Oriental Region, whence they were carried west to Europe and on to North America; north to China and Japan; and possibly east, across the Pacific to South America. The domestic fowl had definitely reached Egypt by 1350 B.C., for a very clear painting of a cock was found on a potsherd in the tomb of Tutankhamen in A.D. 1923 and was figured by Carter, the tomb's discoverer. Thus, the Hebrews probably knew the chicken from before the Exodus. However, apparently they did not adopt it until it was reintroduced to them by the Romans.

THE CRANES (*Gruiformes*)

Most of the features that distinguish the cranes, bustards, and several other families of birds as a group, from the other bird orders, are trivial in character. All have a schizognathous, or slit, palate, and have active, down-covered young. The angle of the lower jaw is truncated; either the number of toes is reduced to three, or, if four toes are present, the breastbone is not notched. (Rewrite from E. T. Gilliard's *Living Birds of the World*.)

THE CRANE FAMILY (*Gruidae*)

The cranes are large wading birds that have a marked outward similarity to the herons and storks. They are characterized by elongated legs and neck, and by a long beak. The wings are long and composed of 10 primary quills. The 12-feathered tail is short. The small first toe is elevated above the other three; and all undergo a semiannual molt.

55. Crane

The crane is identified twice in the Bible under its Hebrew name *agur*. The references encompass perhaps the two most distinctive features of the bird, its very conspicuous migratory habits, and its sound. Jeremiah, as we have already seen, used the migration of birds as a contrast to the wayward habits of the Israelis (*see* STORK, page 142). "Yea, the stork in the heaven knoweth her appointed times; and the turtle, and the crane, and the swallow, observe the time of their coming: but my people know not the judgment of the Lord" (Jer. 8:7). The feelings of a man oppressed are recalled in Isaiah, and the description includes the line: "Like a crane, *or* a swallow, so did I chatter; I did mourn as a dove: mine eyes fail *with looking* upward: O Lord, I am oppressed; undertake for me" (Isa. 38:14). The description also adds the words, "moan of a dove," so that the combination of the three distinctive sounds of these birds seems to be equated with the sound of a man in sorrow.

The cranes are tall, stately birds found throughout the tropical and temperate regions of the world, except for areas in Oceania and South America. There are 14 known species, some of which are on the brink of extinction. Cranes are named after their plumage, coloration, geographical extent, or, as in the case of the Whooping Crane (*Grus americana*) of North America, for their call. Most cranes are about 5 feet tall and have large wingspreads. The legs and neck are long. The long, powerful bill serves as a sharp hammer for killing snakes, small alligators, and frogs.

All cranes have remarkably powerful voices, and their calls are believed to carry for miles. They have a specialized windpipe with large convolutions which lengthen as the crane ages. The trachea of the Whooping Crane is 5 feet in length. This vocal power comes in handy during migration where it is used to keep the birds together. There is usually a flock leader that does the calling. The migratory flights of cranes can be very long in duration. The flock is often large in number, consisting of up to 2000 members. It exhibits certain pattern formations in accordance with the direction and intensity of the wind and with the arrangement of the bird's anatomy. The legs are carried straight back, with head and neck fully extended forward. Whooping Cranes fly at heights of up to 13,000 feet.

After spending the winter in the south, many species return northward to breed. When the flock arrives, it splits into pairs which engage in very attractive dances. The male bends his neck and head forward and leaps high above the female while he whoops. The female responds by also jumping high into the air. After mating, cranes live in pairs. There are only 2 eggs laid and the breeding is once a year. The eggs

are placed in a nest of grasses and reeds constructed by both partners on marshy ground. The nest is not hidden, but is watched carefully by the parents. Both sexes partake in incubation, which lasts about a month. The young are capable of leaving the nest on the day of their hatching, despite the fact that they are only $\frac{1}{100}$ the size of the parents. However, they are usually fed and protected by their parents for long periods. They are not able to fly until they are 4 months old, and usually do not acquire their full adult plumage for 2 years.

Cranes are most abundant in Eurasia, partly because many people there believe that harming cranes brings bad luck. The most common species is *Grus grus*, or the European Crane. This is the species referred to in the Bible. Cranes are useful to the natives because of their ability to kill snakes, insects, and small rodents. In India, their young are captured and used as watchdogs. The most beautiful cranes in the world are found in Africa.

THE PLOVERS (*Charadriiformes*)

This is a very large assemblage of only vaguely related birds that includes many shorebirds, snipe, oystercatchers, avocets, pratincoles, gulls, skuas, terns, skimmers, auks, guillemots, and puffins. Most of these are basically marine or littoral inhabitants and so did not come to the attention of the Hebrews who were an inland people. Nevertheless, some are purely land-living forms, and one of these impressed the Israelites.

THE TYPICAL PLOVERS (*Charadriidae*)

These in turn are divided into 3 groups: the True Typical Plovers—a fine example of the inefficiency of the popular, as opposed to the Linnaean system of Latinized binomial nomenclature—of which there are some 35 species known from all over the world; the Turnstones and Surf-birds, 3 aberrant forms; and the Vanellines or Lapwings, of which there are a dozen species. The last form quite an assemblage with a rather wide variety of form and habit.

56. Lapwing

Just which lapwing is meant by the Hebrew name *or-goor* is uncertain but most scholars now agree that it is the Common Lapwing (*Vanellus vanellus*, or *cristatus*) of Eurasia. This is a most elegant bird, iridescent dark green with flashes of copper above and white below with a black chest band. It is about a foot long, has long legs and stubby wings. From the back of the head a curved crest ascends. It lays 4 eggs—the “plovers’ eggs” that were once a great table delicacy. It also migrates from Europe and central Asia to Africa and is common at all times in

Palestine. It is, for the most part, an inland dweller, and has a most distinctive cry.

THE PIGEON TRIBE (*Columbiformes*)

The doves, pigeons, and sandgrouse form a well-defined, easily recognizable group. All have a rather compact body and a moderately large head, set on a graceful neck. The beak is swollen at the extremity, and has soft skin containing the nostrils covering its basal portion. Usually, there is a marked distinction between feathered and unfeathered areas on the body.

57. Dove (*Rock-dove, Turtle-dove*)

The dove is indisputably the most important bird in the Bible. It first gains prominence in the story of Noah. After Noah, his family, and the multitude of animals had been cooped up in the ark for 40 days and nights, the old man sent forth a raven which did not return. He then sent forth a dove, which, unable to find dry land, returned to the ark. Seven days later he sent forth the dove once more, and when the bird returned it had an olive branch clasped in its beak. God had made his peace with earth, and to this very day the dove holding an olive branch is a symbol of that peace. Seven more days passed, and once again Noah released the dove. When it did not return, Noah knew that the waters had receded, and he removed the top of the ark, releasing the animals and the birds to go out into the world and repopulate it.

The importance of the dove in the beginnings of Judaism should not be underestimated. Only it and the pigeon were thought pure enough for sacrifice to God. In fact, when Abram, the founder of the Children of Israel, performed a sacrifice to the Lord, he offered up a "she goat of three years old, and a ram of three years old, and a turtledove, and a young pigeon" (Gen. 15:9). The Book of Leviticus mentions the dove several times, telling on what occasions it should be offered up to God. If a man could not afford to sacrifice a sheep, the Law of Leviticus tells him to offer up either two turtledoves or two pigeons (Lev. 5:7). Similarly, the turtledove is mentioned as a sacrifice for purification of lepers (Lev. 14:22), and a Nazarite is enjoined to sacrifice a pair of doves to purify himself (Num. 6:10). Also, probably because the dove is a symbol of maternal devotion and purity, the Law says that the mother of a newborn infant shall offer two doves to God (Lev. 12:8).

The prophets did not ignore the gentleness of the dove. Isaiah seems to indicate that the doves lived with the Israelites in a semidomesticated way when he says: "Who *are* these *that* fly as a cloud, and as the doves to their windows?" (Isa. 60:8). And on two occasions, when describing the wailing of man's soul, he refers to the mournful cooing of the dove:

"We roar all like bears, and mourn sore like doves: we look for judgment, but *there is none*; for salvation, *but it is far off from us*" (Isa. 59:11). Ezekiel refers both to the cooing of the dove and its habitat in the rocky hills when he writes: "But they that escape of them shall escape, and shall be on the mountains like doves of the valleys, all of them mourning, every one for his iniquity" (Ezek. 7:16). Jeremiah makes a similar reference to the dove "*that* maketh her nest in the sides of the hole's mouth" (Jer. 48:28).

The Psalms make reference to several of the dove's features. The beauty of the dove's feathers as they shimmer in the bright sunlight is described: "Though ye have lien among the pots, *yet shall ye be as the wings of a dove covered with silver, and her feathers with yellow gold*" (Ps. 68:13). The graceful flight of the bird is also invoked: "And I said, Oh that I had wings like a dove! *for then* would I fly away and be at rest" (Ps. 55:6). And it is the humbleness, the meekness, and the gentleness of the dove that leads the Psalmist to ask the Lord not to lead the "soul of thy turtledove unto the multitude *of the wicked . . .*" (Ps. 74:19). These same characteristics make the bird prominent in the New Testament, where it is on several occasions transformed into a symbol for Jesus.

Doves are monogamous and pay a great deal of attention to their mates. The nest is usually small and delicate. Most of the species lay only 2 eggs which are shining white in color. Both sexes help to construct the nest and both participate in incubation, the female by night and the male by day. Incubation lasts 2 to 3 weeks. The young are hatched with their eyes sealed and stay in the nest for 12 to 18 days. During the first 2 weeks the young are nourished with "pigeon's milk" a substance regurgitated by both parents. The milk is secreted by the wall of the stomach.

Doves feed mostly on seeds, fruit, berries, and a few insects. Their wings are strong and pointed, making for powerful flight. This is vital for some species, who have to travel miles to obtain food for their young. The body is small and compact, with the pectoral muscles well developed. The feathers are weakly attached and will fall off very easily.

One of the possibilities for the "dove" of Scripture is the common Rock Dove of Eurasia (*Columba livia*), commonly known as the Domestic or Street Pigeon. This bird has always been close to man, highly regarded both for its ability to learn to carry messages and for the tastiness of its flesh. There are nearly 200 known varieties within this species, thanks to 5000 years of selective breeding by man.

The true doves (*Turtur*) which are undoubtedly those usually referred to in the Bible, inhabit Eurasia, Africa, Australia, and the Indo-

Malayan region. They are smaller than the street pigeon and have longer tails. They are mostly gray or buff in color, with a blackish or checkered half-collar on the back of the neck. Pure white domestic breeds have been developed. The birds of this group also lay only 2 eggs. The nest is built of twigs gathered by the female. Incubation lasts 17 days and is performed by the female. The male feeds the female on the nest. The young leave the nest about 3 weeks after hatching, but still receive some parental care for a few more days. Courtship is taken very seriously, and there is a great deal of rivalry among the males. The courtship dance is an awesome aerial display.

THE CUCKOO-LIKE BIRDS (*Cuculiformes*)

This is a small assemblage of really very odd birds with remarkable habits—the turacos or plantain eaters of the tropics; the anis; the road-runners; the coucals; and the true cuckoos. Even the last are themselves remarkably varied.

THE CUCKOO FAMILY (*Cuculidae*)

The cuckoos are a universally distributed group of birds that exhibit great variety in form and habits. Some build nests, others are parasitic. The family is distinguished by having a zygodactyle foot and a naked oil gland. The body feathers lack any trace of aftershafts. There are usually 10 tail feathers, although in one group only 8 are present. Some 130 species of cuckoos proper are now recognized.

58. Cuckoo

“But these *are they* of which ye shall not eat . . . the night hawk, and the cuckow, and the hawk after his kind” (Deut. 14:12, 15).

“And these *are they which* ye shall have in abomination among the fowls; they shall not be eaten, they *are* an abomination; the eagle, and the ossifrage, and the ospray . . . And the owl, and the night hawk, and the cuckow, and the hawk after his kind . . .” (Lev. 11:13, 16).

The Hebrew *shachaph*, which is generally taken to be the cuckoo, appears only twice in the Bible, in the lists of unclean birds in Leviticus and Deuteronomy—relegated there most probably because it was considered to feed carnivorously. Thirty-seven species of true cuckoos (*Cuculinae*) are found in the Old World. They vary considerably in size and participate in a highly organized form of nesting behavior. Cuckoos lay their eggs in the nests of other birds, and then delude the owners of the nest into fostering their young.

In contrast to some brilliantly colored species, the true cuckoo is brownish above, with spotted brown and gray under parts. The tail is graduated and the bill is quite large. Cuckoos feed chiefly on insects but

some also take lizards, frogs, snakes, and young birds. Cuckoos are quite proficient in the art of deception. A number of species imitate hawks, sunbirds, and even ravens. The imitations involve modification of plumage, calls, and actions. Their technique of camouflage is incredibly detailed. This ability is a source of considerable confusion to many bird watchers.

The cuckoo referred to in the Bible is the *Cuculus canorus*, or the Common European Cuckoo. It resembles a hawk in the shape of its body. The species consists of a number of populations which seem identical to each other but which consistently lay differently colored eggs. Some lay eggs which are blue, and parasitize birds that lay bluish eggs; others lay eggs that are buff with black spots, and parasitize birds that lay eggs of the same coloration. This kind of intraspecific variation contains many important implications for the study of the evolution of species.

The egg which the cuckoo leaves in the foster nest usually has detrimental effects on the foster bird's own young, since the parasitized bird is usually a member of a smaller and weaker species. The intruding young often will get under the legitimate young and heave them over the rim of the nest. As a result, the parasite manages to obtain for itself all of the food brought by its foster parents.

Many cuckoos migrate as far as several thousand miles in order to take advantage of the sources of insect food which shift with the seasons. The parents leave their eggs in nests of other birds and proceed to migrate; the young catch up to and rejoin their parents about a month later.

The Great Spotted Cuckoo (*Clamator glandarius*) is frequently seen in Palestine but confined to the northern and central regions. It consistently lays its eggs in the nests of the Hooded Crow, which nourishes the foster young with mice and carrion.

THE OWLS (*Strigiformes*)

Due mainly to their "owl face," the members of the owl group are easily distinguished from all other birds. The face is large in relation to the rest of the body, and the eyes point forward instead of to the side, as in most other birds. Around the eyes are circular disks of radiating feathers, which may, in turn, be bounded by a ruff of closely set feathers. Many owls have tufts or crests of feathers above the eyes commonly known as "ears." In keeping with their role as birds of prey, all owls are equipped with a short, stout, strongly curved beak and sharp, curved claws.

THE TRUE OWL FAMILY (*Strigidae*)

The Family *Strigidae* is characterized by a breastbone with a complete lower margin, and by a keel firmly united to the furcula. The inner

edge of the third claw is serrated, while the third and second toes are of equal length. There are a large number of species distributed almost worldwide. The Barn or Monkey-faced Owls form a separate family—the *Tytonidae*.

59. Owl

"Therefore the wild beasts of the desert, with the wild beasts of the islands, shall dwell *there*, and the owls shall dwell therein: and it shall be no more inhabited for ever: neither shall it be dwelt in from generation to generation" (Jer. 50:39).

There are several different types of owl mentioned in the Bible. Owing to etymological confusion, the exact number is uncertain. Several translations of the Bible render the Hebrew word *bath-haya'anah* as "owl," but Tristram argues that, in these places (Job 30:29, Isa. 13:21, Isa. 34:13, Isa. 43:20, Jer. 50:39, Mic. 1:8, and in the lists of unclean birds), a more proper rendering should read "ostrich"! (See OSTRICH, page 136.) Another Hebrew word, *yanshooph*, occurs in the unclean birds list as well as in Isaiah, which reads, "And the owl and the raven shall dwell therein," referring to the downfall of Edom. The owl noted there probably refers to the Egyptian Eagle Owl, a large bird which nests in abandoned ruins.

Another owl, signified by the Hebrew word *cos*, appears in the unclean birds list, and is mentioned in Psalm 102. "I am like the owl of the desert," seems to indicate the Little Owl (*Athene noctua*), which is the most common of the several species that dwell in the Biblical lands. Another owl, the Hebrew *kippoz*, is mentioned by Isaiah as a future dweller in the ruins of Edom (Isa. 34:15). The *kippoz* is the very small (about 7 inches long) Scops Owl (*Otus scops*) which, like the Egyptian Eagle Owl, makes its home in the ruins that dot the Biblical landscape.

In the same passage, describing the downfall of Edom we have already mentioned, a marginal note in Isaiah, referring to the "screech owl," speaks of a "night-monster" that "shall repose there" (Isa. 34:14). The Hebrew word for the night-monster is *lilith*. The word is also the name of the first wife of Adam, who appears in apocryphal versions of the Creation, where it is told that she refused to obey Adam and was driven out of Eden. She later became an Assyrian goddess of the night and protector of demons. Jewish folklore records how in the night she would swoop down upon sleeping children and carry them away. The only use of the word *lilith* is in the Isaiah passage cited above, where most translators render it as "night-monster." A naturalistic equivalent of *lilith* may connote a bird, most probably an owl, specifically the Hooting or Tawny Owl (*Stryx aluco*) common in many parts of the Near East. Correlating evidence is the Jewish folklore superstition that

owls attack sleeping children at night, tearing at their faces with their claws.

There are 133 species of owls scattered around the world. They vary considerably in size; some of them are as small as sparrows, others as large as roosters. They feed on arthropods, fish, amphibians, birds, and small mammals. They obtain their food mostly at night. The owl pounces on its prey with its strong legs and sharp, powerful claws. The eyes of the owl are specially devised for its nocturnal existence. This ability to see so well at night is the characteristic which most people tend to associate with the owl; what is usually overlooked is the fact that the ears of the owl are just as well accommodated. Because of their keen hearing, many species are able to attack prey successfully in absolute darkness. The shape of the bird's head is modified in accordance with the enlarged eyes and ears.

The face of the owl is usually flattened. It is covered with feathers that have a hard, wiry texture, and radiate outward from the beak and eyes to form a disklike structure. This peculiar arrangement may help the owl to see and hear better. The owl's bill is markedly hooked. Near the bill are the nostrils, and above them the eyes. The eyes are directed forward and cannot be turned in their sockets. To compensate for this, the owl is capable of twisting his head and neck in a strange and peculiar manner, rotating it through 270 degrees or more. The plumage is usually soft. The edges of the flight feathers are tipped with delicate filaments which serve to eliminate practically all the noise when the bird is flying. The wings are short and rounded, and the tail is short and square.

Owls are noted for making weird noises. This is one of the reasons why they have long been regarded as ill omens. These sounds are prevalent during the courting season. The eerie cries serve as a means of attracting a mate. At times the male and female join in together to make a very strange woodland concert. The eggs of owls are round and white. The number deposited varies from 1 to 12, depending on the species. As a rule, the farther north the habitations of the bird are, the greater the number of eggs deposited, so that the owls of the Arctic produce the largest number of eggs.

Most of the small- and medium-sized owls nest in cavities in trees or in the ground. Some of the large owls nest on the open tundras or in nests constructed from grass and feathers. A few species prefer grassy swamps. The unusual phenomenon of "staggered birth" can be witnessed among owls. In this, incubation begins right after the first egg has been laid. Other eggs are deposited while the incubation is taking place. The result is that a young owl hatches while its brothers and sisters are still under incubation. The incubation period varies from 25 to 35 days, according to the species. Owls are very courageous in defending their

young against danger. At the time the baby owls hatch, they are covered with a thick white down. Owl nests are easy to detect because the owls litter the surrounding ground with parts of their prey, such as heads and wings. Owls begin to hunt at late dusk. Some hunt in the grasslands of swamps, while others frequent forests. Some species are migratory.

One of the famous Biblical species is the Short-eared Owl (*Asio flammeus*), which is found over most of the Northern Hemisphere. The bird is 15 inches in length. It frequents grassy swamps, building nests from the grass by the water. It eats insects and small rodents. In winter it may roost in groups on the ground. The so-called Owlet (*Athene noctua*) is one of the most familiar owls inhabiting Eurasia. The genus received its name from Athena, the Greek goddess of wisdom. The Owlet is seen by day as well as by night, and breeds in all countries bordering on the Mediterranean.

The Screech or Scops Owls are also an interesting group. They are smallish birds, found almost everywhere throughout the world. One of the species (*Otus scops*) is a well-known inhabitant of Eurasia and Africa. Another species is the *Otus asio*, whose members exhibit a wide variety of coloration. The inhabitants of moist areas are somewhat blackish, while the desert dwellers are much lighter in color. Screech Owls are famous for their whistling calls which resound through the night. They feed on insects and small mammals and birds, and will attack a man if he intrudes on their nests.

The Barn Owl (*Tyto alba*), often erroneously called Screech Owl, is almost worldwide in range and is found in Palestine.

EXOTIC BIRDS (Coraciiformes)

This is in some respects a sort of catch-all, but the numerous families of birds included in the Order do show certain anatomical relationships. Included in it are the kingfishers, todies, and motmots; the bee-eaters and the rollers; the hornbills; and the hoopoes. While bee-eaters and rollers are known from Palestine, the ancients did not see fit to mention them specifically. The hoopoe, perhaps because of its odd and colorful appearance and rather nasty habits, they did.

THE HOOPOE FAMILY (*Upupidae*)

The hoopoes are beautiful, desert-dwelling birds distinguished by the sandy hue of their plumage and the squared form of their tail. They are further characterized by rounded, open nostrils and a bridged structure of the palate. There is a large perforation in the forepart of the breastbone which allows the metacoracoid bones to meet at the middle line.

60. Hoopoe

The Hoopoe is probably the bird indicated by the Hebrew word *dukipath*, which appears among the lists of unclean birds in Leviticus and Deuteronomy. It may hold its place there as much because it was held in religious reverence by the Egyptians, as because of its rather dirty feeding and nesting habits. The Hoopoe derives its name from the singular sound of its resounding call. To emit the sound, the neck feathers are puffed out and the head is snapped in the air. If on the ground, the bird hammers its beak into the earth.

The Hoopoe is an extremely attractive bird, closely related to the hornbill, though different from it in appearance. It is highly ornamented, with a tall and expansive crest of feathers on the top of its head. When the bird is alarmed, these feathers are erected. The bird is a beautiful salmon pink, and the feathers on its back, wings and tail resemble in their coloration the hide of a zebra. The legs and tail are short and the toes are separated. The bill is relatively long and delicately curved. The bird is not afraid of humans, permitting them to approach very close to it. It is about 12 inches long.

Hoopoes inhabit a variety of open and partially open areas in the warmer sections of the Old World, ranging from semiarid regions to public parks. Some hoopoes are migratory. In the summer they may appear in such distant places as Iceland, Japan, and Finland.

The Hoopoe feeds on worms, caterpillars, spiders, beetles, crickets, and many other invertebrates, often drilling its beak into the ground to help it obtain the food. Hoopoes usually hunt alone or in pairs during the breeding season. At other times they travel in small groups. The nest consists of a hole in a tree, house, or even anthill. The Hoopoe does very little to improve the nest once it has been selected. It lays from 4 to 8 eggs, which are basically blue to white in color.

The female performs all of the incubating, a task which lasts about 2 weeks. During this period a special oil gland at the base of her tail becomes active. This is a good means of defense for herself and her young. The secretion is a dirty blackish brown fluid the odor of which is so intense as to discourage any invader. While she is performing the incubation, she is fed on the nest by the male. The young do not leave the nest until about a month after hatching. Some of the food procured by the male is used to nourish the young. Later on, the male feeds the young himself. The recently hatched young are naked, but soon develop a covering of down and sharp blue quills. When they leave the nest they are colored like the adults. It takes about a year for their bills to develop to full size.

In Israel, the Hoopoe is seen in the northern and central parts only. They are useful birds, since they devour grubs, insects, and mole crick-

ets. The bird is a summer breeder, arriving in February and leaving in September. It was considered an unclean animal by the Hebrews because of its habit of probing in filth for insects and worms.

THE SONG BIRDS (*Passeriformes*)

This Order includes the majority of birds, and is well represented over most of the world. Included within this Order are the group popularly known as song birds. All are characterized by the production of their young in a helpless and nearly naked state, most having only scattered patches of down over the body. They are often referred to as "perching birds," for the first toe is mobile and directed backward, and is capable of being worked independently of the other digits. The legs are covered with feathers as far down as the ankle. The number of primary quills in the wings varies from 9 to 10, and there are usually 12 feathers in the tail.

THE CROW FAMILY (*Corvidae*)

The *Corvidae* includes the crows, ravens, magpies, jays, and rooks, all of which are easily distinguished although they have few characteristics in common. All possess strong, large beaks which lack a distinct notch in the upper mandible. The toes are normal, but the first is shorter than the third. The nostrils in most cases are protected by a number of stiff bristles that reach halfway down the beak. The wing always has 10 quills, and the tail, 12 feathers.

61. Raven

"And these *are they which* ye shall have in abomination among the fowls; they shall not be eaten, they *are* an abomination; the eagle, and the ossifrage, and the ospray, And the vulture, and the kite after his kind; Every raven after his kind . . ." (Lev. 11:13-15).

"His head *is as* the most fine gold; his locks *are* bushy, *and* black as a raven" (Song of Sol. 5:11).

The Raven (*Corvus corax*) is the largest member of the family. The bill is somewhat cone-shaped, and the base of the upper "jaw" is usually covered with fine, wiry feathers. These birds eat all kinds of food, including carrion, insects, seeds, fruits, reptilian eggs, avian eggs, and small reptiles. They are crafty and active animals, widely known for their remarkable intelligence. Some are capable of "speaking," solving puzzles, and performing feats of "memory." They are bold, curious birds, and sometimes use their talents for theft. Ravens are found all over the world. Another well-known member of the group is the Black-billed Magpie (*Pica pica*) which is found throughout the Northern Hemisphere. The

Biblical "raven" might, in some cases, be the variety *Pica pica bactriana*. It is about 20 inches in length.

It may seem strange that the crow is not mentioned in the Bible more especially since the species found in the area is a rather striking bird—the Hooded Crow. However, the name *oreb* would appear to have covered the whole family.

THE SWALLOW FAMILY (*Hirundinidae*)

This group possesses a short, wide, and deeply cleft bill. The wings are very long and narrow, and consist of only 9 primary quills. The tail is generally forked and contains 12 feathers. The feet are small and weak, and are poorly adapted for walking.

There are 74 recognized full species of swallows and their relatives the martins spread all over the world. These birds form a very close-knit family with very similar habits, for they are insect-eaters supreme. Many are of exquisite colors, displaying metallic sheens of greens, blues, bronzes, and coppers. Like the bats of the night, the swallows of the daylight hours have kept a constant check on airborne insects since time immemorial, and, without them, man would have been in a sorry state before the discovery of insecticides. Further, several members of the family have taken to associating with man, building their nests on and in his houses, barns, and other buildings, and gathering around his drinking ponds, lakes, and reservoirs. In many countries the association of men and swallows is almost symbiotic, for man, by his works, brings a plethora of insects which the birds then live on.

62. Swallow

"Yea, the stork in the heaven knoweth her appointed times; and the turtle and the crane and the swallow observe the time of their coming; but my people know not the judgment of the LORD" (Jer. 8:7).

"Yea, the sparrow hath found an house, and the swallow a nest for herself, where she may lay her young, *even* thine altars, O LORD of hosts, my King, and my God" (Ps. 84:3).

The *a-geor* of the Hebrews probably indicated any swallow-like bird but doubtless had special reference to the common House or Barn-door Swallow (*Hirundo rustica*) which has an almost universal range in the Northern Hemisphere. This beautiful and delicate little bird with its enchanting twitterings appealed greatly to all the ancients as a symbol of home life, gentility, and aesthetic fragility. Further, its ways were a great mystery to early peoples on account of its sudden and clockwork-like migrations or disappearances and reappearances, so that until quite recently it was believed that they hibernated in mud at the bottom of ponds during the winter.

THE FINCH FAMILY (*Fringillidae*)

The *Fringillidae* include a large number of small, hard-billed, seed-eating birds, such as the finches, sparrows, canaries, buntings, and cardinals. All have conical beaks characterized by the smooth edges of the mandibles. Of the 9 primary quills of the wing, the first and second are of equal length. The tail has 12 feathers and the sexes are usually unlike in size and coloring.

63. Sparrow

"I watch, and am as a sparrow alone upon the house top. Mine enemies reproach me all the day; *and* they that are mad against me are sworn against me. For I have eaten ashes like bread, and mingled my drink with weeping, Because of thine indignation and thy wrath: for thou hast lifted me up, and cast me down" (Ps. 102:7-10).

"Therefore I say unto you, Take no thought for your life, what ye shall eat, or what ye shall drink; nor yet for your body, what ye shall put on. Is not the life more than meat, and the body than raiment? Behold the fowls of the air: for they sow not, neither do they reap, nor gather into barns; yet your heavenly Father feedeth them. Are ye not much better than they?" (Matt. 6:25-26).

The appearance of the sparrow in the Bible is clouded by etymological confusion. The Hebrew word *tsippor* would be used to designate the sparrow, but it also is used for many different kinds of small birds, including wrens, thrushes, etc. Therefore, with few exceptions, *tsippor* is translated in most versions of the Bible to read "bird," thus becoming a generic term, rather than "sparrow," which would be more limiting. In Psalm 84, one of these exceptions appears. It reads: "Yea, the sparrow hath found an house, and the swallow a nest for herself, where she may lay her young, *even* thine altars, O Lord of hosts, my King and my God" (Ps. 84:3).

Sparrows are found in practically every section of the world. They practice solitary nesting and possess a tenth primary feather that is variable. The exact species to which the Bible refers is difficult to determine. One possibility is the *Fringilla patronia*. The members of the genus *Fringilla* are widely distributed throughout the Old World and migrate in unbelievably large hordes. In 1951, approximately 72 million members of one species of *Fringilla* entered Switzerland to roost.

Another possibility for the Biblical reference is the House Sparrow (*Passer domesticus*) which belongs to the *Ploceidae*, a family of birds famous for the complexity and size of their communal nests. The members of this family are commonly referred to as "weaverbirds." Some sparrow-sized members build nests that are as large as tents. Others build them with a delicacy that humans would find difficult to duplicate.

The common, so-called, English House Sparrow is a member of this family but has taken to solitary nesting for the most part. Most weavers have short, sturdy, conical bills. They are primarily arboreal, but search for food on the ground. Most species are nonmigratory. Some of these birds, like the cuckoos, have the ability to delude other birds into fostering their young. The *Ploceidae* are placed at the top of the evolutionary line because of the remarkable variety of specialization and adaptation found in the family. The genus *Passer* is probably the most famous of the weaverbirds. The House Sparrow thrives best in a human environment and now inhabits North America and all of Eurasia. It was introduced into North America in 1851.

Also occurring in Palestine is *Passer moabiticus*, or the Dead Sea Sparrow. It is a summer breeder, found only in the southern part of the Jordan Valley, around the shores of the Dead Sea. In the winter this bird migrates, but it is not yet known where it goes. The bird builds a large conical nest from the needles of the tamarisk. Eggs are laid from April to July. The bird feeds on seeds and insects.

Chapter 9

Reptiles, Amphibians, and Fish

REPTILES

<i>Snakes</i>	64. Viper (Adder)	Akshub	<i>Vipera palestina</i> , <i>Cerastes cerastes</i> , <i>Pseudocerastes fieldi</i> , et al.
<i>Lizards</i>	65. Cobra (Asp)	Pethen	<i>Naja haje</i>
	66. Lizards (true)	Cho-met	(various Lacertids, and ? others)
	66. Skink		
	67. Chameleon	Tinshemeth	<i>Chamaeleo chamaeleon</i>
	68. Gecko	Anakah	<i>Hemidactylus turcicus</i> , et al.
<i>Crocodilians</i>	69. Crocodile	Livyathan	<i>Crocodylus niloticus</i>

AMPHIBIANS

<i>Anurans</i>	70. Frogs	Tsephardea	<i>Rana</i> spp.
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FISH	71. Fish	Dag	(general)
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REPTILES

THE SNAKES (Order, *Serpentes*)

Serpents belong to what is called a superorder of the reptiles known as the *Squamata*, which includes the lizards (Order, *Lacertilia*) and the snakes (Order, *Serpentes*). The snakes differ from lizards most notably in being able to swallow animals several times their own diameter. This is made possible by an unusually flexible jaw mechanism. Other distinguishing features are the absence of movable eyelids, of a middle ear cavity, and of legs. It is believed that snakes evolved from some primitive lizard group, probably from burrowing members which eventually lost their legs. Some snakes gave up the burrowing habit and developed a method of locomotion that depended upon squirming and the accompanying movement of ventral scales. Snakes are regarded as a very successful biological group, having undergone considerable evolutionary change.

Like lizards, snakes shed their worn skins periodically. Most lay eggs, and most embryo snakes have a special device to break open their shells, called "egg teeth," with which they slit the shell from the inside. Snakes have no eyelids so that their eyes are always open, enabling them when asleep to be "awakened" by seeing a moving object. They have no external ears and the internal ears are degenerate. Their main "hearing" apparatus is their long, slender tongues, which have a very sensitive

nerve system able to record, it is now believed, both airborne vibrations and possibly infrared (heat) waves.

64. *Vipers (Adder)*

"Dan shall be a serpent by the way, an adder in the path, that biteth the horse heels, so that his rider shall fall backward" (Gen. 49:17).

"He shall suck the poison of asps: the viper's tongue shall slay him" (Job 20:16).

"And when Paul had gathered a bundle of sticks, and laid *them* on the fire, there came a viper out of the heat, and fastened on his hand" (Acts 28:3).

The snake referred to here is now thought to be the Horned Viper (*Cerastes cerastes*). The older books have this snake classified as *Cerastes hasselquistii*, a desert species with a very toxic venom. It is relatively small, about a foot to 18 inches long, and as pale and sandy as the desert it thrives in. Over each eye there is a sharp, upright spine which gives it the name of the horned or arrow snake. They hide in the sand, in depressions such as those made by the hoofs of camels or horses, and if a man or some animal steps into such a hollow the snake strikes. It is supposed to strike sometimes without provocation, and its venom can kill in half an hour, making it as deadly as a cobra. Tristram believes this to be the "asp" that killed Cleopatra.

There is also a representative of a closely allied genus of snakes in Palestine. This is known as the False Viper or *Pseudocerastes fieldi*, a vicious little true desert species with valves inside its nostrils to seal them against the ultra-fine grains of sandstorms.

Because these are desert animals, their ribs are greatly flattened so they will not sink easily into the sand. They have also developed a good method for fast movement in the sand. The slow, forward progress of a viper is actually not a glide, but, closely watched, will be seen to consist of a movement of the ribs beneath the skin which might be compared to a centipede clad in the skin of a serpent and using its limbs in walking fashion. It is interesting to note that though snakes do not have legs, some can glide with the speed of a running man. This they accomplish by using the small declivities and projections on the ground as points from which they push off to gain speed. Their natural movements on the ground also enable nearly all serpents to swim gracefully and fast.

The word "viper" can refer to a large number of different kinds of snakes of the family *Viperidae*, all of which are poisonous. The Family is divided into a number of genera, one of which is *Vipera*, which is characterized by the presence of scales on the head that are of nearly the same size and type as those of the upper part of the body. The Adder of Europe (*Vipera berus*) is a member of this genus; and ranges from

England to Korea and Sakhalin. Closely related, but not to be confused with the Horned Viper (*Cerastes*) is (*V. ammodytes*) the Nose-horned Viper. It measures less than 2 feet, and is characterized by a small horn arising from the tip of the snout. It lies low in the sand, biting the heels of whatever mammal may dare to trespass. The color is gray, giving it excellent camouflage. The Hebrew word for viper is *akshub* or "coiling back," apparently derived from the characteristic posture of the animal. The bite is extremely toxic, causing swelling and almost immediate death in the victim. Another member of the same genus is the Palestine Viper (*Vipera palestina*). This snake possesses a neck which distends in the same way that the cobra's does. It is green in color, marked obliquely with brown bands. The length varies from 3 to 5 feet. Its bite allegedly brings instant and almost painless death. For this reason it became a highly preferred method of suicide, and, were it available, a much more likely candidate for Cleopatra's asp.

The name "adder" is an English equivalent of viper, used for the viper of the British Isles.

65. *Asp* (Cobra)

The word "asp" is derived from the Greek *aspis* which meant any poisonous snake. In old English it could, at one time, denote any snake from the region of Egypt or north Africa. However, there is now little doubt that it denotes, in the English translations of the Bible, the Egyptian Cobra (*Naja haje*), still another snake that has been named as the one that killed Cleopatra. It conceals itself in holes in walls and rocks, and has the power to expand its neck by raising its anterior ribs so as to dilate the front of its breast into the shape of a flat disk. When alarmed, it rises up with its neck spread out in this fashion, and attacks. In this pose it is depicted on ancient Egyptian monuments, where it represented immortality. The Egyptians looked upon it as a sacred creature. Since it fed on the rodents which ate the Egyptians' crops, it seemed to be a protector, to the Egyptians. As one early historian put it:

"One of the early Egyptian beliefs was that there first existed great silent darkness everywhere and that out of this great primordial night there evolved the world egg which eventually divided into the skies and the earth. Among the most common tradition is the one that ascribes to the Great World Serpent the warming and hatching of the egg, a phenomenon that has been commonly illustrated." (Henry B. Tristram, *Natural History of the Bible*)

The Egyptians also thought that the eclipses of the sun were due to the attacks upon the sun god Ra by the great serpent Apopi who lived in a celestial river. The sun was supposed to be the ship of Ra which passed across the sky, and when attacked by the serpent it was con-

cealed by the fighting that was going on. *Naja haje* is dull brown, with short fangs which are stout and always erect on the forward part of the jaw.

African cobras are noted for the fact that some are able to spit their venom. They do not actually spit, but eject a spray for a considerable distance. The venom is pushed through the fangs by very strong muscles around the gland and is assisted forward by the forcible exhalation of air from the mouth. The spitting cobras usually shoot for the eyes, probably attracted by the white of the eye. The blindness and soreness of the eyes then give the snake an opportunity to escape. Complete blindness does not usually but sometimes does occur. It is invariably painful.

THE LIZARDS (Order, *Sauria*)

Although most lizards can easily be distinguished by their four-limbed body divided into definite head, neck, trunk, and tail, some forms have lost all external trace of limbs, and therefore closely resemble the snakes. In all true lizards, however, the two sections of the lower jaw are joined at the chin by a bony structure. The species equipped with limbs have definite collarbones, and even where the limbs have been lost some traces of these still persist. The tongue is flattened, and can never be withdrawn into a basal sheath, as is the case with snakes.

The Order *Sauria* is a vast one, and is spread all over the world from northern temperate to southern temperate latitudes. It is divided into a great number of genera and 19 Families. Members of at least 4 of these are mentioned in the Bible, but in each case the identification of the animal is not decisive, while there are also grave doubts as to the correctness of the translation of the Hebrew names involved. Even the Greeks were unaware of all but 3 of the Families, and the English translators knew only of one.

66. Lizard

This Family—the typical lizards (Family, *Lacertidae*)—contains numerous genera, and is spread all over Eurasia and most of Africa. The type-genus is *Lacerta*, which comprises the commonest lizards of Europe where animals were first classified. In a passage from Leviticus (Lev. 11:29-30), quoted in full later, a clear distinction is made between what appear to be three reptiles: the ferret (*see* GECKO, below), the chameleon, and the lizard. The Hebrew words involved are *anakah*, *tin-shemeth*, and *cho-met*, respectively. (The first two are discussed later.)

Several species of lizards, including more than one species of *Lacerta*, are found in Palestine, occupying various environments, and there can be no doubt that the Hebrews knew the animals well. That

lizards crawled upon their bellies would make them unclean, and that the *cho-met* is associated with two other lizard types in this passage makes the identification almost certain. However, whether any specific lizard, lacertid or otherwise, was meant or whether the title was a general one for all lizards other than the chameleon and gecko, cannot be determined. Some scholars have inclined to the view that another group of lizards known as the skinks (Family *Scincidae*), creatures that burrow and members of which are also found in the area, was intended, but there is no direct evidence for this.

67. *The Chameleon*

Chameleons are a unique and highly specialized group of four-legged reptiles. The compressed body, short, thin neck, and slender, elongated limbs give them an appearance much different from that of the true lizards. They are possessed of a long, wormlike tongue, the end of which is thickened and covered with a viscous substance. This organ can be quickly extended to trap any insect passing within several inches of the mouth. The feet are characterized by toes divided into two opposing branches of two each, thus forming powerful grasping organs. Aided further by a long prehensile tail, which acts as a fifth hand, the chameleons are well adapted for their life among the branches of trees and shrubs. The structure of the eye presents another outstanding peculiarity of the group. A minute pupil is located in the center of a large eyeball otherwise covered by granular skin, and each eyeball can move independently of its mate to focus on a given object. Chameleons further differ from the true lizards in having no collarbones, and in having the scales of the head and body replaced by granules.

The chameleon is a reptile that is common in the Holy Land. These animals have such enormous lungs that ancient peoples thought they lived on air. When they fill their lungs with air they supposedly become semitransparent. They also have the ability to change color, though this is not as well developed in them as it is in several other animals—notably the octopus. These color changes occur not only according to the variability of shade or background, but also with changes in the temperature, and in their emotions. Though chameleons feed primarily on insects, one larger species is alleged to feed on mice, and another on birds! The largest species of all is over 2 feet long and is found in Madagascar.

68. *Gecko (Ferret?)*

"These also *shall be* unclean unto you among the creeping things that creep upon the earth; the weasel, and the mouse, and the tortoise

after his kind, And the ferret, and the chameleon, and the lizard, and the snail, and the mole" (Lev. 11:29-30).

Almost all scholars agree that the ferret is not the animal intended by the Hebrew word *anakah*, since naturalists maintain that no ferrets were present in Palestine and Syria. Many of the Rabbinical writers translated *anakah* as "hedgehog." The Greek Septuagint translated the word as "shrew." Bible scholars point out that the literal meaning of *anakah* was "groaner" or "sigher." Since the creature was classed in a group of creeping things, many commentators believe that the animal intended was the gecko, popularly known as the wall lizard. The gecko makes a low, mourning sound by vibrating its tongue rapidly against the roof of its mouth. There also was a popular folk legend that a gecko would cause leprosy if it crawled across one's body. This folk belief naturally confirms the Hebrew conception that the animal was unclean.

The gecko was commonly found throughout the Holy Land. Being unclean, it would be a constant nuisance in a home, for it can walk upside down on ceilings and often plop down into the middle of the home. The Arabs of the present day are horribly frightened by the gecko, believing that it poisons all that it touches. It is much like the fear that the English and Americans feel toward the common toad, for both creatures, though repulsive in appearance, are quite harmless.

THE CROCODILIANS (Order, *Crocodylia*)

Including the alligators, gavials, caimans, and crocodiles, the members of the Order *Crocodylia* represent a very ancient and distinct group of reptiles. All are characterized by large, lizard-like bodies supported by short legs. Posteriorly the body develops into a long, highly compressed tail that is a great aid in swimming, serving both as a paddle and a rudder. The head terminates in a flattened snout armed with strong, conical teeth, each of which is implanted in a distinct socket. New teeth growing from beneath continually replace those in use. The fore-feet and hind-feet exhibit five and four toes, respectively. The toes are webbed, and the three innermost digits on each foot are equipped with stout claws. The back and tail of the beasts are protected by quadrangular horny shields of varying size. These are arranged in regular rows, and are in contact with one another at the edges. The ears are covered with movable lids which can be closed when the animal enters the water. *Crocodylia* are all able to breathe with their mouths open and filled with water, for the windpipe extends to a cavity located just behind the nostrils, which is entirely cut off from the mouth.

69. *Crocodile*

The Hebrew word *livyathan* appears only 5 times in the Bible, and not one of these references actually reveals the creature intended by

the writers. The Jewish Bible, the Talmud, accepted the creature intended as being unquestionably the "crocodile." The general consensus is that the word *livyathan*, which means "mourning," is a term used figuratively to signify all the great creatures of the water. The Hebrew word has been variously translated as "a wreathed animal," "a twisted animal," and "one spirally wound." Some scholars have attempted to restrict its meaning to the whale, but it is more broadly accepted as a general term for all serpentine, cetacean, and saurian monsters of the sea. Isaiah used the word "leviathan" to mean "crooked serpent," apparently symbolizing Assyria, the dread enemy of the Israelites.

The crocodile is not known in Palestine but was plentiful in Egypt, where it must have been a commonplace to the Hebrews during their lengthy sojourn there. It would probably have been held in abomination by them as there was an Egyptian crocodile god.

AMPHIBIANS

THE FROGS (Order, *Salientia*)

As is the case with all amphibians, the frogs and toads are covered by a soft, hairless skin. They are distinguished from the other members of the Class by the presence of four limbs and the lack of a tail in the adult state. The hind-legs which are much longer and more powerfully developed than the fore-legs, enable the animals to jump large distances. Generally, most frogs and toads pass through an extended larval period. Known as tadpoles or pollywogs, the larvae have globular heads, gills, fishlike tails, and no limbs.

70. *Frogs*

"And the Lord spake unto Moses, Go unto Pharaoh, and say unto him, Thus saith the Lord, Let my people go, that they may serve me. And if thou refuse to let *them* go, behold, I will smite all thy borders with frogs: And the river shall bring forth frogs abundantly, which shall go up and come into thine house, and into thy bedchamber, and upon thy bed, and into the house of thy servants, and upon thy people, and into thine ovens, and into thy kneadingtroughs; And the frogs shall come up, both on thee, and upon thy people, and upon all thy servants" (Exod. 8:1-4).

Frogs are one of the commonest animals of Egypt, where they are found in great numbers in the marshes and along the waterways. To the Hebrews the frogs represented uncleanness because of their somewhat slimy appearance, though the frog referred to in the Bible is probably the edible one, *Rana ridibunda*. This is one of the aquatic frogs found in Egypt and in the stagnant waters of the Holy Land. They

abound in such numbers that visitors have reported that their croaking at night is deafening. The voice is primarily used by the male to call a mate. The females do not usually use their voices, and the females' vocal powers are small compared to that of the male. Croaking may also take place underwater where the air is forced from the lungs, past the vocal cords, into the mouth cavity and back again. Since they do much of their breathing through their skin, this does not seem to harm them.

These frogs hibernate in the mud in the bottoms of ponds, in springs, or in damp spots in the woods. This is in response to temperature. Their slipperiness is protective so that they can't be held. They are usually great leapers, and can also be "hypnotized" by placing them on their backs for a few moments. Their responses then become slowed and they show a sort of death faint.

FISH

71. *Fish (General)*

This class consists of a large, highly varied group of cold-blooded vertebrate animals that are completely adapted to aquatic life. The limbs and tail are modified into fins; along the medians there are unpaired fins supported by bony rays. With few exceptions, fish breathe solely by the use of gills. All of the higher groups are equipped with distinct jaws. The skin may be naked or covered with scales or bony plates.

Fishes are mentioned many times in the Bible under the general title *dag* and no attempt is made by its writers to distinguish between species or even groups of fish. The Hebrew nation was landlocked, the coast of Palestine being occupied by the Phoenicians, the Philistines, and the other "Sea Peoples," so that they had little knowledge of marine fish, while what we call generally "shellfish" were declared unclean. When the Hebrews were in Egypt they must have known many different kinds of fishes regularly taken from the Nile by the Egyptians, but when they settled in Israel, their acquaintance with fish was confined to those of the Jordan and Lake Galilee.

Mention of fish becomes much more frequent in the New Testament, and they played a rather prominent part in both early and medieval Christian symbolism, due probably to their forming the central theme of two of Christ's miracles.

Chapter 10

Other Animals of the Bible

INSECTS

<i>Hymenoptera</i>	72. Bees	Devorah	<i>Apis mellifera</i>
	73. Hornet	Tzir-or	<i>Vespa crabro</i>
	74. Ants	Nemalah	(various)
<i>Lepidoptera</i>	75. Moths	Awsh	(Notably Clothes Moths)
	75. Caterpillars	Chasil	(Larvae of same)
<i>Diptera</i>	76. Flies	Zevuv	Muscids of many kinds
	77. Gnats	Parósh	<i>Simulium</i> spp.
	77. Mosquitoes	(ditto ?)	<i>Culex</i> spp.
<i>Siphonaptera</i>	78. Fleas	Yav-chus	<i>Pulex irritans</i> , and others
<i>Anoplura</i>	79. Lice	Sciniphs	<i>Pediculus humanus</i>
<i>Orthoptera</i>	80. Grasshoppers	Arbeh	(various)
	80. Locusts	Chor-gorv	<i>Locusta migratoria</i> , et al.

ARACHNIDS

<i>Araneae</i>	81. Spiders	Akkabish	(various)
<i>Scorpionida</i>	82. Scorpions	Akrav	(various)

MOLLUSCS

<i>Gasteropoda</i>	83. Snails	Shablul	(Land, freshwater, and marine).
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WORMS

<i>Hirudinea</i>	84. Leeches	Alukah	Specially <i>Haemopsis sanguisuga</i>
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ZOOPHYTES

<i>Coelenterata</i>	85. Coral	Raw-maw	(various)
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SPONGES

<i>Keratosa</i>	86. Sponge	Is-vog	(various)
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The Animal Kingdom is divided into two great parts: that of the single-celled animals (*Protozoa*) and the multicelled (*Metazoa*). We are concerned here with only the latter, for the existence of the former was not known to the writers of the Bible. The *Metazoa* are divided into a number of what are called "Phyla," but these are of very varying degrees of importance and numbers of forms. Currently, there are 26 recognized Phyla of which more than half were once lumped together simply as "worms!" The Bible mentions members of only 6 of these—the *Chordata*, or animals with backbones; the *Arthropoda*, or jointed-legged ones, the insects, arachnids, crustaceans, and their allies; the *Mollusca*, or snails and other shellfish; one form of the *Annelida* or segmented true worms; and, in general terms, the *Coelenterata* (coral), and the *Porifera* (sponges).

INSECTS

THE BEES, WASPS, AND ANTS (Order, *Hymenoptera*)

In terms of specialization of structure, the bees, wasps, and ants rank among the most highly developed of the insects. The body is divided into a distinct head, thorax, and abdomen, the last being attached to the thorax by a narrow stalk. Very often the hard, shiny exoskeleton is covered with hair. The mandibles are well adapted for biting, although in the case of the honeybees the mouth parts are modified into a tongue-like proboscis for sucking nectar from flowers. The legs are often armed with spines, and the wings, when present, are strong, light, and transparent. Always four in number, the upper and under wings on each side are attached to one another by a series of minute hooks on their adjacent margins. The abdomens of the females are often armed with either an instrument for boring or a powerful stinger. In all species metamorphosis is complete.

72. *Bee*

"And after a time he returned to take her, and he turned aside to see the carcase of the lion; and, behold, *there was* a swarm of bees and honey in the carcase of the lion" (Judg. 14:8).

Bees are plentiful in Palestine. They are the same species (*Apis mellifera*) that we have domesticated, but which, in Biblical times, were known only in the wild state. The wild bees of this region are especially noted for their ferocity in attack. The virulence of their venom increases in warm weather. They build their hives and nests on precipitous rocks or in hollow trees hard for man or animals to reach. Since there are few forests in the area they build mostly on rocks.

Even today much of the honey of this region is collected from these wild bees, though they attack man with a special fury because they are not used to humans. Some years ago the people of the region let a man down the face of the rocks by ropes. He wore protective clothing that completely shielded him from the attacks of the bees and gathered a large amount of honey. However, he was so intimidated by the great swarms of angry bees that he could not be persuaded to repeat the adventure.

The Bible quotation refers to the fact that a few hours after an animal's death the scavengers, such as jackals and vultures, reduce the carcass to the bone, and after the skeleton has dried in the sun, the bees find this an excellent place to start a new honeycomb.

Bees have a very complex social structure which centers around the queen bee. The fertilized queen lives through the winter. In the spring she lays a few eggs in a cavity and infertile female workers de-

velop from some of the eggs. They carry on all of the activities of the colony except laying eggs. At the end of the summer, drones or males, and fertile females which will become queens, hatch from some of the eggs. These mate and the sperm receptacles of the queens are filled. The drones then die, and the race is maintained until the next fall by the queens alone.

The social structure varies with different types of bees. When an egg is laid its future is decided by its food. If a larva is fed "bee bread," an infertile female worker is the result. The drones are also fed on "bee bread." But if a larva is fed on "royal jelly," then this larva will eventually become a queen.

Since bees collect nectar, they have a system of communication to inform each other where the source is. Their main method of talking to each other depends on rhythmic movements, and on odors, but it has recently been discovered that they do also employ a "language" based on sound. A bee informs others of a source of nearby nectar by means of a round dance in which it turns around first one way and then another. This dance gives no indication of direction except to indicate that the nectar is close by. The specific odor of the plant visited, which is on the body of the informing bee, tells her companions the kind of flower to search for. If food is farther away than about 165 to 330 feet, the round dance is replaced by the tail-wagging dance. This not only tells the source of food and odor, but also the distance and direction in which it will be found. As the distance between the feeding place and hive increases, the tail-wagging dance decreases. The direction of the head in a short straight run indicates the direction of the nectar source in relation to the sun. The dances are closely watched by the other bees, who then go out to gather the nectar.

Bees are sensitive to color, being able to distinguish four: blue-green, yellow-green, blue-violet, and ultraviolet. Ultraviolet is invisible to man.

73. *Hornet*

"I will send my fear before thee, and will destroy all the people to whom thou shalt come; and I will make all thine enemies turn their backs unto thee. And I will send hornets before thee, which shall drive out the Hivite, the Canaanite, and the Hittite, from before thee" (Exod. 23:27-28).

The hornets belong to the wasp Family, with four species found in the Holy Land. These have vicious stings and can drive cattle and horses to madness, even death, by their attacks. The name "hornet" applies in Europe to a large species (*Vespa crabro*) of what we in America call a Yellow Jacket; the Yellow Jacket is called, in English, simply the

"Wasp." In America, the name "hornet" is applied to a number of other Hymenopterous insects related to the wasps proper. *Vespa crabro* has been introduced into North America.

74. Ants

Ants are found all over the world, from the burning deserts of Arabia to the rims of the polar icecaps. Naturally, then, men of Biblical times saw and studied these little creatures, and, as they often did, drew from the lives of the ants a moral lesson. To the ancient Hebrews, ants embodied two great virtues, industry and wisdom, and they used ants to represent both of these qualities in the Book of Proverbs.

One of the most famous of the proverbs involves the ant: "Go to the ant, thou sluggard; consider her ways, and be wise":

The illustration of this homily following these two lines is less well known: "Which [i.e., the ant] having no chief, overseer, or ruler, provideth her bread in the summer; *and* gathereth her food in the harvest" (Prov. 6:6-8).

The other proverb involving the ant is less well known, the reason most likely being that, while we still think of ants as industrious, somehow we no longer consider them particularly wise: "There are four *things which are* little upon the earth, but they *are* exceeding wise: the ants *are* a people not strong, yet they provide their food in the summer" (Prov. 30:24-25).

(The other animals mentioned by Proverbs in this connection, incidentally, are rock-badgers, locusts, and spiders.)

The basis for these proverbs is that the ant stores up food in the summer for use during the wintertime. In olden days, this notion was quite widespread, and it appears not only in the Bible but also in the folklore of many peoples. The famous story of the ant and the grasshopper says much the same thing as these proverbs.

This belief, however, has little basis in fact. In climates where there is a true winter, the ants, when the weather turns cold, enter a state of dormancy similar to the hibernation of higher animals; in this state they do not eat. In tropical climes, where winter never comes, the activity of the ant continues all year round and, obviously, there is no need to store food. Furthermore, the food of most ants consists of other insects and animals and the sap from trees, materials which could not be stored anyway.

How, then, did the belief that the ants store food arise? The answer is quite simple. It must have been a common enough experience for the Hebrews to see ants carrying bits of grain, leaves, and other matter to their nest. The ants' work never seemed to cease, and the ancients un-

doubtedly marveled at how diligently these little creatures went about their appointed tasks. Probably they broke open the ants' nests on occasion and found there quantities of grain and chaff. The simple assumption was that, like men, ants collect a harvest in the fall and store it up for the winter. This, after all, was the only way of life the Hebrews knew. The truth is, though, that the ants were not using these things to eat; they were simply lining their nests with them to make them dry and snug.

There are those who disagree with this interpretation of the Biblical passages, and naturalists have discovered that at least three species of ants, all common to the Mediterranean area, actually do store their food for the winter. In any case, the ant is one of nature's busiest and most organized creatures, and thus was an apt example for the writer of Proverbs.

THE MOTHS AND BUTTERFLIES (Order, *Lepidoptera*)

Composed of the butterflies and moths, the Order *Lepidoptera* contains some of the most beautiful of all insects. They are distinguished from other insects by the presence of four large wings covered with tiny, exquisitely shaped scales. Actually the scales are modified hairs that are broadened and flattened to cover the delicate membrane of the wing. A few butterflies and moths lack these scales and so exhibit clear wings. The usual insect jaws are replaced by a long, tubular proboscis that is used to draw honey from flowers or other juices, as some are carrion or dung feeders. All members undergo metamorphosis in their development. From the eggs hatch free-living larvae called caterpillars, which eventually develop into a quiescent pupa stage, and from there into a fully formed adult. The larvae have powerful jaws and feed on leaves and other fibers, both plant and animal.

75. Moths

"And he, as a rotten thing, consumeth, as a garment that is moth eaten" (Job 13:28).

"Behold, the Lord God will help me; who *is* he *that* shall condemn me? lo, they all shall wax old as a garment; the moth shall eat them up" (Isa. 50:9).

Clothes moth larvae are intended in the verse, not the actual adult moth. Damage to clothing is caused by these small white caterpillars. The moths belong to the Family *Tineidae*, with several small moths capable of damaging clothing. The most common of these is *Tinea bis-seliella*, which formerly was known as *Tinea pellionella*. These are small yellowish insects with narrow, fringed wings.

THE TWO-WINGED FLIES (Order, *Diptera*)

The flies form a group that is distinguished from most other insects by the presence of a single pair of wings.* Usually these are naked, but they may, as in the mosquitoes, be furnished with short hairs. The mouth parts are formed for piercing and sucking, the mandibles being modified into a pair of sharp lancets. The ends of the legs are armed with two claws, and are also usually equipped with adhesive pads, which enable the insects to walk on smooth vertical surfaces. Like most other insects, flies undergo a complete metamorphosis. In the larval stage they are known as maggots.

76. *Flies*

There are many types of flies in the Palestine region, but the flies probably referred to are *Musca domestica*, the Common House Fly. However, most likely flies of the Hippoboscidae and several other families were also included in the term *zevuv*. These insects were great pests, and their harm as dirt carriers was not always appreciated. They also can spread typhoid, anthrax, cholera, and a large number of other diseases. Where man and dirt combine, flies abound. Swarms of *Musca domestica* in the East corrupt and destroy anything edible which is not carefully covered from them, polluting a dish of food in a very few minutes. Just as so many of the inhabitants of Egypt, Palestine, and Arabia, still live much as their ancestors did 2 or 3 thousand years ago, so the flies continue to cause babies to die of dysentery just as they did in the days of Joshua, Herod, or Mohammed. Flies, however, are not all bad, for they also act as scavengers and sometimes as wound healers. The fly larvae act as wound healers because their digestive juices (principally urea) dissolve away dead and diseased tissue and do away with bacteria, acting as a powerful antiseptic. This was discovered only in World War I.

The Muscid flies are insects that undergo complete metamorphosis, with the female laying about 100 to 150 eggs at a time, and some are ovoviviparous, laying larvae. The larvae or maggots are often erroneously called "worms" by many. These feed on all manner of decaying animal and vegetable matter and thus actually do a great service in disposing of waste. Flies breed in practically all decaying and fermenting plant and animal wastes. As the adult is forming within the pupa, no provision is made for it to break out, except by a bladder, called a ptilinum. This bursts through a slit on the front of the insect's head and pulsates, being thrust in and out as the blood is pumped into it. This

* The males of the Order *Strepsiptera* or Twist-winged Flies have the front pair of wings reduced to little stubs, while the fore-wings of beetles form horny covers for the hind-wings when folded.

acts as a miniature battering ram, hitting the top of the puparium until it is pushed out and the adult creeps out. With this apparatus the fly works its way to the surface of the medium in which the larva pupated. In the open air the ptilinum withdraws and the slit in the head covers up. The blood is now forced into the wings, which stiffen, enabling the fly to take off in a few moments.

Flies are one of the most widely distributed insects on earth, possibly surpassed only by some arachnids. *Musca domestica* seems to have followed man all over the globe. Their powers of flight are well developed, making them capable of going great distances in search of food. Flies are so pertinacious that successful Egyptian generals were rewarded with golden collars bearing colossal silhouettes of the tiny animals—a wry tribute to their stubbornness in returning again and again to the same spot for food in spite of being shooed away. *Zeruv*, meaning obnoxious creatures, is a Hebrew name for some of these flies because they are so tormenting. The Phoenicians invoked the aid of their god Baal against the hordes of flies, and called him Baalzebub. The Jews in derision changed his name to Baalzebul, or “Master of the Dunghill.”

77. Gnats

“Ye blind guides! which strain at a gnat, and swallow a camel” (Matt. 23:24).

Yav-chus is the Hebrew equivalent of the word “gnat,” in the English version of the Bible. It is mentioned only in the New Testament. The word “gnat” is used in England somewhat ambiguously, and has a wide connotation. Originally it was synonymous with mosquitoes, but also included many other small, bloodsucking, two-winged flies. Today, it is customarily reserved for those that are *not* mosquitoes, and of both the Families *Culicidae* and *Chironomidae*. Several of these come in vast swarms at eventide, when they become troublesome. All these insects are distinguished by their long proboscis, which is a grooved sheath from which the insect shoots long, slender darts into the skin; the larvae and pupae always lie in water, emerging into the air only when they leave the chrysalis.

THE FLEAS (Order, *Siphonaptera*)

The Order *Siphonaptera* contains only the fleas. These are parasitic on other animals and notably warm-blooded ones; their mouth parts are formed into piercing and sucking tubes. The body is laterally compressed, the head is distinct but the thorax is composed of three hinged segments. The limbs progress in length, size, and strength backward and the animal can proceed by prodigious, for its size, leaps as well as by normal running and crawling. Fleas are all of very small size.

Fleas pass through a complete metamorphosis. The eggs are laid in the nests of the animals the adult parasitizes or in dust and trash, and the larvae, which are maggot-like, feed on debris, excrement, and any dried exudates found in the host's nest. There is a resting pupal stage. The adults are all parasites and usually one kind of flea is found on only one kind of host, but some can interchange, and they can live for considerable periods away from any host. The rat fleas are now well recognized as carriers of bubonic plague and other diseases lethal to man.

78. Fleas

The Common Flea, *Pulex irritans*, is found in all areas where unsanitary conditions abound, almost throughout the world. It is a great pest, with a painful bite that causes some swelling and itching. The natives of the area hate them, and the fleas can even "disturb Moslem equanimity." They may be one of the reasons why the Arabs change their camps so often.

The main danger from fleabites is the possible transmission of diseases, mainly the bubonic plague. *Bacillus pestis* or *Pasteurella pestis*, the cause of the plague, incubates in the flea's stomach, and from there is transmitted by the flea's bites. The fleas pick up this bacillus from animals, mainly the Black Rat, before the plague is passed on to man. Thus, control of the plague depends on the eradication of the rat population because this is the reservoir for the bacterium.

During the 1500 years before Christ, there were 41 recorded epidemics. There were 109 epidemics up to A.D. 1500, and 45 epidemics have been counted from 1500 to 1720. The first authenticated plague began in A.D. 542, in Pelusium, in Egypt, a trade center between East and West. By means of the trade routes, the disease spread until every country then known became afflicted, from China to Ireland. At its height, 5000 persons died daily, with the numbers sometimes going as high as 10,000. The author Procopius wrote: "It spared neither island nor cave nor mountain top where man dwelt . . . Many houses were left empty and it came to pass that many from want of relatives or servants lay unburied for several days. At that time it was hard to find anyone at business in Byzantium. Most people who met in the streets were bearing a corpse. All business had ceased. All craftsmen had deserted their crafts."

Only after 200 years did the epidemic subside. The second pandemic of plague, the Black Death, started in Mesopotamia about A.D. 1050 and reached its height in the fourteenth century, ending in the seventeenth century. The Crusaders, coming home from the Holy Land, may have helped spread this epidemic. During the course of the disease, one quarter of the world's population, about 25 million, died. In London, from 1664 to 1665, 70,000 people died out of a population of a half

million. The last epidemic started in 1871, reaching its peak in 1907. Most of the seaports of the world felt its sting, even the United States, though modern measures prevented uncontrolled ravages.

There are about a thousand different known kinds of fleas. They are attracted by warmth. Both the males and the females are bloodsuckers, and under normal conditions blood is needed for pairing and oviposition. They have a long life span; some have lived for 18 months, and if the moisture and temperature are favorable the adults can live for a year or longer without food. They are such voracious feeders that they will often expel undigested blood from their intestines so they can take in more at the mouth.

These animals are flat from side to side, enabling them to move among hairs. They have strong, spine-like hairs projecting back from the posterior edges of their bodies so that as they climb up they will not slip back. Their feet are claw-like so they can hang onto hair. They have a great ability to jump, and starved female fleas have been seen to jump $11\frac{1}{2}$ inches on a smooth wood surface. Perpendicularly, a jump of at least $7\frac{3}{4}$ inches has been measured.

THE LICE (Order, *Anoplura*)

This Order of insects is divided into two suborders, those of the Bird- or Feather-Lice (*Mallophaga*), and the Sucking Lice (*Siphunculata*). The former bite instead of suck and are confined to birds; the latter parasitize mammals, even some aquatic ones like the seals. They occur on many kinds of mammals, including man, who is host to two distinct forms, the Head Louse (*Pediculus humanus*), and the Pubic or Crab Louse (*Phthirius pubis*). All lice are wingless, with bodies much flattened from back to underside; the limbs are armed with large, recurved claws so that the animals may cling firmly to the skin of their host. To this end also, the openings of their breathing apparatus have moved from the normal lateral position to their backs.

79. Lice

The *sciniphs* referred to in the Bible are lice, which were the third plague of Egypt. Since they are involved in the spread of typhus, this may be what was meant by the plague, though they make life uncomfortable enough by themselves. One louse found on man is *Pediculus humanus*, which can be found on the head (and given the subspecies name, *capitus*) or on the body (where it is *P. humanus corporis*). The two are very much alike. Body lice are seldom, if ever, found on the head, while head lice may be found on the body.

All lice are adapted to clinging to hairs by their claw-like feet, but body lice also find refuge in the clothing man uses. These create an in-

tolerable itch when present in large numbers, and may be painful because they have piercing mouth parts. During the biting process the saliva injected into the wound prevents the host's blood from coagulating as it is sucked through the slim mouth parts. Lice seem never to be satisfied for long with one meal, but go on feeding all the time. Skin disorders can be caused by their bites. These animals are dangerous because they are carriers of diseases, especially typhus and cholera. In February, 1915, this disease killed 500 people a day in Serbia. Typhus is largely controlled by eradicating lice.

Lice also spread trench fever and relapsing fever, and so have probably played a more important part in the history of the world, and have had more to do with the winning of wars and battles, than all the generals and admirals put together. In past wars, diseases carried by lice accounted for more casualties among the soldiers than did all the assaults of their enemies.

On one occasion during World War I, approximately 10,000 lice and as many nits were found on a single army shirt, illustrating the numbers of these.

Robert Hooke wrote: "This is a creature so officious that 'twill be known to every one at one time or other, so busy, and so impudent, that it will be intruding itself in everyone's company, and so proud and aspiring that it fears not to trample on the best, and affects nothing so much as a crown; feeds and lives very high, and that makes it so saucy as to pull any one by the ears that comes its way, and will never be quiet till it has drawn blood."

A contemporary of St. Thomas à Becket wrote that on the morning after the saint's murder his robes were taken off, and the haircloth underwear was so infested with lice that they "boiled over" as the cloth was being taken off.

Human lice have eyes, while all the rest are blind. They vary in color according to the race of man they are found on. Lice multiply rapidly. The female can lay 50 eggs every week, which hatch every month. The size of the second generation would be about 2500. The third generation would be about 125,000.

THE GRASSHOPPERS AND LOCUSTS (Order, *Orthoptera*)

This is a large and very ancient order of insects that includes besides the grasshoppers, of which locusts are but a form, the crickets, the roaches, the mantises, and the stick- and leaf-insects. Their distribution is universal. The grasshoppers are divided into two great groups, the Short-horned (Family, *Locustidae*), and the Long-horned, together with the Cave Crickets (Family, *Tettigoniidae*). There are over 5,000 known species of the former; over 4,000 of the latter.

80. Locust

"Thou shalt carry much seed out into the field, and shalt gather *but* little in; for the locust shall consume it" (Deut. 28:38).

"If there be in the land famine, if there be pestilence, blasting, mildew, locust, *or* if there be caterpillar; if their enemy besiege them in the land of their cities; whatsoever plague, whatsoever sickness *there be*;" (I Kings 8:37).

"If there be dearth in the land, if there be pestilence, if there be blasting, or mildew, locusts, or caterpillars; if their enemies besiege them in the cities of their land; whatsoever sore or whatsoever sickness *there be*;" (II Chron. 6:28).

"He gave also their increase unto the caterpillar, and their labour unto the locust" (Ps. 78:46).

"There shall the fire devour thee; the sword shall cut thee off, it shall eat thee up like the cankerworm: make thyself many as the cankerworm, make thyself many as the locusts" (Nah. 3:15).

The Hebrews distinguished between the flying form (generation) of these insects, and the nonflying intermediate generation, but they seem to have used their word for the latter (*chor-gorv*) to cover also the other short-horned grasshoppers.

ARACHNIDS

THE SPIDERS (Order, *Araneae*)

A deep waist separating the cephalothorax from the abdomen is one of the chief characteristics of the true spiders. In most species, the abdomen lacks segmentation and is covered by a soft, hairy integument, or a hard horny cuticle. The cephalothorax is covered by a carapace, in which are usually set eight eyes. The four pairs of walking legs are arranged radially around the cephalothorax. The large mandibles contain a poison gland which is connected to a pair of fangs. Characteristic of most spiders is the presence, on the underside of the abdomen, of a pair of spinnerets which connect with the silk glands, and from which the web is extruded.

81. Spider

"Whose hope shall be cut off, and whose trust *shall be* a spider's web" (Job 8:14).

"The spider taketh hold with her hands, and is in kings' palaces" (Prov. 30:28).

The Hebrew word *akkabish*, which signifies some kind of spider, occurs twice in the Bible: Isaiah 59:5 and Job 8:14. In both cases, refer-

ence is made to the frailty of spider webs by comparing them to the works of the wicked, which shall be so easily swept away. We cannot identify the type of spider from either passage, other than the fact that it is a web-spinner, many species of which are found in Palestine.

THE SCORPIONS (Order, *Scorpionida*)

The scorpions are characterized by an elongated body composed of 18 segments. The last 5 segments are narrowed abruptly to form a tail, at the end of which is located the telson, or poison sting.

82. *Scorpion*

The entire abdomen, including the tail, is distinctly segmented. The upper surface of the thorax, however, is covered by a single plate, bearing the eyes, which vary from 6 to 8 in number. The two foremost pairs of appendages are modified into nippers, the first pair forming small mandibles, the second pair, large pincers or chelae. The four pairs of walking legs are similar, and each is tipped with a pair of claws.

Scorpions (Hebrew *akrabim*) are common throughout Palestine, being found in cracks and crevices of buildings as well as under rocks and brush in desert country. The venom of the scorpion is potent, and the sting of a large specimen can sicken a man for a considerable period of time. Death may even result if the victim is very young or in a weakened condition.

Biblical references to the scorpion allude either to its dangerous sting or to its habit of living in desolate places. "Who led thee through that great and terrible wilderness, *wherein were* fiery serpents, and scorpions, and drought; where *there was* no water; who brought thee forth water out of the rock of flint . . ." (Deut. 8:15). "And they had tails like unto scorpions, and there were stings in their tails: and their power *was* to hurt men five months" (Rev. 9:10).

MOLLUSCS (Phylum, *Mollusca*)

The *Mollusca* form one of the largest phyla with now almost 100,000 recorded species with a seeming infinity of variation of shell structure and color. Molluscs in the form of land snails range from the tops of mountains where there is vegetation, to the seashores, and sea snails extend from there to the ocean depths; they are found from the North Pole itself, under the ice on the ocean bottom, to the shores of Antarctica. Some snails can tolerate great aridity, being able to seal themselves into their shells and go into a state of suspended animation for years.

83. Snails (General)

The occasional Biblical references to molluscs (or shellfish) usually concern derivative products rather than the living animal. In Dan. 5:7, there is found the Hebrew word *argaman*, which signified the regal purple color so highly prized by the ancients: "... And the king spake, and said to the wise *men* of Babylon, Whosoever shall read this writing, and shew me the interpretation thereof, shall be clothed with scarlet [or, purple], and *have* a chain of gold about his neck, and shall be the third ruler in the kingdom." Because of its rarity and expense, purple became synonymous with royalty and power throughout the ancient world. In republican Rome, it was used to trim the togas of the consuls; during the more opulent days of the empire, the Caesars were fully clothed in the rich hue. Actually, the color in question was not a true purple, but more of a crimson. It was compared by the ancients to the color of newly clotted blood.

The costly dye from which this color was obtained was prepared from the bodies of two species of Mediterranean marine gasteropod mollusc or "snail," *Murex branderis* and *Murex trunculus*. The preparation very likely involved crushing the bodies of the molluscs to a pulpy mass into which fabric could be dipped, although the exact method was kept a closely guarded secret. The Phoenician city of Tyre was the center of the purple dye industry, and for this reason the color is often referred to as Tyrian purple. Archaeologists excavating the site of the ancient city have found large quantities of crushed *Murex* shells.

That the art of preparation was a well-kept secret is evident from the writings of the Talmudists, who seem to have had only vague ideas as to the source of the dye. They knew it was derived from a marine mollusc, but thought that the animal appeared only once in 70 years.

In Exod. 30:34-35, reference is made to "onycha," Hebrew *shecheleth*, as an important ingredient of incense: "And the Lord said unto Moses, Take unto thee sweet spices, stacte, and onycha, and galbanum; *these* sweet spices, with pure frankincense: of each shall there be a like *weight*. And thou shalt make it a perfume, a confection after the art of the apothecary, tempered together, pure *and* holy . . ."

Onycha is the horny, clawlike operculum of a Near Eastern member of the molluscan family *Strombidae*. This family enjoys a worldwide distribution, and is represented along our own shores by the familiar Queen Conch, *Strombus gigas*, of Florida. The operculum is used for offense, for defense, and, in some cases, as a unique means of locomotion. By extending its foot, embedding the sharp end of the operculum in the substratum, and then contracting, the animal is able to bump along quite rapidly. When burned, the opercula give off a sharp, strong scent,

and, when mixed with more fragrant but less powerful substances, add greatly to their potency. The name "onycha" is derived from the Greek word "onyx," which signifies a nail or claw.

One of the few references to living snails occurs in Ps. 58:8: "As a snail *which* melteth, let *every one of them* pass away; *like* the untimely birth of a woman, *that* they may not see the sun" (Hebrew, *shablul*). This undoubtedly refers to a belief held by the ancients that the slimy track made by a snail as it crawled along was subtracted from the substance of its body, and that the farther it crawled, the smaller it became until it was entirely wasted away.

Land snails are a very numerous group in the Near East—as almost everywhere else for that matter. Certain fresh-water forms serve as hosts for the Schistosome worm or fluke parasites which cause the dread disease Bilharzia. There are literally hundreds of different species in the area, so that pinning the reference to any one species is both impractical and impossible, even if the Hebrew term ever had specific meanings.

THE SEGMENTED WORMS (Phylum, *Annelida*)

Another Phylum of considerable size and very great importance is represented in the Bible by one form. This is that of the *Annelida* which contains the earthworms, and a host of marine and some fresh-water forms including the leeches. The segmented worms, as they may be popularly and collectively called, are of the utmost importance to life on this planet as it is today, for, in the form of earthworms, they play a vital part in the formation of soil and thus of the whole of plant economy. And, all land animals including ourselves are dependent upon plants and plant growth. The Annelids of the sea also play a very important role in the general scheme of things but nothing compared to their terrestrial cousins. The freshwater forms are not of such great import but they fill some needed niches.

THE LEECHES (Class, *Hirudinea*)

The leeches comprise a small group of segmented worms that are mainly characterized by the presence of a posterior, and sometimes also an anterior, sucker. When present, the anterior sucker surrounds a mouth armed with three semicircular toothed jaws. The head is usually provided with five pairs of eyes, arranged along the first few segments. Although many leeches are external parasites, sucking the blood of fishes, amphibians, and mammals, others are active predators which seek out and devour earthworms, molluscs, and other small creatures.

84. Leech

In Prov. 30:15, we find the only occurrence in the Scriptures of the Hebrew word *alukah*, or "leech": "The horseleach hath two daughters, *crying*, Give, give. There are three *things that* are never satisfied, *yea*, four *things* say not, *It is enough*." That the translation of the word is correct is attested by the similarity of the Hebrew to the Arabic word for leech, *aluk*.

Leeches are common in the streams and rivers of the Near East. They often occur in such great numbers as to become annoying, if not dangerous, to the men and animals who attempt to utilize the streams for drinking and bathing. Most leeches can exist quite well on a diet of snails, insect larvae, crustaceans, and small worms, but given the opportunity they will voraciously drink blood from a vertebrate animal. The saliva of the bloodsucking leeches contains a powerful anticoagulant that not only prevents the formation of a clot, but helps preserve a blood meal for several months. A leech weighing a half ounce has been known to gorge itself with $2\frac{1}{2}$ ounces of concentrated blood, and then to exist for 15 months with no more to eat.

THE JELLYFISH AND CORALS (Phylum, Coelenterata)

The jellyfish, sea anemones, corals, and a considerable host of other marine and freshwater forms of soft-bodied animals are grouped together in the Phylum *Coelenterata*. Coral as we know it, is of course, a mineral growth or aggregation accumulated or formed by colonial animals which resemble tiny jellyfish all connected by a network of fine strands of tissue, and which may be called individually polyps. Coelenterates are of worldwide distribution in the sea, but the corals are confined to tropical and subtropical seas. Freshwater coelenterates also have a worldwide distribution between the polar circles wherever there is standing or running water, even ascending to considerable altitudes in mountain streams.

85. Coral

The ancients probably were not aware that coral is the remains of millions of microscopic animals, but they were very much aware of coral's beauty and prized it highly. Just as the American Indians prized certain rare seashells and used them for wampum, the Hebrews sought coral and used it as money along with precious stones, pearls, and gold. Even though the marine areas of the Middle East are particularly rich in fine coral formations, the Israelite market-places were not inundated by coral for gathering it was an extremely difficult task.

The Hebrew word for coral is *ramoth*, which means "that which grows high like a tree." This suggests that the Hebrews knew that

coral, like pearls, but unlike gold or diamonds, grows—that is, it is something alive. But their exact knowledge of coral is questionable.

Coral is mentioned twice in the Old Testament, both times in conjunction with other precious objects. The Book of Job, so rich in natural history, uses coral to illustrate a homily: “No mention shall be made of coral, or of pearls: for the price of wisdom is above rubies” (Job 28:18).

The Book of Ezekiel lists coral among other commodities regularly traded by the ancients: “. . . they traded for thy wares with carbuncles, purple, and richly woven work, and fine linen, and coral, and rubies” (Ezek. 27:16).

It is interesting to note that, while coral is no longer a precious commodity, mostly because of modern under-water collecting techniques, it is still prized by many people for its splendid patterns and beautiful colors. It is not surprising at all that the Hebrews should have appreciated it so greatly.

THE SPONGES (Phylum, *Porifera*)

The lowliest group of multicelled animals is that of the sponges or *Porifera*. They are, in fact, on the borderline, for in some cases they are nothing more than colonies of bunches of single cells acting in concert, though differentiated. This is a fairly large Phylum and one whose members vary greatly in size, form, and habit. They are found in both salt and fresh water, but not on land. Many of them lay down internal skeletons to support their bulk, and different groups use different substances for this. Some accumulate calcium carbonate, the mineral forming chalk and limestone; others use silicon dioxide in a glassy form; still others make a horny substance which we all know, as it is the bathtub “sponge” of commerce. In life, the sponge of commerce looks like a slimy bun full of holes. These are channels through which water is circulated to bring minute particles of food to the colony. The range of shapes found within the Phylum includes such forms as cups, vases, tubes, spheres, and treelike branches, although many are shapeless. All are characterized by more or less complex internal canals that connect to the exterior by both large and small pores. Through these structures currents of nutrient-bearing water continually course through the animal. In order to support their bodies, sponges construct skeletons of calcium, silicon, or a chitinous material called “spongin.” In some cases, combinations of the different substances are found. They are actually “colonial” entities, like some coelenterates such as the corals, being composed of a vast number of individual animals interconnected by strands of tissue.

86. Sponges

"And straightway one of them ran, and took a sponge, and filled *it* with vinegar, and put *it* on a reed, and gave him to drink" (Matt. 27:48).

"And one ran and filled a sponge full of vinegar, and put *it* on a reed, and gave him to drink, saying, Let alone; let us see whether Elias will come to take him down" (Mark 15:36).

"Now there was set a vessel full of vinegar: and they filled a sponge with vinegar, and put *it* upon hyssop, and put *it* to his mouth" (John 19:29).

The sponge is mentioned in the Bible only in connection with the Crucifixion of Jesus Christ. A Roman soldier dipped one in vinegar and held it to Jesus' lips. Considering the close proximity of all of Palestine to the Mediterranean Sea, it is probable that the ancient Hebrews were familiar with a variety of sponges.

Chapter 11

Dubious Animals of the Bible

“And it came to pass in the twelfth year, in the twelfth month, in the first *day* of the month, *that* the word of the Lord came unto me, saying, Son of man, take up a lamentation for Pharaoh king of Egypt, and say unto him, Thou art like a young lion of the nations, and thou *art* as a whale in the seas; and thou camest forth with thy rivers, and troubledst the waters with thy feet, and fouledst their rivers. Thus saith the Lord God, I will, therefore, spread out my net over thee with a company of many people; and they shall bring thee up in my net. Then will I leave thee upon the land, I will cast thee forth upon the open field, and will cause all the fowls of the heaven to remain upon thee, and I will fill the beasts of the whole earth with thee. And I will lay thy flesh upon the mountains, and fill the valleys with thy height. I will also water with thy blood the land wherein thou swimmest, *even* to the mountains; and the rivers shall be full of thee. And when I shall put thee out, I will cover the heaven, and make the stars thereof dark; I will cover the sun with a cloud, and the moon shall not give her light. All the bright lights of heaven will I make dark over thee, and set darkness upon thy land, saith the Lord God. I will also vex the hearts of many people, when I shall bring thy destruction among the nations, into the countries which thou hast not known” (Ezek. 32:1-9).

In this passage we have a skillful literary description of the coming misfortunes of Egypt. The imagery of the monster is rich and colorful and certainly succeeds in conveying the scenes of terror which the prophet intends. It is not certain what type of beast the Pharaoh is being compared to in the metaphor. Some interpret the monster as a crocodile. In this case, the picture of the animal “troubling” the waters with his feet is quite appropriate. The use of the image of turbidity to apply to Egypt’s interference in the affairs of the Hebrews is an impressive literary device. It is difficult to infer the identity of the animal referred to in the passage. It appears to be a creature of unbelievable size. Furthermore, there is no certainty that the same animal is being mentioned throughout the comparison. This is not a literary deficiency on the part of Ezekiel, but indicative of a literary trait peculiar to ancient Near Eastern literature.

What were those monsters to which the Bible refers? Did they really exist, or were they merely the inventions of a primitive imagination? If they did exist in reality, are they represented by currently extant forms

of animal life, or were they forms peculiar to their day and age, but now extinct?

It is also possible that we are here confronted with an extraordinary manner of describing ordinary animals. As our knowledge of ancient cultures increases, we are coming closer and closer to the solution. At any rate, we have passed the stage where the ancient myths are regarded as mere rhapsodies that contain no element of truth.

In the parable, Ezekiel predicts the plundering of Egypt by the Babylonians. Egypt valued the friendship of the small Palestinian states because they were situated between her and her rival empires of Assyria and Babylon. Numerous were the overtures she made to the Hebrews, promising them support and making every effort to arouse their antagonism against Assyria and Babylon. By failing to keep her promises, Egypt incurred the hostility of the Jews and the age-old appellation, "The Broken Reed." The images of filling the mountains with flesh and the water with blood may be a reference to the slain armies of the Pharaoh.

MANLIKE MONSTERS

There is speculation that a number of hominoid forms existed in Biblical times which today are extinct. Thus, in the first book of the Bible we find the phrase "There were giants (*nephilim*) in the earth in those days . . ." (Gen. 6:4). In the description of the Exodus there are references to the "Hairy Ones" (*Seirim*) who intimidated the Israelites during their wanderings in the desert. These were called by the alternate name *Sheidim* (the "destroyers"). The *Seirim* were about 4½ feet high, possessed long arms, and a great deal of red hair covering their bodies. They inhabited the area around the Sinai Peninsula, and were physiologically close enough to *Homo sapiens* to intermarry with them.

Manlike monsters are also popular mythological ingredients. Like Genesis, the Greek myths mention the existence of gigantic manlike creatures in the early days of creation. The mythologist Edith Hamilton describes them as: ". . . somewhat like men and yet unhuman. They had the shattering, overwhelming strength of earthquake and hurricane and volcano. In the tales about them they do not seem really alive, but rather to belong to a world where as yet there was no life, only tremendous movements of irresistible forces lifting up the mountains and scooping out the seas. The Greeks apparently had some such feeling because in their stories, although they represent these creatures as living beings, they make them unlike any form of life known to man."

Examples of these strange creatures are the Cyclopes and the Titans. There is another Greek legend which contains the postulation of successive experimental creations of man on the part of the gods. They

started with a golden race of men, thence to a silver race, from there to a race of brass, etc.

The primary difficulty in determining the degree of truth in these myths is our inability to sympathize adequately with the minds of those who created and believed the myths. Perhaps the creatures that have been discussed here are purely fictitious; perhaps they were living remnants of very primitive peoples or even of *Homo erectus*, the precursor of *Homo sapiens*, as represented in fossil form by such as the Pithecanthropines and Australopithecines.

The Satyr

"But wild beasts of the desert shall lie there: and their houses shall be full of doleful creatures: and owls shall dwell there, and satyrs shall dance there" (Isa. 13:21).

"The wild beasts of the desert shall also meet with the wild beasts of the island, and the satyr shall cry to his fellow; the screech owl also shall rest there, and find for herself a place of rest" (Isa. 34:14).

The word "satyr," translated from the Hebrew *sa'ar*, is used only twice in the Bible. The Hebrew literally meant "shaggy or rough hair," and therefore is often translated as "wild goat." But to identify the satyr with a particular animal seems impossible, for the satyr in the Greek tradition was a mythological figure. Satyrs were purported to be demi-gods whose upper body was that of a man and whose lower half was the body of a goat.

Some scholars have thought that the satyr might have meant the wolf, since the Bible speaks of it as crying. This could refer to the eerie howling of the wolf, but just as well to the bleating of a goat. Both Tristram and Wood, Bible scholars of the nineteenth century, suggested that the satyr might be the dog-faced baboons that were worshiped in Egypt. But no one can really say whether the satyr was intended to refer to an animal or whether it applied only to some mythological figure.

The Dragon

"Their wine is the poison of dragons, and the cruel venom of asps" (Deut. 32:33).

"I am a brother to dragons, and a companion to owls" (Job 30:29).

"Thou shalt tread upon the lion and adder; the young lion and the dragon shalt thou trample under feet" (Ps. 91:13).

"And the wild beasts of the islands shall cry in their desolate houses, and dragons in *their* pleasant palaces: and her time is near to come, and her days shall not be prolonged" (Isa. 13:22).

"And Babylon shall become heaps, a dwellingplace for dragons, an astonishment, and an hissing without an inhabitant" (Jer. 51:37).

"Speak, and say, Thus saith the Lord God, Behold, I *am* against thee, Pharaoh king of Egypt, the great dragon that lieth in the midst of his rivers, which hath said, My river *is* mine own, and I have made *it* for myself" (Ezek. 29:3).

Practically every religion or mythology has its share of dragons. One of the more celebrated Sumerian myths tells of the slaying of the dragon *Kur*, and the ancient Greeks recorded the story of Hercules slaying the Hydra, a many-headed dragon which sprouted two new heads for every one cut off. Even Christianity has its dragon stories, notably the famous legend of St. George and the dragon. In most of these monster stories the dragon represents forces of evil which can be overcome only through the combined efforts of God and man.

Thus, Biblical references to the dragon can be regarded as symbolic—that is, the writer using the dragon in a fictional way. These references are a kind of shorthand evocation of the evil forces of the cosmos that are in conflict with man. When in Psalm 91 we find, "the young lion and the dragon shalt thou trample under feet," we can be almost certain the writer does not have in mind any conflict with a fire-breathing reptile, but rather that holiness shall triumph over evil when God's kingdom is established on earth.

The Hebrew word used to denote the dragon in these references is *tannin*, which means any great monster. Because the word is so vague it will have different connotations when it appears in various parts of the Bible. Sometimes it will have the symbolic meaning described above, while just as often it will signify some actual creature. Many Biblical scholars translate the word *tannin* as "jackal," denoting a mammal rather than a serpent. The related Hebrew word *than*, which means "dweller in a desolate place," is in the same way often translated as dragon, but it also probably refers to the jackal. When we read in Jeremiah: "And Babylon shall become heaps, a dwellingplace for dragons . . .," we can probably assume that the writer means nothing more than that Babylon will be destroyed and made desolate, a dwelling place for jackals. Similarly, certain Biblical references to dragons may refer to crocodiles. For example, Ezekiel refers to "the great dragon that lieth in the midst of his rivers." This probably refers to the crocodiles that infest the banks of the Nile River. Another occurrence of the dragon is in Deuteronomy (32:33): "Their wine *is* the poison of dragons, and the cruel venom of asps." Here the writer can mean any one of a number of small poisonous serpents known to the ancient Hebrews.

A more unusual case is the reference in Nehemiah to a dragon well, apparently signifying a fountain located across the Jordan River from

Jerusalem. The Septuagint sheds some light on the usage here, indicating that a possible confusion of Hebrew words has taken place, and that a more accurate (and satisfactory) translation would be "fountain of the figs."

Not every mention of dragons in the Bible is so easily explained. In certain passages (Jer. 51:34, and others) the dragon mentioned is a specific monster that dwells in the ocean and is an adversary of God. Possibly the dragon here has a kinship to a monster named *Tiamet* which is a familiar figure in Babylonian and Assyrian mythology. The ancient Hebrews were quite naturally influenced by the religions around them, just as later they would influence the new religions of Christianity and Islam, and it is not too far-fetched to explain these dragons in this way. Furthermore, it would be highly unusual to attribute no belief in dragons to the Hebrews since almost every one of the ancient peoples had a considerable niche in their folklore reserved for giant reptiles.

The Sirrush

Generally in discussing dragons, one assumes that they did not exist and goes on to explain away references to them by the various methods already discussed. But what if dragons did exist? What if the writers of the Bible, who seem to have had an almost unbelievably accurate knowledge of zoology, mentioning animals found only in quite remote regions of the ancient world, had in mind an animal unknown to us but fitting the popular conception of what a dragon is? Such an assertion cannot be made flatly, but perhaps it is not as far-fetched as it seems.

In 1889, a German archaeologist working on the site of ancient Babylon brought to light the famed Ishtar Gate, an enormous brick arch built by the Babylonian ruler Nebuchadnezzar, covered with glazed bas-reliefs that showed various animals, including quite lifelike bulls, lions, and a creature that has come to be known as the Dragon of Babylon, also called the *sirrush*. The *sirrush* is at first sight a fantastic beast. The explicit bas-relief outline of it shows a serpent-like creature covered with scales. At the end of its long neck is a reptilian head from the nose of which arises a single sharp horn and from the mouth of which a forked tongue protrudes. Along the neck and at the back of the head are growths of skin that seem braided and adorned with knots. Most fantastic of all are the legs of the *sirrush*; the fore-legs resemble those of a feline animal, perhaps a panther with five small clawed fingers, while the hind-legs are shaped, taloned, and scaled like those of a bird. It has been shown that the *sirrush*, the Dragon of Babylon whose figure adorned the Ishtar Gate, is the same creature identified in the Bible by that name.

It may be that Nebuchadnezzar's artists used their imagination in drawing the dragon. But the juxtaposition of a purely mythical creature with easily recognizable lions and bulls does suggest to an open-minded observer the possibility that some creature resembling the *sirrush* did indeed exist at the time, and that it had been seen by at least some Babylonians and Hebrews. The creature, if it did exist, would be a throw-back to the great age of dinosaurs that came to an end 78 million years ago. Is this impossible?

Scientists are still unsure exactly what conditions of climate and fauna led to the extinction of the dinosaurs. It is known that Africa was once well stocked with the big reptiles. Perhaps, in some remote jungle, conditions allowed a few "dragons" to survive. Scientists are constantly revising their judgments as new evidence—in all fields—is brought to light. Perhaps their statement that dinosaurs disappeared many millions of years before man appeared will prove to have exceptions. After all, the Crocodilians, the Chelonians, and the Tuatara, all older than the dinosaurs, survived.

Several unexplained phenomena strengthen the possibility that some strange creature named *sirrush* could have existed in Biblical times, indeed, might even live today. We are familiar with the many modern reports of sea serpents sighted by apparently reliable people, and never adequately explained away by mass hysteria, faulty eyesight, or the like. Similar reports often are recorded of people seeing various monsters inland. In particular, central Africa has been a rich source of such stories, coming not only from superstitious local people, but also from reliable, educated Europeans. Many of these reports suggest the existence of a creature similar in anatomy to the Ishtar Dragon. Now, central Africa is quite a long way from the site of ancient Babylon, but we need not assume that the animals portrayed on the Ishtar Gate were denizens of the Babylonian region.

Another creature, known Biblically as the *re'em*, but identified as a real animal called the Aurochs or Urus, was also displayed on the gate, and this also became totally extinct before modern science was established. Furthermore, it is now known that there was trade and direct contact between Mesopotamia and East Africa long before the time of Nebuchadnezzar. It seems likely that, if a *sirrush* had survived in central Africa, its proportions would have been known to the Babylonians. The Beast in the Pit might even have been a live specimen. There is, of course, no way of proving an assertion that the *sirrush* actually existed in Biblical times, but there is enough evidence to show that such an occurrence was not impossible.

But perhaps the most significant aspect of the *sirrush* conundrum is the fact that certain small dinosaurs exactly fitting the appearance of

this beast are now known to have existed in the far past. These walked on their hind-legs and had legs and feet like birds; they had long serpentine tails; their bodies were covered with scales; their fore-limbs were short and they had "hands" with five fingers much like ours, or like those of a large cat with extended claws; and, most significant of all, they bore a single upright bone horn on their snouts. Being reptiles, they might well have had cloven serpentine tongues, and they could, like the iguanas of today, have borne crests down the backs of their necks. Dinosaurs were not all enormous; some were under 2 feet long. The animals described as being seen in Africa today are alleged to have bodies no bigger than donkeys and to be considerably less bulky than the largest living crocodiles in the over-all. Maybe one was brought to Babylon and kept in a pit such as those in which we keep large animals in our modern zoos.

The Unicorn

Even more tantalizing than the search for the *sirrush* is the ubiquitously legendary unicorn. The unicorn (the name means "one-horn") is best known for its appearance in Greek mythology, where it is described as a horse with a single horn protruding from its head. But the unicorn also appears in many places in the Bible, notably in the Book of Job and The Psalms. The original Biblical word for unicorn, however, has been shown to be none other than *re'em*, which, as we have seen, is a real animal, the extinct ox of western Eurasia. Why the *re'em* and the unicorn should have been confused is a simple matter. The Gate of Ishtar, following the artistic style of the place and period, showed its creatures in profile. Thus, the bi-horned *re'em*, in its appearance on the gate, appears to have but a single horn. Although that is probably the basis for the appearance of the unicorn in Biblical lore, the *re'em* quickly became mixed up with the Greek unicorn, and until modern times few people denied that unicorns actually existed.

The horn of the unicorn, known as the *alicorn*, was prized in the Middle Ages for its curative powers, and, as such a horn was very rare, it was literally worth its weight in gold. When one knows that the horn of the Indian rhinoceros is similarly prized in that country, the basis of the unicorn myth becomes more evident but still more confused. Many of the earliest descriptions of the unicorn tally closely with the Indian rhino, which, if we were not familiar with it, would be an unlikely enough beast. A well-known appearance of the unicorn comes in Talmudic lore surrounding the story of Noah's ark. That particular unicorn was said to have been so large that it could not fit in the ark, and was forced to swim behind it for the duration of the Flood, resting by supporting its alicorn on the boat.

The ultimate confusion in the story of the unicorn, both Biblical

and Hellenistic, arose with the introduction into both the Near East and Europe of real alicorns—long, straight, and with a number of sinistrally twisted grooves. These were just as they are shown sticking out of the foreheads of the horselike beasts called unicorns.

They were, of course, the horns carried by a strange whale of the Arctic and sub-Arctic seas called the Narwhal (*Monodon monoceras*), and they reached the Mediterranean area from two directions: from the Greenland Norse settlements via Denmark, and from the coasts of eastern Siberia via the great trade routes across central Asia, that ended in Baghdad. It was from the combination of these Narwhal "horns" with the unicorns of the ancients that the medieval artists derived their standard unicorn of heraldry.

The Behemoth and the Leviathan

Almost as well known as the unicorn are the purely Biblical beasts, the behemoth and the leviathan, the former being a giant land animal, the latter a giant water beast. Like many other dubious Biblical creatures, the conceptions of these differ in their various appearances in the Scriptures. For example, we read in Isa. (27:1) that "In that day the Lord, with his sore, and great, and strong sword, shall punish leviathan the piercing serpent, even leviathan that crooked serpent; and he shall slay the dragon that *is* in the sea." The reference here is obviously to something quite different from the crocodile that the writer of Job has in mind when he says (41:1): "Canst thou draw out leviathan with an hook? or his tongue with a cord *which* thou lettest down?"

In general, however, the leviathan is a large *sea* monster, usually described as a fish, while the behemoth is a giant mammal, usually pictured in terms of a gigantic ox. Actually, the confusion stems from the root of each word. Behemoth is the plural form of a Hebrew word meaning "beast." As such it is used in the Bible to connote elephants, hippos, and other actual large land animals as well as its mythical counterpart. The word "leviathan" similarly stems from a Hebrew root word meaning "coil" or "twist," and thus is often used to signify some form of serpent in addition to the primary usage to indicate the king of the fishes.

There are several bizarre legends in Hebrew folklore concerning the leviathan and behemoth. For instance, it is said that there is but a single male and female of the species, and that the pair are not capable of producing baby behemoths, for a flourishing of these giants would overrun the world. Similarly, there are only two leviathans, which do not reproduce either, lest they crowd all other creatures from the ocean. It is said in apocryphal literature that on the Day of Judgment the righteous shall be permitted to view a colossal battle between leviathan and behemoth. First, the two beasts will be attacked by the angels, but

they will repulse the heavenly host and begin a titanic encounter in which both will perish. The blessed will then be served a divine banquet of the flesh of these creatures. Often a giant bird called the *ziz* is added to form a triumvirate representing the three elements—earth, water, and air. The *ziz* is said to darken the sky with its wings, and once, when its egg was broken, the yolk and white flooded many cities.

The Cockatrice

While the behemoth and leviathan were noted for their hugeness, they never held sway over people's fears as did a small monster known as the cockatrice—or basilisk, as it is often called in the Bible. The cockatrice was the foul offspring of a cock's egg hatched by a venomous serpent. This creature is, of course, purely legendary. Some Bible scholars maintain that when the basilisk or *tzepha* (its Hebrew equivalent) was mentioned in the Bible, the writer had in mind nothing more than poisonous serpents in general, not something as bizarre as the cockatrice. Cocks simply do not lay eggs, and even if they did, no serpent would hatch the eggs, preferring instead to make of them a succulent repast.

Nevertheless, for many centuries the rumor of a cockatrice in the neighborhood terrified an ignorant populace, which not only believed that the animal existed, but that it was by far the most lethal creature in existence, killing plants and other animals with its very breath, sometimes even with a casual glance. According to legend, only the weasel was immune from the cockatrice's venom. The only way to kill a cockatrice, the legend insisted, was to hold a mirror up to it; its own image—the head of a cock upon the body of a serpent—would destroy it!

The belief in basilisks during the Middle Ages gave rise to a flourishing trade in "Jenny Hannivers," a commerce that still crops up now and again in isolated seacoast areas. A Jenny Hanniver is the body of a dead cockatrice. They were easy enough to obtain if your trade was fishing. Dead skates or rays, when properly shaped by means of a pocket-knife, will easily take on the appearance of the legendary basilisk. As early as 1558, a writer recorded the purchase of a Jenny Hanniver, recognizing it for what it was. Others were more gullible, and the apothecary of the Middle Ages who did not have the body of a cockatrice hanging in his shop beside his alicorn was considered ill equipped. Why fake cockatrice bodies came to be called Jenny Hannivers is a mystery as impenetrable as the mystery of why people ever believed in the creatures in the first place.

The cockatrice was said to be deadly to those who felt its breath or met the glance of its eye. Most commentators seem sure that the Biblical

verse refers to a viper of some kind. Tristram says that this is *Daboia xanthina*—i.e., a form of Russell's Viper—which he supposes was the fiery serpent mentioned by Moses.

The cockatrice was once held to be synonymous with the adder, but Biblical reference, if it refers to a snake at all, more likely indicates a puff adder (*Bitis*) or *Daboia*. The *Daboia* is actually a name for Russell's Viper (*Vipera russellii*) or the Tic-Polonga, a beautifully colored reptile about 5 feet long. It has a pale brown body with three longitudinal series of black rings enclosing spots of chocolate brown. This is the largest of the Asiatic vipers, but it is not found in the Holy Land. However, in northeast Asia Minor there is a large snake called the *Vipera xanthina*, which may be the snake referred to by Tristram in this connection.

Some puff adder would seem to fit the cockatrice best. These snakes are found throughout Africa and Asia and have remarkable ability to adapt to differing conditions. It is generally agreed that they are the "worst looking" of all the snakes; and they are as deadly as they look.

Puff adders are stout for their length, which is about 4 feet, and can be up to 9 inches in girth. Their fangs are enormously developed, and they inject their poison by a combination of a strike and a bite, as do the pit vipers. They mostly live in dry places, hiding in half-burnt grass or in sand. At night they come out to the trails of the small mammals on which they prey. They lie flat, with the forward part of the body in an S-shaped loop, ready to strike. They hiss violently with each inhalation and expulsion of breath, thus giving them the name "puff adder."

Puff adders are supposed to enter houses and farm buildings, where they hibernate during the cool months. Although their poison is effective, they are not really dangerous because of their slow, phlegmatic movements. There is a case where one hibernated in a woman's hat and other anecdotes are known which illustrate their supposed "friendliness."

There is one final explanation for the appearance of fabulous animals in the Bible, an explanation that is not really suitable for the creatures already discussed, but quite applicable to the assortment of mythical monsters described in the book of Revelation, an apocryphal book concerned mostly with the Judgment Day. The explanation is simply this: the writers of revelations and other mystical works either in the Bible or in the great body of related Biblical writings experienced "visions," or what we today would call hallucinations. While these hallucinations are rare today, they were quite common in earlier, more spiritual times, and led often to highly colorful and unusual descriptions of such things as hell and the Judgment Day. Thus, the book of Revelation talks about

a beast that will appear on the Judgment Day with the head of a lion, the body of a horse, and the tail of a serpent. To complete the picture, the beast breathes fire and brimstone. Unlike, for example, the cockatrice, which was widely believed to exist, Revelation animals, like the above, are the personal expression of some form of religious mysticism.

Chapter 12

Plagues of the Bible

“Then the Lord said unto Moses, Go in unto Pharaoh, and tell him, Thus saith the Lord God of the Hebrews, Let my people go, that they may serve me” (Exod. 9:1).

Many of the events recorded in the Bible lie on the fringe of human understanding. Phenomena, or miracles, such as the ten plagues that befell Egypt and led to the Exodus of the Jewish people from that nation, would appear to be beyond modern man’s experience. When we are told that the waters of the Nile turned to blood, or that the land was covered by darkness, we tend to dismiss these accounts as parable, allegory, or myth. This is because, to modern man, whether Jew, Christian, or Mohammedan—whether believer or disbeliever—these accounts seem to lack the preciseness we have come to expect from modern journalistic reports of almost equally strange happenings. Today, if we hear of many people dying somewhere, we know that some germ or virus is responsible. For the writers of the Bible, on the other hand, an equally explainable (from our point of view) event became a sign of divine intervention.

The plagues of Egypt, extraordinary as they seem, were all natural events. To say this does not necessarily deny the possibility of supernatural instigation of the plagues. It means that they are explainable in scientific as well as religious terms. Scientists today are ready to accept statements made in the Bible as straight fact. They have no reason to believe that the plagues, extraordinary though they seem, could not have occurred in Egypt at that time. No single one of the plagues is at all impossible or even extraordinary. It is the occurrence of *ten* natural disasters in one land at one time that strains belief. But unlikeliness doesn’t mean impossibility.

The ten plagues were as follows:

1. The waters of the Nile were turned to blood. (Perhaps red clay was carried down from the upper Nile basin, giving the water a blood-like appearance.)
2. There was a plague of frogs.
3. Innumerable lice appeared.
4. There came a plague of flies.
5. All domestic animals except those of the Hebrews died.
6. Men and animals broke out with boils.

7. There was a series of hailstorms.
8. Swarms of locusts appeared.
9. Darkness (perhaps dust storms) covered the land.
10. The "first born" of the Egyptians were smitten.

Five of the ten (2, 3, 4, 5, and 8) involve animals. Three others (5, 6, and 10) are, in some way or other, medical affairs, most likely attributable to some disease or virus. The darkness and the hailstorms are easily understandable natural events. To understand their vast significance, let us examine the background of the plagues.

The Hebrews sojourned in Egypt for a considerable time, in bondage but probably not as slaves *per se*. Their status seems to have been that of a second-class citizenry such as Hitler endeavored to impose upon the Jews of his short-lived "empire." But they were there for many generations, and undoubtedly came to know the wildlife of that country intimately. Therefore, we must inspect the Book of Exodus and especially the account of the plagues from a point of view other than that which we should adopt toward the later chapters of the Bible. Before and up to Exodus we are facing one thing, with its own history and philosophy; after Exodus, we confront several other complete ethos starting with that of the Hebrews as a nation and ending, if you are a Christian, with something altogether different. The comparatively brief period of the history of the Hebrews recorded in Exodus represents an intermediate and transitional stage in their history, alien to them but of enormous interest to us.

During the period of bondage in Egypt, the nomadic, pastoral Hebrew tribe lived in an ancient, settled, agricultural land inhabited by two distinct peoples—the indigenous fellahin who still live there, and the ruling, so-called Dynastic Egyptians, a lordly and intelligent people who had come into the country some 3000 years before. The latter ruled the former, come wars, revolutions, and all other disasters, for 4000 years; religious precept wielded by an all-pervading priestly hierarchy secured their power. From time to time these ruling Egyptians conquered other peoples, but they never remained in control of them. They always withdrew into their delta and river channel to brood and resuscitate their ancient religious motives. People invaded them too—the mysterious Hyksos, the Assyrians, the Persians, and the Greeks—but they, too, all finally withdrew, while Ancient Egypt continued, sullied but for the most part unchanged.

These Dynastic Egyptians enslaved many peoples, mostly desert tribes from neighboring territories in Libya and the Red Sea coast, but these people were just absorbed into the underlying mass of the fellahin. Nubians were brought in, in great numbers, but they simply vanished.

The Hebrews alone remained in this autocratic realm as a unit *and multiplied there*. This was really extraordinary and was a constant source of irritation to the current ruling dynasty. The cry was, "Why won't the Hebrews integrate?" Why, the Pharaohs asked, would not this stubborn breed give up their strange God, do obeisance to Ra, admit the omnipotence of Amen, and join the rest of the fellahin? It puzzled the priests as well as the lay rulers. For hundreds of years both tried to lash, push, persuade, and cajole the Hebrews into at least religious cooperation. Everything they tried failed, for the Hebrews had their very personal God and, to the last female child, not only believed in His omnipotence, but in His infallibility as well. They had no need of Ra, or even of Amen, the universal spirit.

By 1200 B.C., Egypt was in turmoil. The situation between the Egyptian rulers and the Hebrew people became intolerable to both. The Hebrews had by that time acquired a very real importance. As a well-integrated and stable community, they could speak to the Pharaoh, face to face, and on an equal footing—and they did so, with their leader, Moses, as their spokesman.

Moses was not only the elected chieftain of a vast tribe; he was an exceptional man, a born leader, and a practical mystic. The Pharaoh was no match for him. Moses had been brought up and educated by the ruling aristocracy, and so knew all their tricks. As the leader of his people, he knew full well that the time to leave had come—that it was now or never.

Moses was a very learned and wise man and he had had access to the thousands of years of accumulated knowledge of the plodding priests of the land—a land controlled wholly and annually by the activities of the mighty Nile River. Moses obviously picked his time as well as his Pharaoh. Then he struck. And he brought to bear upon his righteous task every possible ethical, moral, religious, traditional, atavistic, practical—even mystical—force he could muster. He even employed psychology of a most advanced and, in some respects, modern order. And he was inspired by, and filled with, the power of his God.

So Moses achieved the deliverance of the Hebrew people from the land of Egypt. He did this, the Bible tells us, by demonstrating the power of his God to the Egyptian rulers in the form of the plagues which tormented the Egyptians for about a year. The Bible makes clear, however, that all of the plagues were natural phenomena, familiar to the people of Egypt, but unusual on this occasion by their intensity, their violence, and their close sequence. Thus, the power of the Hebrew Deity is shown in the Bible by the subjugation of natural forces to His Will.

Now, we can take this in several ways. First, we can believe that

the plagues were wholly natural and that Moses used their occurrence psychologically to frighten the Egyptians into granting his request. Or, we can believe that some mysterious teleological relationship between natural and supernatural forces was being demonstrated. Or, going even farther, we can believe that Moses, extraordinary man that he was, whether through some remarkable (but perfectly reasonable) control over the elements or through some form of mass suggestion, in some way was able to bring about a belief on the part of both Hebrews and Egyptians that his God was causing these events. In any case, there seems little reason to doubt that the events as recorded in the Bible *did* take place.

Exodus attempts to emphasize the Divine interest in human affairs: God's provident care over an enslaved people and His subsequent punishment of their oppressors. The virtues toward which the book especially points are justice, mercy, and righteousness. We cannot help but recognize the immanent quality of the Hebrew God, His indescribable proximity to man and His mysterious participation in all of his triumphs and setbacks.

The power of God is expressed, in the Book of Exodus, through these events which achieved the deliverance of the Hebrews and made known God's power in Egypt and throughout the world. The revelation of God, as subjecting the forces of Nature to *His Will*, demonstrates the mysterious teleological relationship between the natural and the supernatural order, as understood by these remarkable people—the Hebrews.

Subsequent to the initial "plague," which was but an exceptional flood bearing silt of a dark reddish hue, the plagues went as follows:

PLAGUE NO. 2—FROGS

"And the Lord spake unto Moses, Go unto Pharaoh, and say unto him, Thus saith the Lord, Let my people go, that they may serve me. And if thou refuse to let *them* go, behold, I will smite all thy borders with frogs: And the river shall bring forth frogs abundantly, which shall go up and come into thine house, and into thy bedchamber, and upon thy bed, and into the house of thy servants, and upon thy people, and into thine ovens, and into thy kneadingtroughs; And the frogs shall come up, both on thee, and upon thy people, and upon all thy servants. And the Lord spake unto Moses, Say unto Aaron, Stretch forth thine hand with thy rod over the streams, over the rivers, and over the ponds, and cause frogs to come up upon the land of Egypt. And Aaron stretched out his hand over the waters of Egypt; and the frogs came up, and covered the land of Egypt. And the magicians did so with their enchantments, and brought up frogs upon the land of Egypt. Then

Pharaoh called for Moses and Aaron, and said, Entreat the Lord, that he may take away the frogs from me, and from my people; and I will let the people go, that they may do sacrifice unto the Lord. And Moses said unto Pharaoh, Glory over me: when shall I entreat for thee, and for thy servants, and for thy people to destroy the frogs from thee and thy houses, *that* they may remain in the river only? And he said, To morrow. And he said, *Be it* according to thy word; that thou mayest know that *there is* none like unto the Lord our God. And the frogs shall depart from thee, and from thy houses, and from thy servants, and from thy people; they shall remain in the river only. And Moses and Aaron went out from Pharaoh: and Moses cried unto the Lord because of the frogs which he had brought against Pharaoh. And the Lord did according to the word of Moses; and the frogs died out of the houses, out of the villages, and out of the fields. And they gathered them together upon heaps; and the land stank" (Exod. 8:1-14).

The frogs of Egypt, like frogs elsewhere and even in the tropical rain forests, have a single breeding season, and this is dependent on the sidereal year. However, it is affected by both temperature and humidity—the latter in the form of surface water from rainfall or melting snow and ice. In regions of equable climate such as tropical rain forests or temperate regions of high rainfall, the annual breeding date may be extraordinarily precise. Long-term research in western Europe has shown that the common frog *Rana temporaria* invariably consummates each phase of its breeding, metamorphosis, and migration on the first day after a certain date when the temperature first reaches and maintains a specific point. The frogs of the Nile are faced with quite different seasonal problems.

The river flows through a desert in Egypt and Nubia (the Sudan), and there is virtually no rainfall at all except in the extreme north on the delta where the seasons are like ours of the northern temperate belt. Thus, the frogs of the Nile valley proper breed when the floods come, and these floods move slowly downstream, northward, starting at Khartoum in August and September while the maximum at Cairo is in October.

In case of an exceptional flood, or one at a time of year other than the normal, the frogs may be thrown out of "gear," as not infrequently happens in the tropics, and a veritable "plague" might then occur. That this happened on the occasion of the exceptional flood described in Exodus hardly needs to be questioned. And this would, indeed, be a plague, for, on the sudden retreat of a flood that has started frogs breeding over a wide area, millions of the animals are left high and dry to die, to stink in the hot sun, and to attract flies.

PLAGUE NO. 3—LICE

"But when Pharaoh saw that there was respite, he hardened his heart, and hearkened not unto them; as the Lord had said. And the Lord said unto Moses, Say unto Aaron, Stretch out thy rod, and smite the dust of the land, that it may become lice throughout all the land of Egypt. And they did so: for Aaron stretched out his hand with his rod, and smote the dust of the earth, and it became lice in man and in beast; all the dust of the land became lice throughout all the land of Egypt. And the magicians did so with their enchantments to bring forth lice, but they could not: so there were lice upon man, and upon beast. Then the magicians said unto Pharaoh, *This is the finger of God*: and Pharaoh's heart was hardened, and he hearkened not unto them; as the Lord had said. And the Lord said unto Moses, Rise up early in the morning, and stand before Pharaoh; lo, he cometh forth to the water; and say unto him, Thus saith the Lord, Let my people go, that they may serve me" (Exod. 8:15-20).

There are a number of different interpretations of the word "lice" in the preceding verses. Some take it to mean lice, while others claim that it refers to mosquitoes.

Mosquitoes belong to a different class of insects from that of the lice. Actually, the colloquial term "lice" includes two families of insects: the *Siphunculata* which, as was explained above, live on mammals, and the *Mallophaga*, which live on birds. Lice are bloodsuckers and are transmitted to new host individuals through bodily contact. They can spend their entire life cycle on the same host.

The mosquitoes thrive in hot and damp climates, rendering sleep impossible. The common Egyptian mosquito (*Culex pipiens*) is small, ash-colored, and has white spots on its legs. The ancient Egyptians were known to have used mosquito nets in an effort to minimize this discomfort. Female mosquitoes feed mostly on blood of animals, which causes them to inflict painful bites on man and beast. The correlation between the changes in the Nile and the proliferation of frogs and "lice"—if mosquitoes were meant—reveals the writer of Exodus to be accurate from a scientific standpoint. The reference to the dust of the land becoming lice contains some interesting implications. Even if we interpret it as a literary device, it is a mechanism well engineered. It may also imply, however, a belief on the part of the Hebrews in the spontaneous generation of animate from inanimate matter. The belief in spontaneous generation was widespread throughout the world and persisted through the centuries until Louis Pasteur refuted it in the middle of the nineteenth century. It was commonly applied to larval animals. This mention would, however, seem to indicate lice being lice rather than mosquitoes

which were well known to be associated with marshes and water. Sudden increased humidity does, moreover, foster the breeding of body lice.

PLAGUE NO. 4—FLIES

"Else, if thou wilt not let my people go, behold, I will send swarms of *flies* upon thee, and upon thy servants, and upon thy people, and into thy houses; and the houses of the Egyptians shall be full of swarms of *flies*, and also the ground whereon they *are*. And I will sever in that day the land of Goshen, in which my people dwell, that no swarms of *flies* shall be there; to the end thou mayest know that I *am* the Lord in the midst of the earth. And I will put a division between my people and thy people: to morrow shall this sign be. And the Lord did so: and there came a grievous swarm of *flies* into the house of Pharaoh, and into his servants' houses, and into all the land of Egypt; the land was corrupted by reason of the swarm of *flies*. And Pharaoh called for Moses and for Aaron, and said, Go ye, sacrifice to your God in the land. And Moses said, It is not meet so to do; for we shall sacrifice the abomination of the Egyptians to the Lord our God: lo, shall we sacrifice the abomination of the Egyptians before their eyes, and will they not stone us? We will go three days' journey into the wilderness, and sacrifice to the Lord our God, as he shall command us. And Pharaoh said, I will let you go, that ye may sacrifice to the Lord your God in the wilderness; only ye shall not go very far away; entreat for me. And Moses said, Behold, I go out from thee, and I will entreat the Lord that the swarms of *flies* may depart from Pharaoh, from his servants, and from his people, to morrow: but let not Pharaoh deal deceitfully any more in not letting the people go to sacrifice to the Lord. And Moses went out from Pharaoh, and entreated the Lord. And the Lord did according to the word of Moses; and he removed the swarms of *flies* from Pharaoh, from his servants, and from his people: there remained not one. And Pharaoh hardened his heart at this time also, neither would he let the people go" (Exod. 8:21-32).

There are a number of possible interpretations of the plague of flies. One opinion claims that it is identical with the preceding plague. Therefore, we have one story drawn from two different sources. Others choose to endow the plague with more individuality. The Hebrew word used to describe the animals is *arob*, which implies a mixture; i.e., "all sorts of flies." In Psalm 78, this same word is used, describing the creature as devouring the Egyptians.

In this case some "scholars" have suggested that a likely candidate is *Blatta aegyptica*, the Egyptian cockroach. The Egyptian cockroaches are as great a nuisance as mosquitoes. They eat everything in sight and they

are capable of inflicting severe bites on man. For this reason they became objects of appeasement, occupying a considerable place among Egyptian sacred creatures. They are found frequently in Egyptian sculpture and painting. They are the same size as our common cockroach (*Blatta orientalis*), black in color with a white band on an oval corselet.

However, since the Bible says "flies," and even uses a recognized Hebrew word that denotes "all kinds of flies"—and since the writers of the Bible were manifestly such excellent zoologists—is it not much more reasonable to accept their statement at face value in this case? Further, as was pointed out above, flies are the natural aftermath of floods even if excessive numbers of dead animals are not left by the retreating waters. Among such flies are, in addition to the common House Fly (*Musca domestica*), the even more troublesome bluebottles, the greenbottles, the warbleflies and the botflies. The last named, moreover, take longer to swarm and among them are the loathsome *ver macaques*, beefworm flies, and screwworm flies that lay their eggs in the skins of men and beasts. These afflictions were, be it noted, alluded to as "murrain" in livestock by the English about the time the Bible was translated.

PLAGUE NO. 5—MURRAIN UPON DOMESTIC ANIMALS

"Then the Lord said unto Moses, Go in unto Pharaoh, and tell him, Thus saith the Lord God of the Hebrews, Let my people go, that they may serve me. For if thou refuse to let *them* go, and wilt hold them still, Behold, the hand of the Lord is upon thy cattle which *is* in the field, upon the horses, upon the asses, upon the camels, upon the oxen, and upon the sheep: *there shall be* a very grievous murrain. And the Lord shall sever between the cattle of Israel, and the cattle of Egypt: and there shall nothing die of all *that is* the children's of Israel. And the Lord appointed a set time, saying, To morrow the Lord shall do this thing in the land. And the Lord did that thing on the morrow, and all the cattle of Egypt died: but of the cattle of the children of Israel died not one. And Pharaoh sent, and, behold, there was not one of the cattle of the Israelites dead. And the heart of Pharaoh was hardened, and he did not let the people go" (Exod. 9:1-7).

PLAGUE NO. 6—BOILS

"And the Lord said unto Moses and unto Aaron, Take to you handfuls of ashes of the furnace, and let Moses sprinkle it toward the heaven in the sight of Pharaoh. And it shall become small dust in all the land of Egypt, and shall be a boil breaking forth *with* blains upon man, and upon beast, throughout all the land of Egypt. And they took ashes of

the furnace, and stood before Pharaoh; and Moses sprinkled it up toward heaven; and it became a boil breaking forth *with* blains upon man, and upon beast. And the magicians could not stand before Moses because of the boils; for the boil was upon the magicians, and upon all the Egyptians. And the Lord hardened the heart of Pharaoh, and he hearkened not unto them; as the Lord had spoken unto Moses. And the Lord said unto Moses, Rise up early in the morning, and stand before Pharaoh, and say unto him, Thus saith the Lord God of the Hebrews, Let my people go, that they may serve me. For I will at this time send all my plagues upon thine heart, and upon thy servants, and upon thy people; that thou mayest know that *there is* none like me in all the earth" (Exod. 9:8-14).

It is quite possible that the two plagues (murrain and boils) are identical except for the fact that the second one is applied to man. "Blains," to the sixteenth-century Englishman, meant painful blisters or pustules, but the nature of the disease involved in Egypt is unknown to us. It is just possible that it was the bubonic plague. It is unfortunate that there is no mention of a proliferation of rats to confirm this hypothesis, as there is in the plague of emerods on the Philistines. Another hypothesis is that it was smallpox. Like the plague, smallpox is both contagious and infectious, and like the plague, it is accompanied by considerable fever and chills. It is also accompanied by eruptions which often leave permanent scars on the victim. The smallpox virus is known to have serious effects upon cattle. In this form, the disease is referred to as cowpox. However, the most likely interpretation is, again, just what the Bible says—namely, murrain, or boils induced by fly eggs laid in the skins of men and animals.

PLAGUE NO. 7—HAIL

"As yet exaltest thou thyself against my people, that thou wilt not let them go? Behold, to morrow about this time, I will cause it to rain a very grievous hail, such as hath not been in Egypt since the foundation thereof even until now. Send therefore now, *and* gather thy cattle, and all that thou hast in the field; *for upon* every man and beast which shall be found in the field, and shall not be brought home, the hail shall come down upon them, and they shall die. He that feared the word of the Lord, among the servants of Pharaoh, made his servants and his cattle flee into the houses: And he that regarded not the word of the Lord left his servants and his cattle in the field. And the Lord said unto Moses, Stretch forth thine hand toward heaven, that there may be hail in all the land of Egypt, upon man, and upon beast, and upon every herb of the field, throughout the land of Egypt. And Moses stretched forth his rod toward heaven; and the Lord sent thunder and hail, and the fire

ran along upon the ground: and the Lord rained hail upon the land of Egypt. So there was hail, and fire mingled with the hail, very grievous, such as there was none like it in all the land of Egypt since it became a nation. And the hail smote throughout all the land of Egypt all that *was* in the field, both man and beast; and the hail smote every herb of the field. Only in the land of Goshen, where the children of Israel *were*, was there no hail. And Pharaoh sent, and called for Moses and Aaron, and said unto them, I have sinned this time: the Lord *is* righteous, and I and my people *are* wicked. Entreat the Lord (for *it is* enough) that there be no *more* mighty thunderings and hail; and I will let you go, and ye shall stay no longer. And Moses said unto him, As soon as I am gone out of the city, I will spread abroad my hands unto the Lord; *and* the thunder shall cease, neither shall there be any more hail; that thou mayest know how that the earth *is* the Lord's" (Exod. 9:17-29).

From the passage above it is easy to conclude that this was a very painful plague. Hail results when there are considerable differences of temperature between the lower and higher levels of air. The presence of the colder layer causes the surrounding moisture to condense so suddenly that small "stones" of ice are formed. There are two kinds of hail: one kind consists of the tiny grains which precede a snowfall; the other is composed of hailstones. The latter occurs commonly in spring and summer, and quite frequently in tropical climates. The formation of the stones results from the contact of clouds of widely different temperatures. They consist of concentric layers, like an onion, with a nucleus of snow or ice. The usual range of their weight is from a few grains to several ounces, though at times they may reach half a pound. They commonly measure about one fourth of an inch in diameter. In hot climates, however, they are much larger, ranging from 2 to 5 inches in diameter.

Hailstorms are not frequent in Egypt. When they do occur, it is usually in January. In all likelihood the month in which this plague occurred was February. This assumption is borne out by the agricultural description, ". . . for the barley *was* in the ear, and the flax *was* balled. But the wheat and the rie were not smitten; for they *were* not grown up" (Exod. 9:31-32). The "fire mingled with the hail" is a reference to lightning, a usual accompaniment of a hailstorm.

PLAGUE NO. 8—LOCUSTS

"And the Lord said unto Moses, Go in unto Pharaoh: for I have hardened his heart, and the heart of his servants, that I might shew these my signs before him: And that thou mayest tell in the ears of thy son, and of thy son's son, what things I have wrought in Egypt, and my signs which I have done among them; that ye may know how that

I *am* the Lord. And Moses and Aaron came in unto Pharaoh, and said unto him, Thus saith the Lord God of the Hebrews, How long wilt thou refuse to humble thyself before me? let my people go, that they may serve me. Else, if thou refuse to let my people go, behold, to morrow will I bring the locusts into thy coast: And they shall cover the face of the earth, that one cannot be able to see the earth: and they shall eat the residue of that which is escaped, which remaineth unto you from the hail, and shall eat every tree which groweth for you out of the field: And they shall fill thy houses, and the houses of all thy servants, and the houses of all the Egyptians; which neither thy fathers, nor thy fathers' fathers have seen, since the day that they were upon the earth unto this day. And he turned himself, and went out from Pharaoh. And Pharaoh's servants said unto him, How long shall this man be a snare unto us? let the men go, that they may serve the Lord their God: knowest thou not yet that Egypt is destroyed? And Moses and Aaron were brought again unto Pharaoh: and he said unto them, Go, serve the Lord your God: *but* who *are* they that shall go? And Moses said, We will go with our young and with our old, with our sons and with our daughters, with our flocks and with our herds will we go: for we *must hold* a feast unto the Lord. And he said unto them, Let the Lord be so with you, as I will let you go, and your little ones: look *to it*; for evil *is* before you. Not so: go now ye *that are* men, and serve the Lord; for that ye did desire. And they were driven out from Pharaoh's presence. And the Lord said into Moses, Stretch out thine hand over the land of Egypt for the locusts, that they may come up upon the land of Egypt, and eat every herb of the land, *even* all that the hail hath left. And Moses stretched forth his rod over the land of Egypt, and the Lord brought an east wind upon the land all that day, and all *that* night; *and* when it was morning, the east wind brought the locusts. And the locusts went up over all the land of Egypt, and rested in all the coasts of Egypt: very grievous *were they*; before them there were no such locusts as they, neither after them shall be such. For they covered the face of the whole earth, so that the land was darkened; and they did eat every herb of the land, and all the fruit of the trees which the hail had left: and there remained not any green thing in the trees, or in the herbs of the field, through all the land of Egypt. Then Pharaoh called for Moses and Aaron in haste; and he said, I have sinned against the Lord your God, and against you. Now, therefore, forgive, I pray thee, my sin only this once, and entreat the Lord your God, that he may take away from me this death only. And he went out from Pharaoh, and entreated the Lord. And the Lord turned a mighty strong west wind, which took away the locusts, and cast them into the Red sea; there remained not one locust in all the coasts of Egypt. But the Lord hardened

Pharaoh's heart, so that he would not let the children of Israel go" (Exod. 10:1-20).

In Asia Minor, Egypt, southern Asia, and Africa, locusts occur periodically in vast swarms. They bring famine and desolation to flourishing regions by devouring all the vegetation in sight. They are also a source of pestilence because of the putrefaction of their accumulated bodies. The description in Exodus of the abominable creatures covering "the face of the earth" is not just a literary device. In some parts of Africa they are known to cover the whole surface of the ground over areas of more than 2000 square miles. As though all this were not enough, they are known to poison the air with the fetid exhalation of their excrement, which can be smelled up to 150 miles away. They fly in compact formations large enough to blot out the light of the sun. As the Bible indicates, the course of their travels is very much affected by the wind. It is possible for a strong enough wind to destroy them. By the law of Moses, locusts were permitted as food. In some parts of Asia and Africa even today, they are commonly eaten, either broiled, stewed, or fried in butter.

PLAGUE NO. 9—DARKNESS

"But the Lord hardened Pharaoh's heart, so that he would not let the children of Israel go. And the Lord said unto Moses, Stretch out thine hand toward heaven, that there may be darkness over the land of Egypt, even darkness *which* may be felt. And Moses stretched forth his hand toward heaven; and there was a thick darkness in all the land of Egypt three days: They saw not one another, neither rose any from his place for three days: but all the children of Israel had light in their dwellings. And Pharaoh called unto Moses, and said, Go ye, serve the Lord; only let your flocks and your herds be stayed: let your little ones also go with you. And Moses said, Thou must give us also sacrifices and burnt offerings, that we may sacrifice unto the Lord our God. Our cattle also shall go with us; there shall not an hoof be left behind: for thereof must we take to serve the Lord our God; and we know not with what we must serve the Lord, until we come thither. But the Lord hardened Pharaoh's heart, and he would not let them go" (Exod. 10:20-27).

The darkness referred to above was probably caused by a sandstorm, a frequent occurrence in early spring in climates such as Egypt's. Some of the phrases above verify this assumption. Thus, the darkness is described as one "which may be felt." What else but a sandstorm could keep an entire people confined in their homes for three days? A sandstorm is ushered in by a hot wind from the desert which will last for two or three days at a time. The quantity of "sand"—actually very fine dust—in the air is so great as to darken the skies. The wind usually

travels in a narrow zone, leaving the air clear on either side of the sand-storm.

PLAGUE NO. 10—DEATH OF THE FIRSTBORN

"And the Lord said unto Moses, Yet will I bring one plague *more* upon Pharaoh, and upon Egypt; afterwards he will let you go hence: when he shall let *you* go, he shall surely thrust you out hence altogether. Speak now in the ears of the people, and let every man borrow of his neighbour, and every woman of her neighbour, jewels of silver, and jewels of gold. And the Lord gave the people favour in the sight of the Egyptians. Moreover, the man Moses *was* very great in the land of Egypt, in the sight of Pharaoh's servants, and in the sight of the people. And Moses said, Thus saith the Lord, About midnight will I go out into the midst of Egypt: And all the firstborn in the land of Egypt shall die, from the firstborn of Pharaoh that sitteth upon his throne, even unto the firstborn of the maidservant that *is* behind the mill; and all the firstborn of beasts. And there shall be a great cry throughout all the land of Egypt, such as there was none like it, nor shall be like it any more. But against any of the children of Israel shall not a dog move his tongue, against man or beast; that ye may know how that the Lord doth put a difference between the Egyptians and Israel. And all these thy servants shall come down unto me, and bow down themselves unto me, saying, Get thee out, and all the people that follow thee: and after that I will go out. And he went out from Pharaoh in a great anger" (Exod. 11:1-8).

"And it came to pass, that at midnight the Lord smote all the first-born in the land of Egypt, from the firstborn of Pharaoh that sat on his throne, unto the firstborn of the captive that *was* in the dungeon; and all the firstborn of cattle. And Pharaoh rose up in the night, he, and all his servants, and all the Egyptians; and there was a great cry in Egypt; for *there was* not a house where *there was* not one dead" (Exod. 12:29-30).

This is unquestionably the most terrible of all the plagues. People are slain no longer through the agency of disease or climatic conditions but directly by the hand of God. In addition, the firstborn are the ones who are killed. In ancient Near Eastern cultures, the position of the firstborn in a family was one of singular dignity. Thus, the Egyptians were confronted with the Hebrew God in all His power and wrath. It seems unfortunate that all the people of Egypt had to suffer in such a manner for the misdeeds of their corrupt leaders, especially since most of the Egyptians were on amicable terms with their Hebrew neighbors. We must remember that in those times individualism was not so prevalent an attitude as it is today. Consequently, peoples more often than individuals were the objects of the Divine wrath. Many believe this tenth plague to have been responsible for the origin of the Feast of the Pass-

over. While it raged, the Hebrew family would select a lamb or a kid from the flock and smear its blood on the lintel or side posts of the door, together with an aromatic plant known as the *byssop*. When the Lord passed through the territory to inflict His plague, they believed that He would notice this blood and "pass over" the houses of the Israelites which were thereby designated. Another opinion claims that the ritual may have been in use long before the time of the plagues. In this case, its practitioners regarded it as a means of obtaining Divine protection from any crisis or misfortune.

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ROY PINNEY

Roy Pinney is a native New Yorker, but he has never given in to it. As a combination writer-photographer-naturalist, he has been on some seventy expeditions to all parts of the world.

Born in New York City in 1911, he was the Brooklyn Museum's Curator of Insects while still in his teens and was often in the company of the great wildlife conservationists, Ernest Thompson Seton and William T. Hornaday.

As a war correspondent-photographer, Mr. Pinney covered the Normandy invasion. After the war, he became interested in the possibilities of underwater photography and helped develop much special equipment for it. He also found time to try aerial photography and qualify as a pilot.

He has filmed two television series, "Wild Cargo" and "Wild Kingdom." He and his wife, Doris, a noted photographer in her own right, took the pictures for the animated film "Turn Around—Boys," which won first prize in its category at the 1963 Cannes Film Festival.

Mr. Pinney is founder and past president of the Picture Agency Council of America, founder and trustee of the American Society of Magazine Photographers, and founder and president of Photo-Library, Inc., a world-wide picture agency.

He writes a monthly column for *U.S. Camera* and is the author and illustrator of a number of books, among them, *Advertising Photography*, *Wild Animal Pets*, *The Complete Book of Cave Exploration*, *Vanishing Wildlife*, *Micro-Zoo*, and *Young Israel*.



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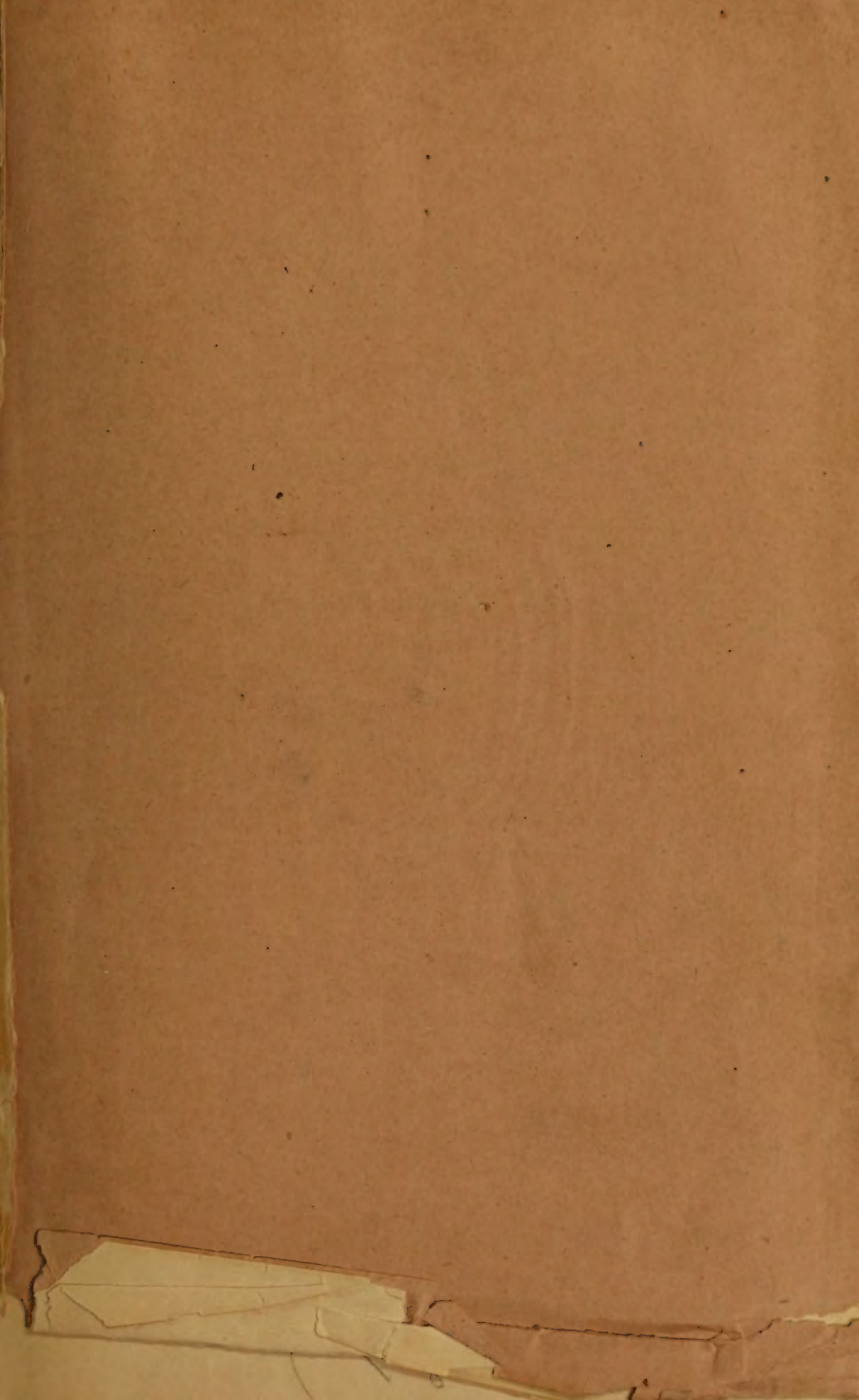
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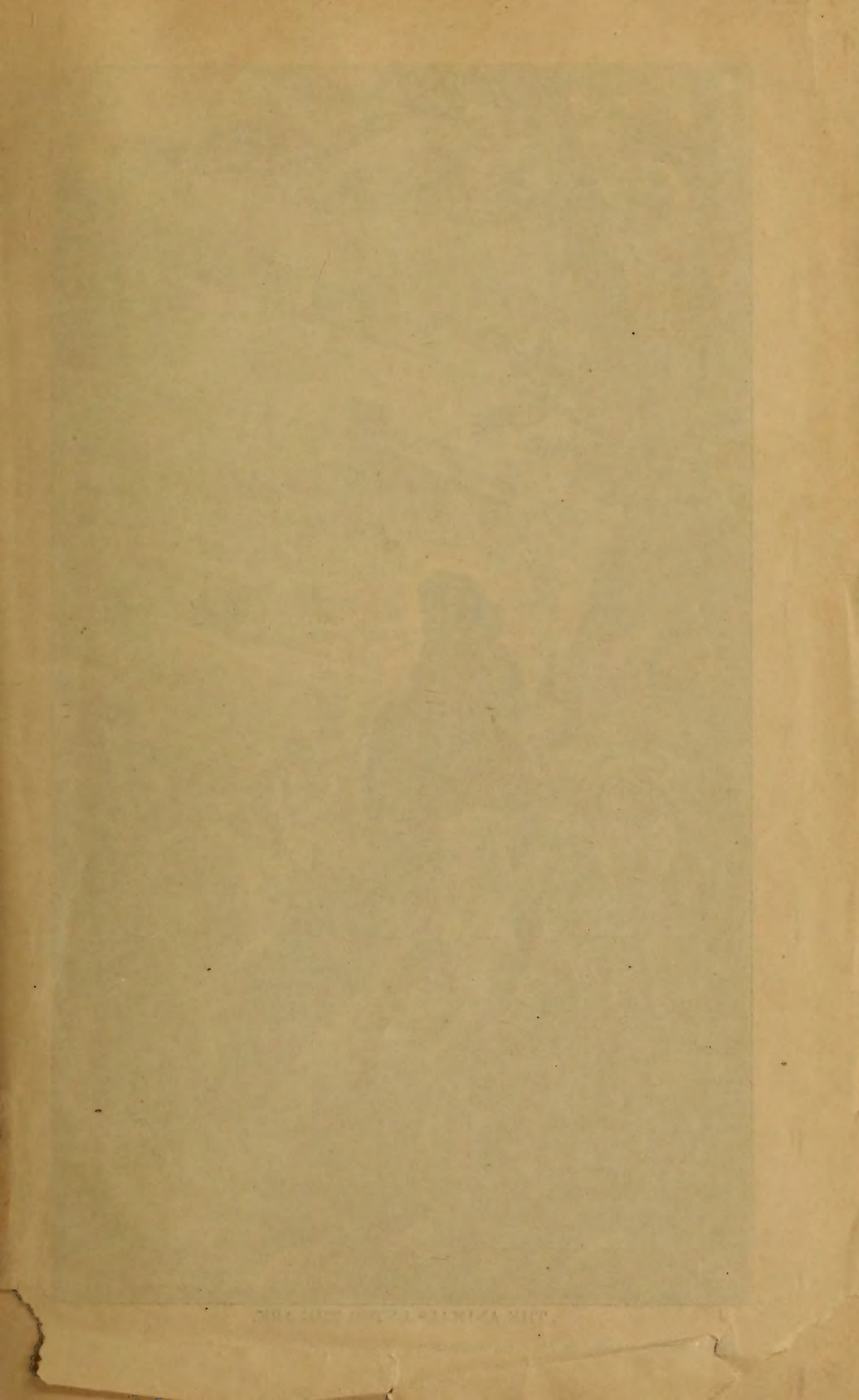
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THE ANIMALS ENTER THE ARK.

STORY OF THE BIBLE ANIMALS

A Description of the
Habits and Uses of every living
Creature mentioned in the Scriptures,

WITH

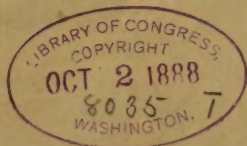
EXPLANATION OF PASSAGES IN THE OLD AND NEW TESTAMENT IN
WHICH REFERENCE IS MADE TO THEM.

John Wood
BY
J. G. WOOD,

AUTHOR OF "HOMES WITHOUT HANDS,"
"THE ILLUSTRATED NATURAL HISTORY," ETC.

300 ILLUSTRATIONS.

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WAR-HORSES AND ANCIENT EGYPTIAN CHARIOT.

See page 307.

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The object of the present work is therefore, to take in its proper succession, every creature whose name is given in the Scriptures, and to supply so much of its history as will enable the reader to understand all the passages in which it is mentioned.



SHEPHERD LEADING SHEEP AND GOATS TO THEIR FOLD IN THE ROCK.
See page 191.

THE AUTHOR.

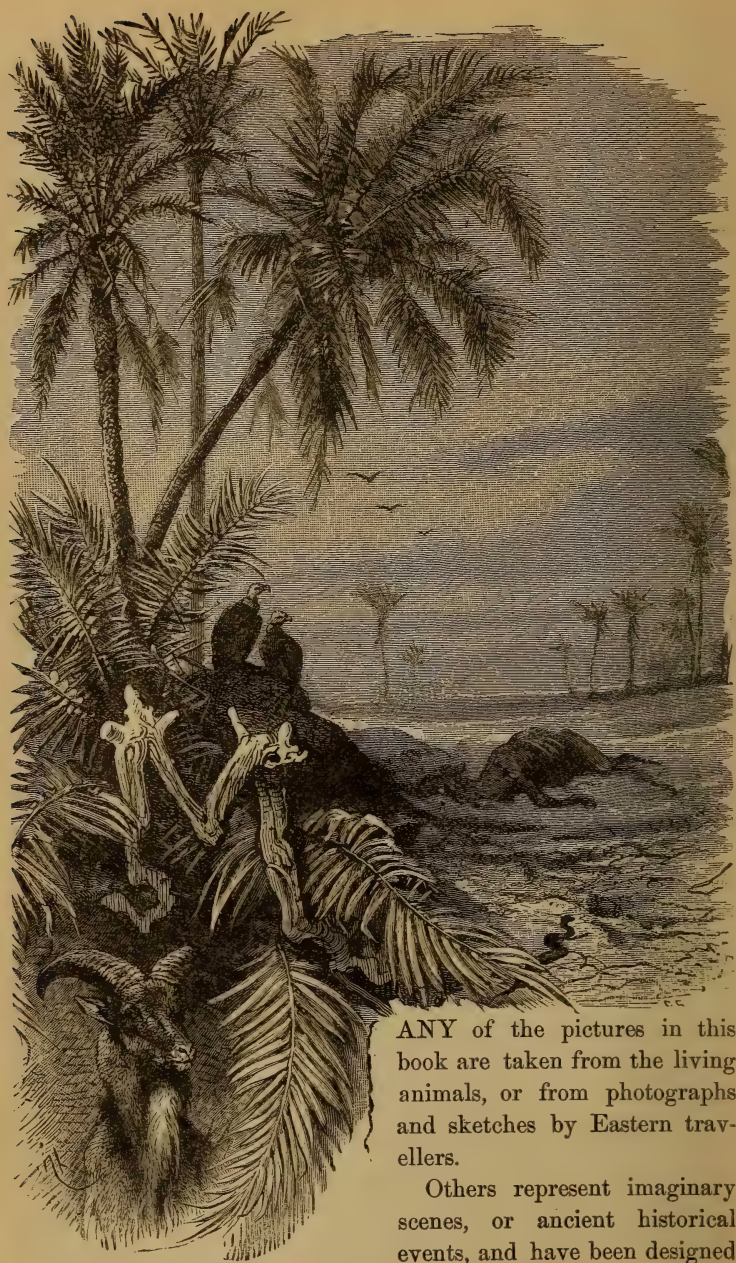
THE Rev. J. G. Wood is a native of London, England. He was educated at Oxford University, and has long been known, both in England and America, as not only a learned and accurate writer on Natural History, but a popular one as well, having the happy faculty of making the results of scientific study and painstaking observation, interesting and instructive to all classes of readers.

He has published a number of works on the most familiar departments of the history of animals, designed to awaken popular interest in the study. Their titles are "Sketches and Anecdotes of Animal Life;" "Common Objects of the Seashore and Country;" "My Feathered Friends;" "Homes Without Hands"—being a description of the habitations of animals,—and the "Illustrated Natural History," a book which is widely known both in England and America as a standard work of great value. It has given the author celebrity, and has caused him to be considered an eminent authority on the subject which it treats.

It is evident, from these facts, that it would be difficult to find a man better qualified than Mr. Wood, to write a book describing the animals mentioned in the Bible.

Profoundly impressed with the ignorance which prevails towards so important a feature of the Scriptural Narrative, he has devoted his ripe powers and special knowledge to the work of dissipating it, and in this volume, not only fully describes the nature and habits of all the animals mentioned in the Scriptures, but tells the story of their relations to mankind.

Mr. Wood is a clergyman of the Church of England, and was for a time connected with Christ Church, Oxford. He has devoted himself mainly, however, to authorship in the field which he has chosen, and in which he has become so well known. In his works he usually employs a popular style of writing, and does not make scientific terms prominent. This is especially true of the "Story of the Bible Animals," which from its easy and interesting character is adapted to the comprehension of young and old.



ANY of the pictures in this book are taken from the living animals, or from photographs and sketches by Eastern travellers.

Others represent imaginary scenes, or ancient historical events, and have been designed

by skilful artists after careful study of the subjects,

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STORY OF THE BIBLE ANIMALS.

THE LION.

Frequent mention of the Lion in the Scriptures—The Lion employed as an emblem in the Bible—Similarity of the African and Asiatic species—The chief characteristics of the Lion—its strength, activity, and mode of seizing its prey—The Lion hunt.

OF all the undomesticated animals of Palestine, none is mentioned so frequently as the LION. This may appear the more remarkable, because for many years the Lion has been extinct in Palestine. The leopard, the wolf, the jackal, and the hyæna, still retain their place in the land, although their numbers are comparatively few; but the Lion has vanished completely out of the land. The reason for this disappearance is twofold, first, the thicker population; and second, the introduction of firearms.

No animal is less tolerant of human society than the Lion. In the first place, it dreads the very face of man, and as a rule,

whenever it sees a man will slink away and hide itself. There are, of course, exceptional cases to this rule. Sometimes a Lion becomes so old and stiff, his teeth are so worn, and his endurance so slight, that he is unable to chase his usual prey, and is obliged to seek for other means of subsistence. In an unpopulated district, he would simply be starved to death, but when his lot is cast in the neighbourhood of human beings, he is perforce obliged to become a "man-eater." Even in that case, a Lion will seldom attack a man, unless he should be able to do so unseen, but will hang about the villages, pouncing on the women as they come to the wells for water, or upon the little children as they stray from their parents, and continually shifting his quarters lest he should be assailed during his sleep. The Lion requires a very large tract of country for his maintenance, and the consequence is, that in proportion as the land is populated does the number of Lions decrease.

Firearms are the special dread of the Lion. In the first place, the Lion, like all wild beasts, cannot endure fire, and the flash of the gun terrifies him greatly. Then, there is the report, surpassing even his roar in resonance; and lastly, there is the unseen bullet, which seldom kills him at once, but mostly drives him to furious anger by the pain of his wound, yet which he does not dread nearly so much as the harmless flash and report. There is another cause of the Lion's banishment from the Holy Land. It is well known that to attract any wild beast or bird to some definite spot, all that is required is to provide them with a suitable and undisturbed home, and a certainty of food. Consequently, the surest method of driving them away is to deprive them of both these essentials. Then the Lion used to live in forests, which formerly stretched over large tracts of ground, but which have long since been cut down, thus depriving the Lion of its home, while the thick population and the general use of firearms have deprived him of his food. In fact, the Lion has been driven out of Palestine, just as the wolf has been extirpated from England.

But, in the olden times, Lions must have been very plentiful. There is scarcely a book in the Bible, whether of the Old or New Testaments, whether historical or prophetic, that does not contain some mention of this terrible animal; sometimes describing the actions of individual Lions, but mostly using the



LION DRINKING AT A POOL.

word as an emblem of strength and force, whether used for a good purpose or abused for a bad one.

There are several varieties of Lion, which may be reduced to two, namely, the African and the Asiatic Lion. It is almost certain, however, that these animals really are one and the same species, and that the trifling differences which exist between an African and an Asiatic Lion, are not sufficient to justify a naturalist in considering them to be distinct species. The habits of both are identical, modified, as is sure to be the case, by the difference of locality ; but then, such variations in habit are con-



A LION KILLS THE PROPHET FROM JUDAH.

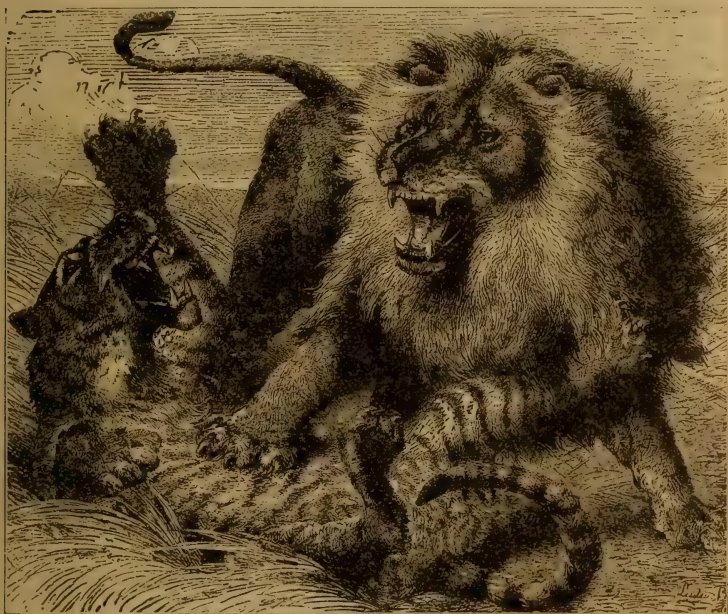
tinually seen in animals confessedly of the same species, which happen to be placed in different conditions of climate and locality.

That it was once exceedingly plentiful in Palestine is evident, from a very cursory knowledge of the Holy Scriptures. It is every where mentioned as a well-known animal, equally familiar and dreaded. When the disobedient prophet was killed by the Lion near Bethel, the fact seemed not to have caused any surprise in the neighbourhood. When the people came out to rescue the body of the prophet, they wondered much because the

Lion was standing by the fallen man, but had not torn him, and had left the ass unhurt. But that a Lion should have killed a man seems to have been an event which was not sufficiently rare to be surprising.

We will now proceed to those characteristics of the Lion which bear especial reference to the Scriptures.

In the first place, size for size, the Lion is one of the strongest of beasts.



LION AND TIGER.

Moreover, the strength of the Lion is equally distributed over the body and limbs, giving to the animal an easy grace of movement which is rare except with such a structure. A full-grown Lion cannot only knock down and kill, but can carry away in its mouth, an ordinary ox ; and one of these terrible animals has been known to pick up a heifer in its mouth, and to leap over a wide ditch still carrying its burden. Another Lion carried a two-year old heifer, and was chased for five hours by mounted farmers, so that it must have traversed a very considerable distance. Yet, in

the whole of this long journey, the legs of the heifer had only two or three times touched the ground.

It kills man, and comparatively small animals, such as deer and antelopes, with a blow of its terrible paw ; and often needs to give no second blow to cause the death of its victim. The sharp talons are not needed to cause death, for the weight of the blow is sufficient for that purpose.

When the hunter pursues it with dogs, after the usual fashion, there is often a great slaughter among them, especially among those that are inexperienced in the chase of the Lion. Urged by their instinctive antipathy, the dogs rush forward to the spot where the Lion awaits them, and old hounds bay at him from a safe distance, while the young and inexperienced among them are apt to convert the sham attack into a real one. Their valour meets with a poor reward, for a few blows from the Lion's terrible paws send his assailants flying in all directions, their bodies streaming with blood, and in most cases a fatal damage inflicted, while more than one unfortunate dog lies fairly crushed by the weight of a paw laid with apparent carelessness upon its body. There is before me a Lion's skin, a spoil of one of these animals shot by the celebrated sportsman, Gordon Cumming. Although the skin lies flat upon the floor, and the paws are nothing but the skin and talons, the weight of each paw is very considerable, and always surprises those who hear it fall on the floor.

There are several Hebrew words which are used for the Lion, but that which signifies the animal in its adult state is derived from an Arabic word signifying strength ; and therefore the Lion is called the Strong-one, just as the Bat is called the Night-flier. No epithet could be better deserved, for the Lion seems to be a very incarnation of strength, and, even when dead, gives as vivid an idea of concentrated power as when it was living. And, when the skin is stripped from the body, the tremendous muscular development never fails to create a sensation of awe. The muscles of the limbs, themselves so hard as to blunt the keen-edged knives employed by a dissector, are enveloped in their glittering sheaths, playing upon each other like well-oiled machinery, and terminating in tendons seemingly strong as steel, and nearly as impervious to the knife. Not until the skin is removed can any one form a conception of the enormously powerful muscles of the neck, which enable the Lion to lift the



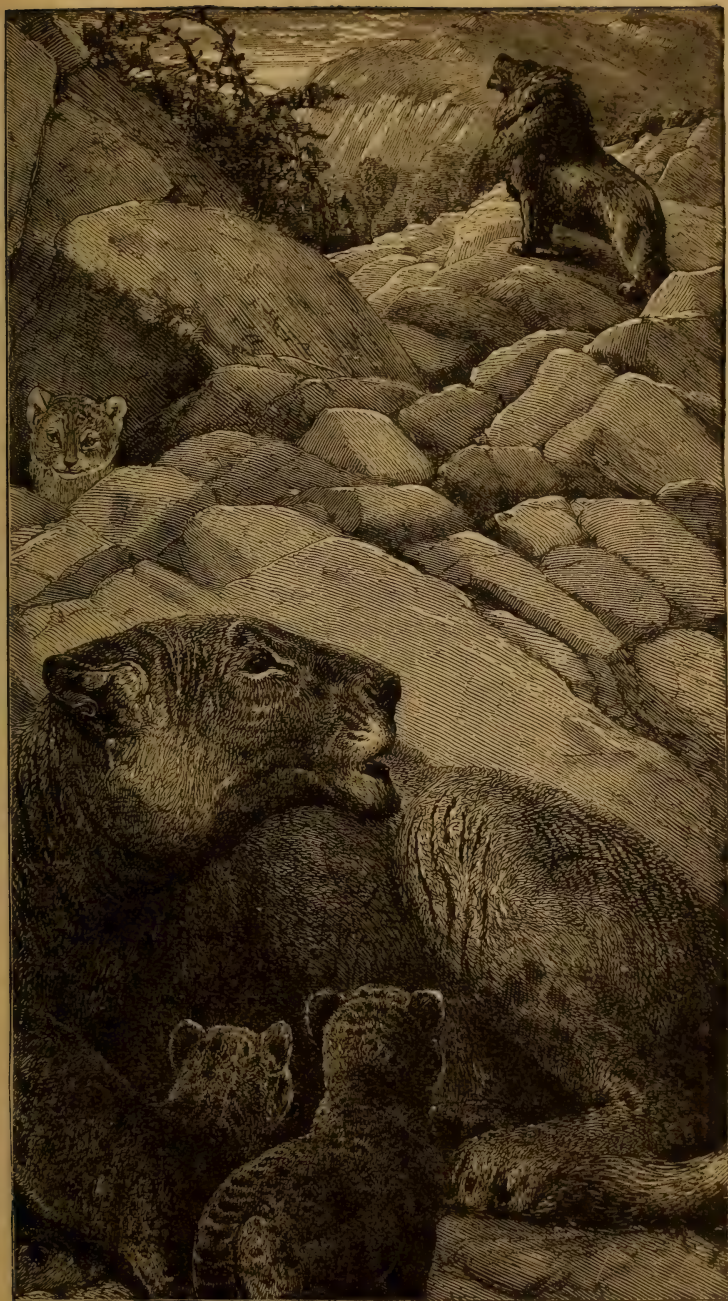
THE LION REPLIES TO THE THUNDER.

weighty prey which it kills, and to convey it to a place of security.

Although usually unwilling to attack an armed man, it is one of the most courageous animals in existence when it is driven to fight, and if its anger is excited, it cares little for the number of its foes, or the weapons with which they are armed. Even the dreaded firearms lose their terrors to an angry Lion, while a Lioness, who fears for the safety of her young, is simply the most terrible animal in existence. We know how even a hen will fight for her chickens, and how she has been known to beat off the fox and the hawk by the reckless fury of her attack. It may be easily imagined, therefore, that a Lioness actuated by equal courage, and possessed of the terrible weapons given to her by her Creator, would be an animal almost too formidable for the conception of those who have not actually witnessed the scene of a Lioness defending her little ones.

The roar of the Lion is another of the characteristics for which it is celebrated. There is no beast that can produce a sound that could for a moment be mistaken for the roar of the Lion. The Lion has a habit of stooping his head towards the ground when he roars, so that the terrible sound rolls along like thunder, and reverberates in many an echo in the far distance. Owing to this curious habit, the roar can be heard at a very great distance, but its locality is rendered uncertain, and it is often difficult to be quite sure whether the Lion is to the right or the left of the hearer.

There are few sounds which strike more awe than the Lion's roar. Even at the Zoological Gardens, where the hearer knows that he is in perfect safety, and where the Lion is enclosed in a small cage faced with strong iron bars, the sound of the terrible roar always has a curious effect upon the nerves. It is not exactly fear, because the hearer knows that he is safe; but it is somewhat akin to the feeling of mixed awe and admiration with which one listens to the crashing thunder after the lightning has sped its course. If such be the case when the Lion is safely housed in a cage, and is moreover so tame that even if he did escape, he would be led back by the keeper without doing any harm, the effect of the roar must indeed be terrific when the Lion is at liberty, when he is in his own country, and when the shades of evening prevent him from being seen even at a short distance.



LIONESS AND YOUNG.

In the dark, there is no animal so *invisible* as a Lion. Almost every hunter has told a similar story—of the Lion's approach at night, of the terror displayed by dogs and cattle as he drew near, and of the utter inability to see him, though he was so close that they could hear his breathing. Sometimes, when he has crept near an encampment, or close to a cattle inclosure, he does not proceed any farther lest he should venture within the radius illumined by the rays of the fire. So he crouches closely to the ground, and, in the semi-darkness, looks so like a large stone, or a little hillock, that any one might pass close to it without perceiving its real nature. This gives the opportunity for which the Lion has been watching, and in a moment he strikes down the careless straggler, and carries off his prey to the den. Sometimes, when very much excited, he accompanies the charge with a roar, but, as a general fact, he secures his prey in silence.

The roar of the Lion is very peculiar. It is not a mere outburst of sound, but a curiously graduated performance. No description of the Lion's roar is so vivid, so true, and so graphic as that of Gordon Cumming: "One of the most striking things connected with the Lion is his voice, which is extremely grand and peculiarly striking. It consists at times of a low, deep moaning, repeated five or six times, ending in faintly audible sighs. At other times he startles the forest with loud, deep-toned, solemn roars, repeated five or six times in quick succession, each increasing in loudness to the third or fourth, when his voice dies away in five or six low, muffled sounds, very much resembling distant thunder. As a general rule, Lions roar during the night, their sighing moans commencing as the shades of evening envelop the forest, and continuing at intervals throughout the night. In distant and secluded regions, however, I have constantly heard them roaring loudly as late as nine or ten o'clock on a bright sunny morning. In hazy and rainy weather they are to be heard at every hour in the day, but their roar is subdued."

Lastly, we come to the dwelling-place of the Lion. This animal always fixes its residence in the depths of some forest, through which it threads its stealthy way with admirable certainty. No fox knows every hedgerow, ditch, drain, and covert better than the Lion knows the whole country around his den.

Each Lion seems to have his peculiar district, in which only himself and his family will be found. These animals seem to parcel out the neighbourhood among themselves by a tacit law like that which the dogs of eastern countries have imposed upon themselves, and which forbids them to go out of the district in which they were born. During the night he traverses his dominions ; and, as a rule, he retires to his den as soon as the sun is fairly above the horizon. Sometimes he will be in wait for prey in the broadest daylight, but his ordinary habits are nocturnal, and in the daytime he is usually asleep in his secret dwelling-place.

We will now glance at a few of the passages in which the Lion is mentioned in the Holy Scriptures, selecting those which treat of its various characteristics.

The terrible strength of the Lion is the subject of repeated reference. In the magnificent series of prophecies uttered by Jacob on his deathbed, the power of the princely tribe of Judah is predicted under the metaphor of a Lion—the beginning of its power as a Lion's whelp, the fulness of its strength as an adult Lion, and its matured establishment in power as the old Lion that couches himself and none dares to disturb him. Then Solomon, in the Proverbs, speaks of the Lion as the "strongest among beasts, and that turneth not away for any."

Solomon also alludes to its courage in the same book, Prov. xxviii. 1, in the well-known passage, "The wicked fleeth when no man pursueth : but the righteous are bold as a lion." And, in 2 Sam. xxiii. 20, the courage of Benaiah, one of the mighty three of David's army, is specially honoured, because he fought and killed a Lion single-handed, and because he conquered "two lion-like men of Moab." David, their leader, had also distinguished himself, when a mere keeper of cattle, by pursuing and killing a Lion that had come to plunder his herd. In the same book of Samuel which has just been quoted (xvii. 10), the valiant men are metaphorically described as having the hearts of Lions.

The ferocity of this terrible beast of prey is repeatedly mentioned, and the Psalms are full of such allusions, the fury and anger of enemies being compared to the attacks of the Lion.

Many passages refer to the Lion's roar, and it is remarkable that the Hebrew language contains several words by which the

different kind of roar is described. One word, for example, represents the low, deep, thunder-like roar of the Lion seeking its prey, and which has already been mentioned. This is the word which is used in Amos iii. 4, "Will a lion roar in the forest when he hath no prey?" and in this passage the word which is translated as Lion signifies the animal when full grown and in the prime of life. Another word is used to signify the sudden exulting cry of the Lion as it leaps upon its victim. A third is used for the angry growl with which a Lion resents any endeavour to deprive it of its prey, a sound with which we are all familiar, on a miniature scale, when we hear a cat growling over a mouse which she has just caught. The fourth term signifies the peculiar roar uttered by the young Lion after it has ceased to be a cub and before it has attained maturity. This last term is employed in Jer. li. 38, "They shall *roar* together like lions; they shall *yell* as lions' whelps," in which passage two distinct words are used, one signifying the roar of the Lion when searching after prey, and the other the cry of the young Lions.

The prophet Amos, who in his capacity of herdsman was familiar with the wild beasts, from which he had to guard his cattle, makes frequent mention of the Lion, and does so with a force and vigour that betoken practical experience. How powerful is this imagery, "The lion hath roared; who will not fear? The Lord God hath spoken; who can but prophesy?" Here we have the picture of the man himself, the herdsman and prophet, who had trembled many a night, as the Lions drew nearer and nearer; and who heard the voice of the Lord, and his lips poured out prophecy. Nothing can be more complete than the parallel which he has drawn. It breathes the very spirit of piety, and may bear comparison even with the prophecies of Isaiah for its simple grandeur.

It is remarkable how the sacred writers have entered into the spirit of the world around them, and how closely they observed the minutest details even in the lives of the brute beasts. There is a powerful passage in the book of Job, iv. 11, "The old lion perisheth for lack of prey," in which the writer betrays his thorough knowledge of the habits of the animal, and is aware that the usual mode of a Lion's death is through hunger, in consequence of his increasing inability to catch prey.

The nocturnal habits of the Lion and its custom of lying in

wait for prey are often mentioned in the Scriptures. The former habit is spoken of in that familiar and beautiful passage in the Psalms (civ. 20), "Thou makest darkness, and it is night; wherein all the beasts of the forest do creep forth. The young Lions roar after their prey; and seek their meat from God. The sun ariseth, they gather themselves together, and lay them down in their dens."



LION CARRYING HOME SUPPLIES.

An animal so destructive among the flocks and herds could not be allowed to carry out its depredations unchecked, and as we have already seen, the warfare waged against it has been so successful, that the Lions have long ago been fairly extirpated in Palestine. The usual method of capturing or killing the Lion was by pitfalls or nets, to both of which there are many references in the Scriptures.

The mode of hunting the Lion with nets was identical with that which is practised in India at the present time. The precise locality of the Lion's dwelling-place having been discovered, a circular wall of net is arranged round it, or if only a few nets can be obtained, they are set in a curved form, the concave side being towards the Lion. They then send dogs into the thicket, hurl stones and sticks at the den, shoot arrows into it, fling



AFRICAN LIONS.

burning torches at it, and so irritate and alarm the animal that it rushes against the net, which is so made that it falls down and envelopes the animal in its folds. If the nets be few, the drivers go to the opposite side of the den, and induce the Lion to escape in the direction where he sees no foes, but where he is sure to run against the treacherous net. Other large and dangerous animals were also captured by the same means.

Another and more common, because an easier and a cheaper method was, by digging a deep pit, covering the mouth with a slight covering of sticks and earth, and driving the animal upon the treacherous covering. It is an easier method than the net, because after the pit is once dug, the only trouble lies in throwing the covering over its mouth. But, it is not so well adapted for taking beasts alive, as they are likely to be damaged, either by the fall into the pit, or by the means used in getting them out again. Animals, therefore, that are caught in pits are generally, though not always, killed before they are taken out. The net, however, envelops the animal so perfectly, and renders it so helpless, that it can be easily bound and taken away. The hunting net is very expensive, and requires a large staff of men to work it, so that none but a rich man could use it in hunting.

The passages in which allusion is made to the use of the pitfall in hunting are too numerous to be quoted, and it will be sufficient to mention one or two passages, such as those wherein the Psalmist laments that his enemies have hidden for him their net in a pit, and that the proud have digged pits for him.

Lions that were taken in nets seem to have been kept alive in dens, either as mere curiosities, or as instruments of royal vengeance. Such seems to have been the object of the Lions which were kept by Darius, into whose den Daniel was thrown, by royal command, and which afterwards killed his accusers when thrown into the same den. It is plain that the Lions kept by Darius must have been exceedingly numerous, because they killed at once the accusers of Daniel, who were many in number, together with their wives and children, who, in accordance with the cruel custom of that age and country, were partakers of the same punishment with the real culprits. The whole of the first part of Ezek. xix. alludes to the custom of taking Lions alive and keeping them in durance afterwards.

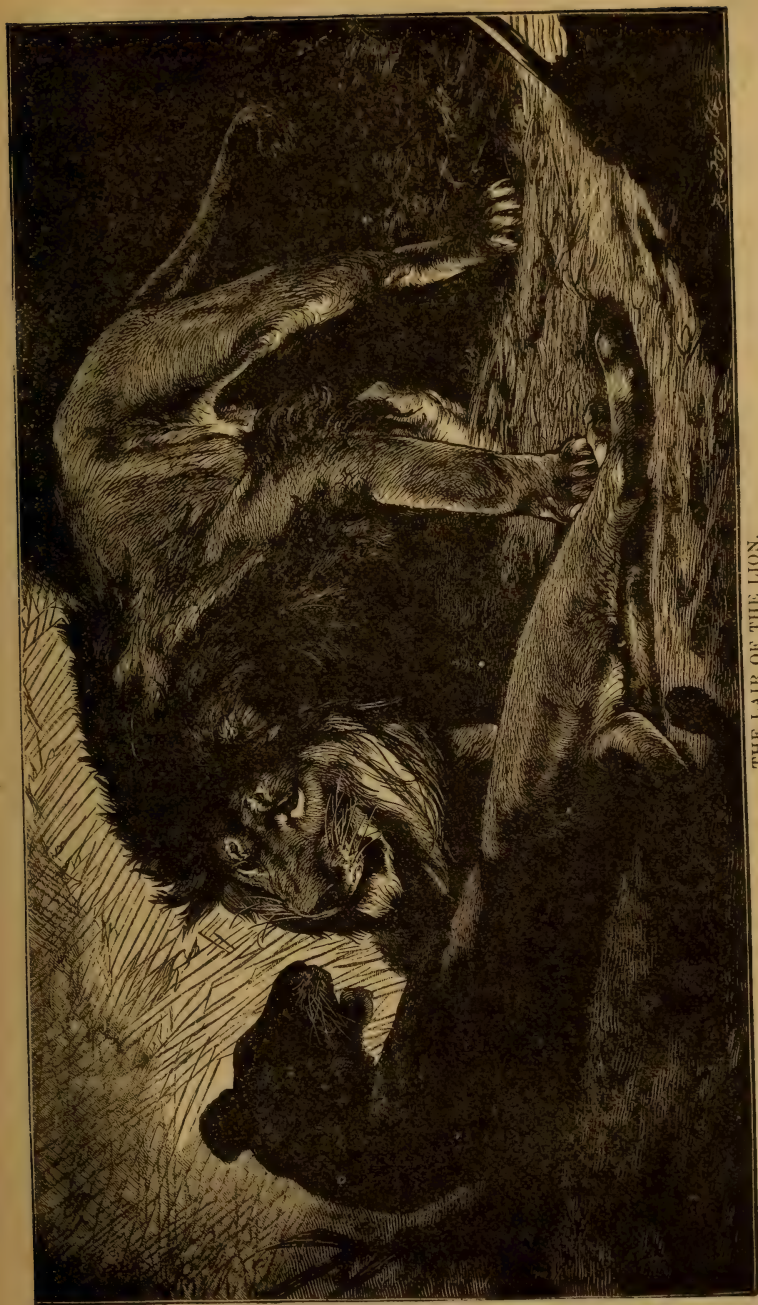
Sometimes the Lion was hunted as a sport, but this amusement seems to have been restricted to the great men, on account of its expensive nature. Such hunting scenes are graphically depicted in the famous Nineveh sculptures, which represent the hunters pursuing their mighty game in chariots, and destroying them with arrows. Rude, and even conventional as are these sculptures, they have a spirit, a force, and a truthfulness, that prove them to have been designed by artists to whom the scene was a familiar one.



THE LION ATTACKS THE HERD.

Upon the African Continent the Lion reigns supreme, monarch of the feline race.

Whatever may be said of the distinction between the Asiatic and African Lion, there seems to be scarcely sufficient grounds for considering the very slight differences a sufficient warrant for constituting separate species. From all accounts, it seems that the



THE LAIR OF THE LION.

habits of all Lions are very similar, and that a Lion acts like a Lion whether found in Africa or Asia.

An old Boer, as the Dutch settlers of Southern Africa are called, gave me a most interesting account of an adventure with a Lion.

The man was a well-known hunter, and lived principally by the sale of ivory and skins. He was accustomed each year to make a trip into the game country, and traded with the Kaffirs, or native blacks, under very favorable auspices. His stock in trade consisted of guns and ammunition, several spans of fine oxen, some horses, and about a dozen dogs.

A Lion which appeared to have been roaming about the country happened to pass near this hunter's camp, and scenting the horses and oxen, evidently thought that the location would suit him for a short period. A dense wood situated about a mile from the camp afforded shelter, and this spot the Lion selected as a favorable position for his headquarters.

The hunter had not to wait for more than a day, before the suspicions which had been aroused by some broad footmarks, which he saw imprinted in the soil, were confirmed into a certainty that a large Lion was concealed near his residence.

It now became a question of policy whether the Boer should attack the Lion, or wait for the Lion to attack him. He thought it possible that the savage beast, having been warned off by the dogs, whose barking had been continued and furious during the night on which the Lion was supposed to have passed, might think discretion the better part of valor, and consequently would move farther on, in search of a less carefully guarded locality upon which to quarter himself. He determined, therefore, to wait, but to use every precaution against a night-surprise.

The Lion, however, was more than a match for the man; for during the second night a strong ox from his best span was quietly carried off, and, although there was some commotion among the dogs and cattle, it was then thought that the alarm had scared the Lion away.

The morning light, however, showed that the beast had leaped the fence which surrounded the camp, and, having killed the ox, had evidently endeavored to scramble over it again with the ox in his possession. The weight of the Lion and the ox had caused the stakes to give way, and the Lion had easily carried off his prey through the aperture.

The track of the Lion was immediately followed by the Boer, who took with him a negro and half a dozen of his best dogs. The tracks were easily seen, and the hunter had no difficulty in deciding that the Lion was in the wood previously mentioned. But this in itself was no great advance, for the place was overgrown with a dense thicket of thorn-bushes, creepers, and long grass, forming a jungle so thick and impenetrable that for a man to enter seemed almost impossible.

It was therefore agreed that the Boer should station himself on one side, while the negro went to the other side of the jungle, the dogs meanwhile being sent into the thicket.

This arrangement, it was hoped, would enable either the hunter or the negro to obtain a shot; for they concluded that the dogs, which were very courageous animals, would drive the Lion out of the bushes.

The excited barking of the dogs soon indicated that they had discovered the Lion, but they appeared to be unable to drive him from his stronghold; for, although they would scamper away every now and then, as though the enraged monster was chasing them, still they returned to bark at the same spot.

Both of the hunters fired several shots, with the hope that a stray bullet might find its way through the underwood to the heart of the savage beast, but a great quantity of ammunition was expended and no result achieved.

At length, as the dogs had almost ceased to bark, it was considered advisable to call them off. But all the whistling and shouting failed to recall more than two out of the six, and one of these was fearfully wounded. The others, it was afterwards found, had been killed by the Lion: a blow from his paw had sufficed to break the back or smash the skull of all which had come within his reach.

Thus the first attempt on the Lion was a total failure, and the hunter returned home lamenting the loss of his dogs, and during the night watched beside his enclosure; but the Lion did not pay him a second visit.

Early on the following evening, accompanied by the negro, he started afresh for the wood; and, having marked the spot from which the Lion had on the former occasion quitted the dense thorny jungle, the two hunters ascended a tree and watched during the whole night in the hope of obtaining a shot at the hated

marauder. But while they were paying the residence of the Lion a visit *he* favored the camp with a call, and this time, by way of variety, carried away a very valuable horse, which he conveyed to the wood, being wise enough to walk out and to return by a different path from that he had previously used, consequently avoiding the ambush prepared for him.

When the hunter returned to his camp, he was furious at this new loss, and determined upon a plan which, though dangerous, still appeared the most likely to insure the destruction of the ravenous monster.

This plan was to enter the wood alone, without attendant or dogs, and with noiseless, stealthy movements creep near enough to the Lion to obtain a shot.

Now, when we consider the difficulty of moving through thick bushes without making a noise, and remember the watchful habits of every member of the cat tribe, we may be certain that to surprise the Lion was a matter of extreme difficulty, and that the probability was that the hunter would meet with disaster.

At about ten o'clock on the morning after the horse-slaughter, the hunter started for the wood armed with a double-barrelled smooth-bore gun, and prepared to put forth his utmost skill in stalking his dangerous enemy.

Now, it is the nature of the Lion, when gorged, to sleep during the day; and if the animal has carried off any prey, it usually conceals itself near the remnants of its feast, to watch them until ready for another meal.

The hunter was aware of this, and laid his plans very judiciously, He approached the wood slowly and silently, found the track of the Lion, and began tracing it to find the spot where the remains of the horse could be seen.

He moved forward very slowly and with great caution, being soon surrounded by the thick bushes, the brightness of the plain also being succeeded by the deep gloom of the wood. Being an experienced hand at bush-craft, he was able to walk or crawl without causing either a dried stick to crack or a leaf to rustle, and he was aware that his progress was without noise; for the small birds, usually so watchful and alert, flew away only when he approached close to them, thus showing that their eyes, and not their ears, had made them conscious of the presence of man.

Birds and monkeys are the great obstacles in the bush to the



THE LION LISTENS TO THE APPROACH OF THE HUNTER.

success of a surprise, for the birds fly from tree to tree and whistle or twitter, whilst the monkeys chatter and grimace, expressing by all sorts of actions that a strange creature is approaching. When, therefore, the bushranger finds that birds and monkeys are unconscious of his presence until they see him, he may be satisfied that he has traversed the bush with tolerable silence, and has vanquished such dangerous betrayers of his presence as dried sticks and dead leaves.

The hunter had not proceeded thus more than fifty yards into the jungle, before he found indications that he was close upon the lair of the Lion: a strong leonine scent was noticeable, and part of the carcase of his horse was visible between the bushes. Instead, therefore, of advancing farther, as an incautious or inexperienced bushranger would have done, he crouched down behind a bush and remained motionless.

All animals are aware of the advantages of a surprise, and the cat tribe especially practise the ambuscading system. The hunter, therefore, determined, if possible, to turn the tables on the Lion, and to surprise, rather than to be surprised.

He concluded that the Lion, even when gorged with horseflesh, would not be so neglectful of his safety as to sleep with more than one eye closed, and that, although he had crept with great care through the bush, he had probably, from some slight sound, caused the Lion to be on the alert; if, therefore, he should approach the carcase of the horse, he might be pounced upon at once.

After remaining silent and watchful for several minutes, the hunter at length saw that an indistinctly-outlined object was moving behind some large broad-leaved plants at about twenty paces from him.

This object was the Lion. It was crouched behind some shrubs, attentively watching the bushes where the hunter was concealed. Its head only was clearly visible, the body being hidden by the foliage.

It was evident that the Lion was suspicious of something, but was not certain that anything had approached.

The hunter, knowing that this was a critical period for him, remained perfectly quiet. He did not like to risk a shot at the forehead of the Lion, for it would require a very sure aim to insure a death-wound, and the number of twigs and branches would be almost certain to deflect the bullet.

The Lion, after a careful inspection, appeared to be satisfied, and laid down behind the shrubs. The hunter then cocked both barrels of his heavy gun and turned the muzzle slowly around, so that he covered the spot on which the Lion lay, and shifted his position so as to be well placed for a shot.

The slight noise he made in moving, attracted the attention of the Lion, who immediately rose to his feet. A broadside shot, which was the most sure, could not be obtained, so the hunter fired at the head of the animal, aiming for a spot between the eyes. The ball struck high, as is usually the case when the distance is short, and the charge of powder heavy, but the Lion fell over on its back, rising, however, almost immediately and uttering a terrific roar.

In regaining its feet it turned its side to the hunter, giving him the opportunity he had so anxiously waited for. Aiming at a spot behind the shoulder, he fired again, and had the satisfaction of seeing the savage beast, maddened by the pain of a mortal wound, tearing up the ground in its fury within a very few paces of his hiding-place.

By degrees its fierce roars subsided into angry growls, and the growls into heavy moans, until the terrible voice was hushed and silence reigned throughout the wood.

The hunter immediately started off home, and brought his negroes and dogs to the spot, where they found stretched dead upon the ground a Lion of the largest size.

Before sunset that evening its skin was pegged down at the hunter's camp, and all were filled with delight, knowing that they would be no more disturbed by the fierce marauder.

THE LEOPARD.

The Leopard **not** often mentioned in the Scriptures—its attributes exactly described—Probability that several animals were classed under the name—How the Leopard takes its prey—Craft of the Leopard—its ravages among the flocks—The empire of man over the beast—The Leopard at Bay—Localities wherein the Leopard lives—The skin of the Leopard—Various passages of Scripture explained.

OF the LEOPARD but little is said in the Holy Scriptures.

In the New Testament this animal is only mentioned once, and then in a metaphorical rather than a literal sense. In the Old Testament it is casually mentioned seven times, and only in two places is the word Leopard used in the strictly literal sense. Yet, in those brief passages of Holy Writ, the various attributes of the animal are delineated with such fidelity, that no one could doubt that the Leopard was familiarly known in Palestine. Its colour, its swiftness, its craft, its ferocity, and the nature of its dwelling-place, are all touched upon in a few short sentences scattered throughout the Old Testament, and even its peculiar habits are alluded to in a manner that proves it to have been well known at the time when the words were written.

It is my purpose in the following pages to give a brief account of the Leopard of the Scriptures, laying most stress on the qualities to which allusion is made, and then to explain the passages in which the name of the animal occurs.

In the first place, it is probable that under the word Leopard are comprehended three animals, two of which, at least, were thought to be one species until the time of Cuvier. These three animals are the LEOPARD proper (*Leopardus varius*), the OUNCE (*Leopardus uncia*), and the CHETAH, or HUNTING LEOPARD (*Gueparda jubata*). All these three species belong to the same family of animals; all are spotted and similar in colour, all are nearly alike in shape, and all are inhabitants of Asia, while two of them, the Leopard and the Chetah, are also found in Africa.

It is scarcely necessary to mention that the Leopard is a beast of prey belonging to the cat tribe, that its colour is tawny, variegated with rich black spots, and that it is a fierce and voracious animal, almost equally dreaded by man and beast. It inhabits many parts of Africa and Asia, and in those portions of the country which are untenanted by mankind, it derives all its sustenance from the herb-eating animals of the same tracts.



THE LEOPARD.

To deer and antelopes it is a terrible enemy, and in spite of their active limbs, seldom fails in obtaining its prey. Swift as is the Leopard, for a short distance, and wonderful as its spring, it has not the enduring speed of the deer or antelope, animals which are specially formed for running, and which, if a limb is

shattered, can run nearly as fast and quite as far on three legs as they can when all four limbs are uninjured. Instinctively knowing its inferiority in the race, the Leopard supplies by cunning the want of enduring speed.

It conceals itself in some spot whence it can see far around without being seen, and thence surveys the country. A tree is the usual spot selected for this purpose, and the Leopard, after climbing the trunk by means of its curved talons, settles itself in the fork of the branches, so that its body is hidden by the boughs, and only its head is shown between them. With such scrupulous care does it conceal itself, that none but a practised hunter can discover it, while any one who is unaccustomed to the woods cannot see the animal even when the tree is pointed out to him.

As soon as the Leopard sees the deer feeding at a distance, he slips down the tree and stealthily glides off in their direction. He has many difficulties to overcome, because the deer are among the most watchful of animals, and if the Leopard were to approach to the windward, they would scent him while he was yet a mile away from them. If he were to show himself but for one moment in the open ground he would be seen, and if he were but to shake a branch or snap a dry twig he would be heard. So, he is obliged to approach them against the wind, to keep himself under cover, and yet to glide so carefully along that the heavy foliage of the underwood shall not be shaken, and the dry sticks and leaves which strew the ground shall not be broken. He has also to escape the observation of certain birds and beasts which inhabit the woods, and which would certainly set up their alarm-cry as soon as they saw him, and so give warning to the wary deer, which can perfectly understand a cry of alarm, from whatever animal it may happen to proceed.

Still, he proceeds steadily on his course, gliding from one covert to another, and often expending several hours before he can proceed for a mile. By degrees he contrives to come tolerably close to them, and generally manages to conceal himself in some spot towards which the deer are gradually feeding their way. As soon as they are near enough, he collects himself for a spring, just as a cat does when she leaps on a bird, and dashes towards the deer in a series of mighty bounds. For a moment or two they are startled and paralysed with fear at the sudden



LEOPARD ATTACKING A HERD OF DEER.

appearance of their enemy, and thus give him time to get among them. Singling out some particular animal, he leaps upon it, strikes it down with one blow of his paw, and then, couching on the fallen animal, he tears open its throat, and laps the flowing blood.

In this manner does it obtain its prey when it lives in the desert, but when it happens to be in the neighbourhood of human habitations, it acts in a different manner. Whenever man settles himself in any place, his presence is a signal for the beasts of the desert and forest to fly. The more timid, such as the deer and antelope, are afraid of him, and betake themselves as far away as possible. The more savage inhabitants of the land, such as the lion, leopard, and other animals, wage an unequal war against him for a time, but are continually driven farther and farther away, until at last they are completely expelled from the country. The predaceous beasts are, however, loth to retire, and do so by very slow degrees. They can no longer support themselves on the deer and antelopes, but find a simple substitute for them in the flocks and herds which man introduces, and in the seizing of which there is as much craft required as in the catching of the fleeter and wilder animals. Sheep and goats cannot run away like the antelopes, but they are penned so carefully within inclosures, and guarded so watchfully by herdsmen and dogs, that the Leopard is obliged to exert no small amount of cunning before it can obtain a meal.

Sometimes it creeps quietly to the fold, and escapes the notice of the dogs, seizes upon a sheep, and makes off with it before the alarm is given. Sometimes it hides by the wayside, and as the flock pass by it dashes into the midst of them, snatches up a sheep, and disappears among the underwood on the opposite side of the road. Sometimes it is crafty enough to deprive the fold of its watchful guardian. Dogs which are used to Leopard-hunting never attack the animal, though they are rendered furious by the sound of its voice. They dash at it as if they meant to devour it, but take very good care to keep out of reach of its terrible paws. By continually keeping the animal at bay, they give time for their master to come up, and generally contrive to drive it into a tree, where it can be shot.

But instances have been known where the Leopard has taken advantage of the dogs, and carried them off in a very cunning



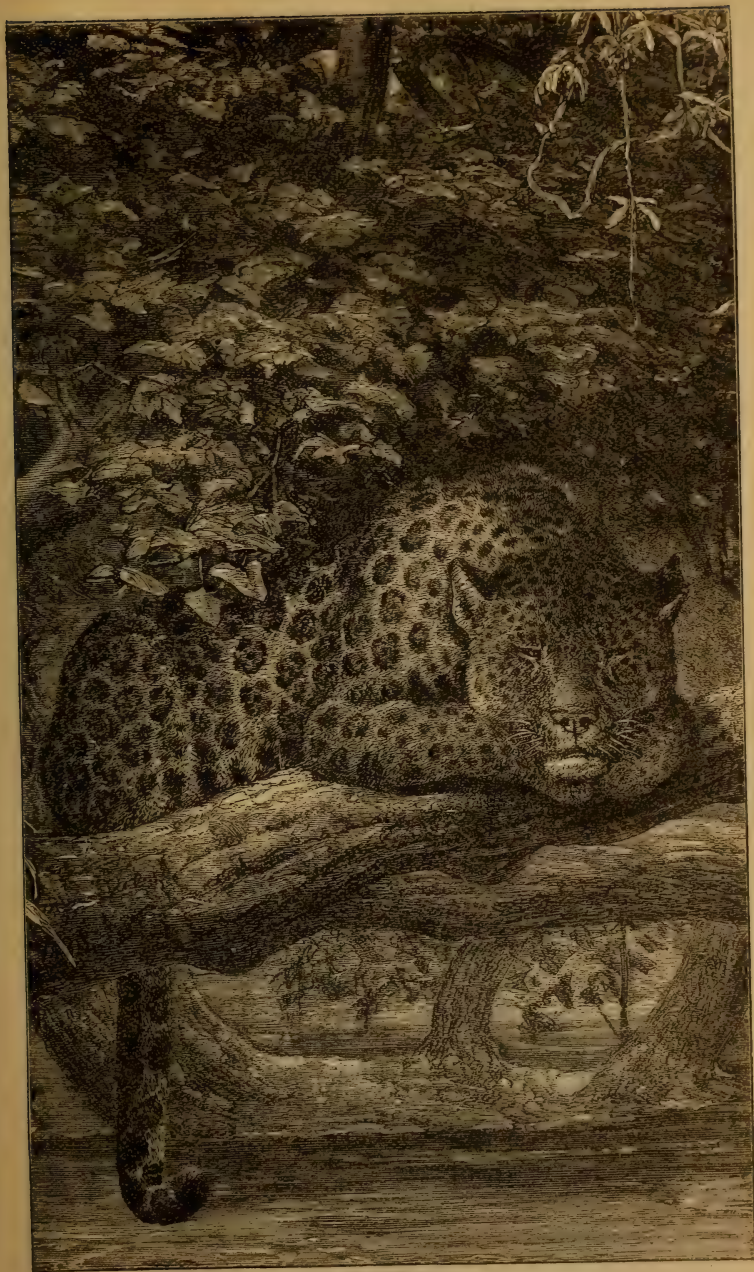
THE LEOPARD LEAPS UPON HIS PREY.

manner. It hides itself tolerably near the fold, and then begins to growl in a low voice. The dogs think that they hear a Leopard at a distance, and dash towards the sound with furious barks and yells. In so doing, they are sure to pass by the hiding-place of the Leopard, which springs upon them unawares, knocks one of them over, and bounds away to its den in the woods. It does not content itself with taking sheep or goats from the fold, but is also a terrible despoiler of the hen-roosts, destroying great numbers in a single night when once it contrives to find its way into the house.

As an instance of the cunning which seems innate in the Leopard, I may mention that whenever it takes up its abode near a village, it does not meddle with the flocks and herds of its neighbours, but prefers to go to some other village at a distance for food, thus remaining unsuspected almost at the very doors of the houses.

In general, it does not willingly attack mankind, and at all events seems rather to fear the presence of a full-grown man. But, when wounded or irritated, all sense of fear is lost in an overpowering rush of fury, and it then becomes as terrible a foe as the lion himself. It is not so large nor so strong, but it is more agile and quicker in its movements ; and when it is seized with one of these paroxysms of anger, the eye can scarcely follow it as it darts here and there, striking with lightning rapidity, and dashing at any foe within reach. Its whole shape seems to be transformed, and absolutely to swell with anger ; its eyes flash with fiery lustre, its ears are thrown back on the head, and it continually utters alternate snarls and yells of rage. It is hardly possible to recognise the graceful, lithe glossy creature, whose walk is so noiseless, and whose every movement is so easy, in the furious passion-swollen animal that flies at every foe with blind fury, and pours out sounds so fierce and menacing that few men, however well armed, will care to face it.

As is the case with most of the cat tribe, the Leopard is an excellent climber, and can ascend trees and traverse their boughs without the least difficulty. It is so fond of trees, that it is seldom to be seen except in a well-wooded district. Its favourite residence is a forest where there is plenty of under-wood, at least six or seven feet in height, among which trees are sparingly interspersed. When crouched in this cover it is prac-



WAITING.

tically invisible, even though its body may be within arm's length of a passenger. The spotted body harmonizes so perfectly with the broken lights and deep shadows of the foliage that even a practised hunter will not enter a covert in search of a Leopard unless he is accompanied by dogs. The instinct which teaches the Leopard to choose such localities is truly wonderful, and may be compared with that of the tiger, which cares little for underwood, but haunts the grass jungles, where the long, narrow blades harmonize with the stripes which decorate its body.

The skin of the Leopard has always been highly valued on account of its beauty, and in Africa, at the present day, a robe made of its spotted skin is as much an adjunct of royalty as is the ermine the emblem of judicial dignity in England. In more ancient times, a leopard skin was the official costume of a priest, the skin being sometimes shaped into a garment, and sometimes thrown over the shoulders and the paws crossed over the breast.

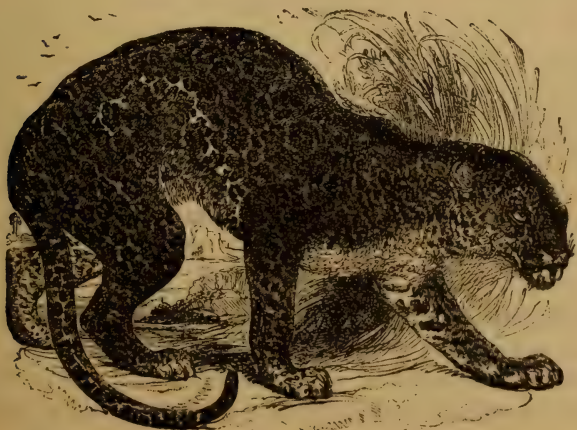
Such is a general history of the Leopard. We will now proceed to the various passages in which it is mentioned, beginning with its outward aspect.

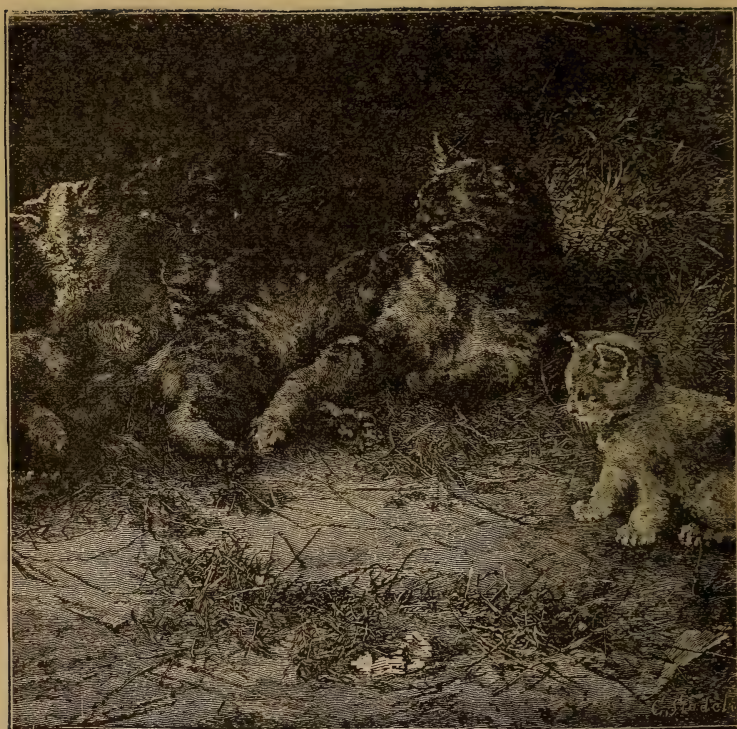
In the first place, the Hebrew word *Namer* signifies "spotted," and is given to the animal in allusion to its colours. The reader will now see how forcible is the lament of Jeremiah, "Can the Ethiopian change his skin, or the Leopard his spots?" Literally, "Can the Ethiopian change his skin, or the spotted one his spots?"

The agility and swiftness of the Leopard are alluded to in the prediction by the prophet Habakkuk of the vengeance that would come upon Israel through the Chaldeans. In chap. i. 5, we read: "I will work a work in your days, which ye will not believe though it be told you. For, lo, I raise up the Chaldeans, that bitter and hasty nation, which shall march through the breadth of the land, to possess the dwelling-places that are not theirs. They are terrible and dreadful; their judgment and their dignity shall proceed of themselves. Their horses also are swifter than the Leopards, and are more fierce than the evening wolves."

The craftiness of the Leopard, and the manner in which it lies in wait for its prey, are alluded to in more than one passage of Holy Writ. Hosea the prophet alludes to the Leopard in a

few simple words which display an intimate acquaintance with the habits of this formidable animal, and in this part of his prophecies he displays that peculiar local tone which distinguishes his writings. Speaking of the Israelites under the metaphor of a flock, or a herd, he proceeds to say: "According to their pasture so were they filled; they were filled, and their heart was exalted; therefore have they forgotten me. Therefore I will be unto them as a lion, as a Leopard by the way will I observe them." The reader will note the peculiar force of this sentence, whereby God signifies that He will destroy them openly, as a lion rushes on its prey, and that he will chastise them unexpectedly, as if it were a Leopard crouching by the wayside, and watching for the flock to pass, that it may spring on its prey unexpectedly. The same habit of the Leopard is also alluded to by Jeremiah, who employs precisely the same imagery as is used by Habakkuk. See Jer. v. 5, 6, "These have altogether broken the yoke, and burst the bonds. Wherefore a lion out of the forest shall slay them, and a wolf of the evenings shall spoil them, a leopard shall watch over their cities." It is evident from the employment of this image by two prophets, the one being nearly a hundred years before the other, that the crafty, insidious habits of the Leopard were well known in Palestine, and that the metaphor would tell with full force among those to whom it was addressed.





THE CAT.

The Cat never mentioned by name in the canonical Scriptures, and only once in the Apocrypha—The Cat domesticated among the Egyptians, and trained in bird-catching—Neglected capabilities of the Cat—Anecdote of an English Cat that caught fish for her master—Presumed reason why the Scriptures are silent about the Cat—The Cat mentioned by Baruch.

It is a very remarkable circumstance that the word CAT is not once mentioned in the whole of the canonical Scriptures, and only once in the Apocrypha.

The Egyptians, as is well known, kept Cats domesticated in their houses, a fact which is mentioned by Herodotus, in his second book, and the 66th and 67th chapters. After describing the various animals which were kept and fed by this nation, he

proceeds to narrate the habits of the Cat, and writes as follows : " When a fire takes place, a supernatural impulse seizes the cats. For the Egyptians, standing at a distance, take care of the cats and neglect to quench the fire ; but the cats make their escape, and leaping over the men, cast themselves into the fire, and when this occurs, great lamentations are made among the Egyptians. In whatever house a cat dies of a natural death, all the family shave their eyebrows. All cats that die are carried to certain sacred houses, where, after being embalmed, they are buried in the city of Bubastis."

Now, as many of those cat-mummies have been discovered in good preservation, the species has been identified with the Egyptian Cat of the present day, which is scientifically termed *Felis maniculatus*. Not only did the Egyptians keep Cats at their houses, but, as is shown by certain sculptures, took the animals with them when they went bird-catching, and employed them in securing their prey. Some persons have doubted this statement, saying, that in the first place, the Cat is not possessed of sufficient intelligence for the purpose ; and that in the second place, as the hunter is represented as catching wild fowl, the Cat would not be able to assist him, because it would not enter the water. Neither objection is valid, nor would have been made by a naturalist.

There are no grounds whatever for assuming that the Cat has not sufficient intelligence to aid its master in hunting. On the contrary, there are many familiar instances where the animal has been trained, even in this country, to catch birds and other game, and bring its prey home. By nature the Cat is an accomplished hunter, and, like other animals of the same disposition, can be taught to use its powers for mankind. We all know that the chetah, a member of the same tribe, is in constant use at the present day, and we learn from ancient sculptures that the lion was employed for the same purpose. Passing from land to water, mankind has succeeded in teaching the seal and the otter to plunge into the water, catch their finny prey, and deliver it to their owners. Among predaceous birds, we have trained the eagle, the falcon, and various hawks, to assist us in hunting the finned and feathered tribes, while we have succeeded in teaching the cormorant to catch fish for its master, and not for itself. Why, then, should the Cat be excepted from a rule so general ?

The fact **is**, the Cat has been, although domesticated for so many centuries, a comparatively neglected animal; and it is the fashion to heap upon it the contumacious epithets of sullen, treacherous, selfish, spiteful, and intractable, just as we take as our emblems of stupidity the ass and the goose, which are really among the most cunning of the lower animals. We have never tried to teach the Cat the art of hunting for her owners, but that is no reason for asserting that the animal could not be taught.

As to entering the water, every one who is familiar with the habits of the Cat knows perfectly well that the Cat will voluntarily enter water in chase of prey. A Cat does not like to wet her feet, and will not enter the water without a very powerful reason, but when that motive is supplied, she has no hesitation about it. A curious and valuable confirmation of this fact appeared some time ago in "The Field" newspaper, in which was recorded the history of an old fisherman, whose Cat invariably went to sea with him, and as invariably used to leap overboard, seize fish in her mouth, and bring them to the side of the boat, where her kindly owner could lift her out, together with the captured fish.

The Cat, then, having been the favoured companion of the Egyptians, among whom the Israelites lived while they multiplied from a family into a nation, it does seem very remarkable that the sacred writers should not even mention it. There is no prohibition of the animal, even indirectly, in the Mosaic law; but it may be the case that the Israelites repudiated the Cat simply because it was so favoured by their former masters.



THE DOG.

Antipathy displayed by Orientals towards the Dog, and manifested throughout the Scriptures—Contrast between European and Oriental Dogs—Habits of the Dogs of Palestine—The City Dogs and their singular organization—The herdsman's Dog—Various passages of Scripture—Dogs and the crumbs—their numbers—Signor Pierotti's experience of the Dogs—Possibility of their perfect domestication—The peculiar humiliation of Lazarus—Voracity of the Wild Dogs—The fate of Ahab and Jezebel—Anecdote of a volunteer Watch-dog—Innate affection of the Dog towards mankind—Peculiar local Instinct of the Oriental Dog—Albert Smith's account of the Dogs at Constantinople—The Dervish and his Dogs—The Greyhound—Uncertainty of the word.

SCARCELY changed by the lapse of centuries, the Oriental of the present day retains most of the peculiarities which distinguished him throughout the long series of years during which the books of sacred Scripture were given to the world. In many of these characteristics he differs essentially from Europeans of the present day, and exhibits a tone of mind which seems to be not merely owing to education, but to be innate and inherent in the race.

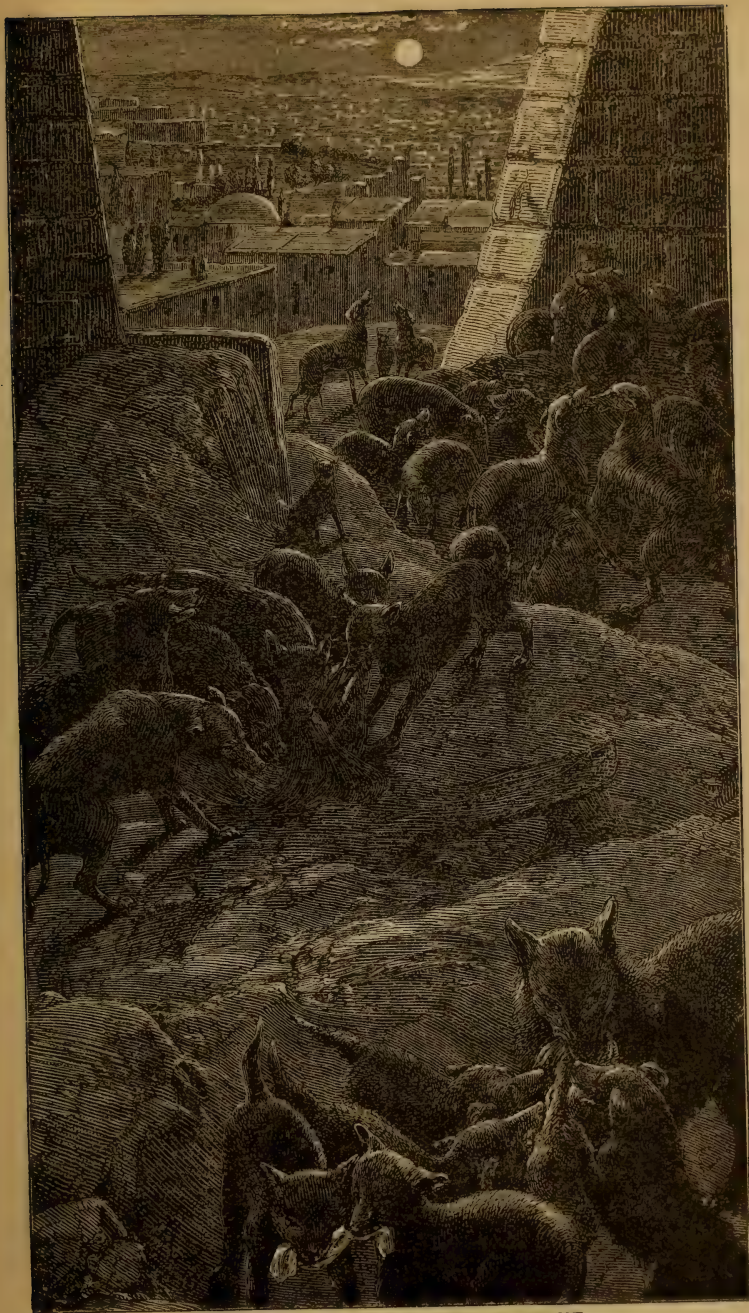
One of these remarkable characteristics is the strange loathing with which he regards the Dog. In all other parts of the world, the Dog is one of the most cherished and valued of animals, but among those people whom we popularly class under the name of Orientals, the Dog is detested and despised. As the sacred books were given to the world through the mediumship of Orientals, we find that this feeling towards the Dog is manifested whenever the animal is mentioned; and whether we turn to the books of the Law, the splendid poetry of the Psalms and the book of Job, the prophetic or the historical portions of the Old Testament, we find the name of the Dog repeatedly mentioned; and in every case in connexion with some repulsive idea. If we turn from the Old to the New Testament, we find the same idea manifested, whether in the Gospels, the Epistles, or the Revelation.

To the mind of the true Oriental the very name of the Dog carries with it an idea of something utterly repugnant to his nature, and he does not particularly like even the thought of the animal coming across his mind. And this is the more extraordinary, because at the commencement and termination of their history the Dog was esteemed by their masters. The Egyptians, under whose rule they grew to be a nation, knew the value of the Dog, and showed their appreciation in the many works of art which have survived to our time. Then the Romans, under whose iron grasp the last vestiges of nationality crumbled away, honoured and respected the Dog, made it their companion, and introduced its portrait into their houses. But, true to their early traditions, the Jews of the East have ever held the Dog in the same abhorrence as is manifested by their present masters, the followers of Mahommed.

Owing to the prevalence of this feeling, the Dogs of Oriental towns are so unlike their more fortunate European relatives, that they can hardly be recognised as belonging to the same species. In those lands the traveller finds that there is none of the wonderful variety which so distinguishes the Dog of Europe. There he will never see the bluff, sturdy, surly, faithful mastiff, the slight gazelle-like greyhound, the sharp, intelligent terrier, the silent, courageous bulldog, the deep-voiced, tawny bloodhound, the noble Newfoundland, the clever, vivacious poodle, or the gentle, silken-haired spaniel.

As he traverses the streets, he finds that all the dogs are alike, and that all are gaunt, hungry, half starved, savage, and cowardly, more like wolves than dogs, and quite as ready as wolves to attack when they fancy they can do so with safety. They prowl about the streets in great numbers, living, as they best can, on any scraps of food that they may happen to find. They have no particular masters, and no particular homes. Charitable persons will sometimes feed them, but will never make companions of them, feeling that the very contact of a dog would be a pollution. They are certainly useful animals, because they act as scavengers, and will eat almost any animal substance that comes in their way.

The strangest part of their character is the organization which prevails among them. By some extraordinary means they divide the town into districts, and not one dog ever ventures out of



that particular district to which it is attached. The boundaries, although invisible, are as effectual as the loftiest walls, and not even the daintiest morsel will tempt a dog to pass the mysterious line which forms the boundary of his district. Generally, these bands of dogs are so savage that any one who is obliged to walk in a district where the dogs do not know him is forced to carry a stout stick for his protection. Like their European relatives, they have great dislike towards persons who are dressed after a fashion to which they are unaccustomed, and therefore are sure to harass any one who comes from Europe and wears the costume of his own country. As is customary among animals which unite themselves in troops, each band is under the command of a single leader, whose position is recognised and his authority acknowledged by all the members.

These peculiarities are to be seen almost exclusively in the dogs which run wild about the towns, because there is abundant evidence in the Scriptures that the animal was used in a partially domesticated state, certainly for the protection of their herds, and possibly for the guardianship of their houses. That the Dog was employed for the first of these purposes is shown in Job xxx. i: "But now they that are younger than I have me in derision, whose fathers I would have disdained to have set with the dogs of my flock." And that the animal was used for the protection of houses is thought by some commentators to be shown by the well-known passage in Is. lvi. 10: "His watchmen are blind: they are all ignorant, they are all dumb dogs, they cannot bark; sleeping, lying down, loving to slumber." Still, it is very probable that in this passage the reference is not made to houses, but to the flocks and herds which these watchmen ought to have guarded.

The rooted dislike and contempt felt by the Israelites towards the Dog is seen in numerous passages. Even in that sentence from Job which has just been quoted, wherein the writer passionately deplores the low condition into which he has fallen, and contrasts it with his former high estate, he complains that he is despised by those whose fathers he held even in less esteem than the dogs which guarded his herds. There are several references to the Dog in the books of Samuel, in all of which the name of the animal is mentioned contemptuously. For example, when David accepted the challenge of Goliath, and went to

meet his gigantic enemy without the ordinary protection of mail, and armed only with a sling and his shepherd's staff. Goliath said to him, "Am I a dog, that thou comest to me with staves?" (1 Sam. xvii. 43.) And in the same book, chapter xxiv. 14, David remonstrates with Saul for pursuing so insignificant a person as himself, and said, "After whom is the King of Israel come out? after a dead dog, after a flea."

The same metaphor is recorded in the second book of the same writer. Once it was employed by Mephibosheth, the lame son of Jonathan, when extolling the generosity of David, then King of Israel in the place of his grandfather Saul: "And he bowed himself, and said, 'What is thy servant, that thou shouldest look upon such a dead dog as I am?'" (2 Sam. ix. 8.)



SHIMEI EXULTING OVER KING DAVID.

In the same book, chapter xvi. 9, Abishai applies this contemptuous epithet to Shimei, who was exulting over the troubled monarch with all the insolence of a cowardly nature, "Why should this dead dog curse my lord the king?" Abner also makes use of a similar expression, "Am I a dog's head?" And we may also refer to the familiar passage in 2 Kings viii. 13,

Elisha had prophesied to Hazael that he would become king on the death of Ben-hadad, and that he would work terrible mischief in the land. Horrified at these predictions, or at all events pretending to be so, he replied, "But what, is thy servant a dog, that he should do this great thing?"

If we turn from the Old to the New Testament, we find the same contemptuous feeling displayed towards the Dog. It is mentioned as an intolerable aggravation of the sufferings endured by Lazarus the beggar as he lay at the rich man's gate, that the dogs came and licked his sores. In several passages, the word Dog is employed as a metaphor for scoffers, or unclean persons, or sometimes for those who did not belong to the Church, whether Jewish or Christian. In the Sermon on the Mount our Lord himself uses this image, "Give not that which is holy unto dogs" (Matt. vii. 6.) In the same book, chapter xv. 26, Jesus employs the same metaphor when speaking to the Canaanitish woman who had come to ask him to heal her daughter: "It is not meet to take the children's bread and cast it to dogs." And that she understood the meaning of the words is evident from her answer, in which faith and humility are so admirably blended. Both St. Paul and St. John employ the word Dog in the same sense. In his epistle to the Philippians, chapter iii. 2, St. Paul writes, "Beware of dogs, beware of evil workers." And in the Revelation, chapter xxii. 14, these words occur: "Blessed are they that do his commandments, that they may have right to the tree of life, and may enter in through the gates to the city; for without are dogs, and sorcerers, and murderers, and idolaters, and whomsoever loveth and maketh a lie."

That the dogs of ancient times formed themselves into bands just as they do at present is evident from many passages of Scripture, among which may be mentioned those sentences from the Psalms, wherein David is comparing the assaults of his enemies to the attacks of the dogs which infested the city. "Thou hast brought me into the dust of death; for dogs have compassed me, the assembly of the wicked have enclosed me." This passage will be better appreciated when the reader has perused the following extract from a recent work by Signor Pierotti. After giving a general account of the Dogs of Palestine and their customs, he proceeds as follows:—

"In Jerusalem, and in the other towns, the dogs have an organization of their own. They are divided into families and districts, especially in the night time, and no one of them ventures to quit his proper quarter; for if he does, he is immediately attacked by all the denizens of that into which he intrudes, and is driven back, with several bites as a reminder. Therefore, when an European is walking through Jerusalem by night, he is always followed by a number of canine attendants, and greeted at every step with growls and howls. These tokens of dislike, however, are not intended for him, but for his followers, who are availing themselves of his escort to pass unmolested from one quarter to another.

"During a very hard winter, I fed many of the dogs who frequented the road which I traversed almost every evening, and afterwards, each time that I passed, I received the homage not only of the individuals, but of the whole band to which they belonged, for they accompanied me to the limits of their respective jurisdictions and were ready to follow me to my own house, if I did but give them a sign of encouragement, coming at my beck from any distance. They even recollected the signal two years afterwards, though it was but little that I had given them."

The account which this experienced writer gives of the animal presents a singular mixture of repulsive and pleasing traits, the latter being attributable to the true nature of the Dog, and the former to the utter neglect with which it is treated. He remarks that the dogs which run wild in the cities of Palestine are ill-favoured, ill-scented, and ill-conditioned beasts, more like jackals or wolves than dogs, and covered with scars, which betoken their quarrelsome nature. Yet, the same animals lose their wild, savage disposition, as soon as any human being endeavours to establish that relationship which was evidently intended to exist between man and the dog. How readily even these despised and neglected animals respond to the slightest advance, has been already shown by Sig. Pierotti's experience, and there is no doubt that these tawny, short-haired, wolf-like animals, could be trained as perfectly as their more favoured brethren of the western world.

As in the olden times, so at the present day, the dogs lie about in the streets, dependent for their livelihood upon the offal that is flung into the roads, or upon the chance morsels that may

be thrown to them. An allusion to this custom is made in the well-known passage in Matt. xv. The reader will remember the circumstance that a woman of Canaan, and therefore not an Israelite, came to Jesus, and begged him to heal her daughter, who was vexed with a devil. Then, to try her faith, He said, "It



LAZARUS LYING AT THE RICH MAN'S DOOR.

is not meet to take the children's bread, and to cast it to dogs." And she said, "Truth, Lord: yet the dogs eat of the crumbs which fall from their master's table." Now, the "crumbs" which are here mentioned are the broken pieces of bread which were used at table, much as bread is sometimes used in eating fish.

The form of the "loaves" being flat, and much like that of the oat-cake of this country, adapted them well to the purpose. The same use of broken bread is alluded to in the parable of Lazarus, who desired to be fed with the crumbs that fell from the rich man's table, *i. e.* to partake of the same food as the dogs which swarmed round him and licked his sores.



THE DEATH OF JEZEBEL.

The "crumbs," however liberally distributed, would not nearly suffice for the subsistence of the canine armies, and their chief support consists of the offal, which is rather too plentifully flung into the streets. If the body of any animal, not excluding their own kind, be found lying in the streets, the dogs will assemble round it, and tear it to pieces, and they have no scruples even in devouring a human body. Of course, owing to the peculiar feeling entertained by the Orientals towards the Dog, no fate can be imagined more repulsive to the feelings of humanity than to be eaten by dogs; and therein lies the terror of the fate which was prophesied of Ahab and Jezebel. Moreover, the blood, even of the lower animals, was held in

great sanctity, and it was in those days hardly possible to invoke a more dreadful fate upon any one than that his blood should be lapped by dogs.

We lose much of the real force of the Scriptures, if we do not possess some notion of the manners and customs of Palestine and the neighbouring countries, as well as of the tone of mind prevalent among the inhabitants. In our own country, that any one should be eaten by dogs would be a fate so contrary to usage, that we can hardly conceive its possibility, and such a fate would be out of the ordinary course of events. But, if such a fate should happen to befall any one, we should have no stronger feeling of pity than the natural regret that the dead person was not buried with Christian rites.

But, with the inhabitants of Palestine, such an event was by no means unlikely. It was, and is still, the custom to bury the corpse almost as soon as life has departed, and such would ordinarily have been the case with the dead body of Jezebel. But, through fear of the merciless Jehu, by whose command she had been flung from the window of her own palace, no one dared to remove her mangled body. The dogs, therefore, seized upon their prey; and, even before Jehu had risen from the banquet with which he celebrated his deed, nothing was left of the body but the skull, the feet, and the hands.



SYRIAN DOG.

In Mr. Tristram's work, the author has recognised the true dog nature, though concealed behind an uninviting form: "Our watch-dog, Beirût, attached himself instinctively to Wilhelm, though his canine instinct soon taught him to recognise every

one of our party of fourteen, and to cling to the tents, **whether** in motion or at rest, as his home. Poor Beirût! though the veriest pariah in appearance, thy plebeian form encased as noble a dog-heart as ever beat at the sound of a stealthy step."

The same author records a very remarkable example of the sagacity of the native Dog, and the fidelity with which it will keep guard over the property of its master. "The guard-house provided us, unasked, with an invaluable and vigilant sentry, who was never relieved, nor ever quitted the post of duty. The poor Turkish conscript, like every other soldier in the world, is fond of pets, and in front of the grim turret that served for a guard-house was a collection of old orange-boxes and crates, thickly peopled with a garrison of dogs of low degree, whose attachment to the spot was certainly not purchased by the loaves and fishes which fell to their lot.

"One of the family must indeed have had hard times, for she had a family of no less than five dependent on her exertions, and on the superfluities of the sentries' mess. With a sagacity almost more than canine, the poor gaunt creature had scarcely seen our tents pitched before she came over with all her litter and deposited them in front of our tent. At once she scanned the features of every member of the encampment, and introduced herself to our notice. During the week of our stay, she never quitted her post, or attempted any depredation on our kitchen-tent, which might have led to her banishment. Night and day she proved a faithful and vigilant sentry, permitting no stranger, human or canine, European or Oriental, to approach the tents without permission, but keeping on the most familiar terms with ourselves and our servants.

"On the morning of our departure, no sooner had she seen our camp struck, than she conveyed her puppies back to their old quarters in the orange-box, and no entreaties or bribes could induce her to accompany us. On three subsequent visits to Jerusalem, the same dog acted in a similar way, though no longer embarrassed by family cares, and would on no account permit any strange dog, nor even her companions at the guard-house, to approach within the tent ropes."

After perusing this account of the Dog of Palestine, two points strike the reader. The first is the manner in which the Dog, in spite of all the social disadvantages under which it

labours, displays one of the chief characteristics of canine nature, namely, the yearning after human society. The animal in question had already attached herself to the guard-house, where she could meet with some sort of human converse, though the inborn prejudices of the Moslem would prevent the soldiers from inviting her to associate with them, as would certainly have been done by European soldiers. She nestled undisturbed in the orange-box, and, safe under the protection of the guard, brought up her young family in their immediate neighbourhood. But, as soon as Europeans arrived, her instinct told her that they would be closer associates than the Turkish soldiers who were quartered in the guard-house, and accordingly she removed herself and her family to the shelter of their tents.

Herein she carried out the leading principle of a dog's nature. A dog *must* have a master, or at all events a mistress, and just in proportion as he is free from human control, does he become less dog-like and more wolf-like. In fact, familiar intercourse with mankind is an essential part of a dog's true character, and the animal seems to be so well aware of this fact, that he will always contrive to find a master of some sort, and will endure a life of cruel treatment at the hands of a brutal owner rather than have no master at all.

The second point in this account is the singular local instinct which characterises the Dogs of Palestine and other eastern countries, and which is as much inbred in them as the faculty of marking game in the pointer, the combative nature in the bulldog, the exquisite scent in the bloodhound, and the love of water in the Newfoundland dog. In this country, we fancy that the love of locality belongs especially to the cat, and that the Dog cares little for place, and much for man. But, in this case, we find that the local instinct overpowered the yearning for human society. Fond as was this dog of her newly-found friends, and faithful as she was in her self-imposed service, she would not follow them away from the spot where she had been born, and where she had produced her own young.

This curious love for locality has evidently been derived from the traditional custom of successive generations, which has passed from the realm of reason into that of instinct. The reader will remember that Sig. Pierotti mentions an instance where the dogs which he had been accustomed to feed would

follow him as far as the limits of their particular district, but would go no farther. The late Albert Smith, in his "Month at Constantinople," gives a similar example of this characteristic. He first describes the general habits of the dogs.

On the first night of his arrival, he could not sleep, and went to the window to look out in the night. "The noise I heard then I shall never forget. To say that if all the sheep-dogs, in going to Smithfield on a market-day, had been kept on the constant bark, and pitted against the yelping curs upon all the carts in London, they could have given any idea of the canine uproar that now first astonished me, would be to make the feeblest of images. The whole city rang with one vast riot. Down below me, at Tophané—over-about Stamboul—far away at Scutari—the whole sixty thousand dogs that are said to overrun Constantinople appeared engaged in the most active extermination of each other, without a moment's cessation. The yelping, howling, barking, growling, and snarling, were all merged into one uniform and continuous even sound, as the noise of frogs becomes when heard at a distance. For hours there was no lull. I went to sleep, and woke again, and still, with my windows open, I heard the same tumult going on; nor was it until daybreak that anything like tranquillity was restored.

"Going out in the daytime, it is not difficult to find traces of the fights of the night about the limbs of all the street dogs. There is not one, among their vast number, in the possession of a perfect skin. Some have their ears gnawed away or pulled off; others have their eyes taken out; from the backs and haunches of others perfect steaks of flesh had been torn away; and all bear the scars of desperate combats.

"Wild and desperate as is their nature, these poor animals are susceptible of kindness. If a scrap of bread is thrown to one of them now and then, he does not forget it; for they have, at times, a hard matter to live—not the dogs amongst the shops of Galata or Stamboul, but those whose 'parish' lies in the large burying-grounds and desert places without the city; for each keeps, or rather is kept, to his district, and if he chanced to venture into a strange one, the odds against his return would be very large. One battered old animal, to whom I used occasionally to toss a scrap of food, always followed me from the hotel to the cross street in Pera, where the two soldiers stood on

guard, but would never come beyond this point. He knew the fate that awaited him had he done so; and therefore, when I left him, he would lie down in the road, and go to sleep until I came back.

“ When a horse or camel dies, and is left about the roads near the city, the bones are soon picked very clean by these dogs, and they will carry the skulls or pelves to great distances. I was told that they will eat their dead fellows—a curious fact, I believe, in canine economy. They are always troublesome, not to say dangerous, at night; and are especially irritated by Europeans, whom they will single out amongst a crowd of Levantines.”

In the same work there is a short description of a solitary dervish, who had made his home in the hollow of a large plane-tree, in front of which he sat, surrounded by a small fence of stakes only a foot or so in height. Around him, but not venturing within the fence, were a number of gaunt, half-starved dogs, who prowled about him in hopes of having an occasional morsel of food thrown to them. Solitary as he was, and scanty as must have been the nourishment which he could afford to them, the innate trustfulness of the dog-nature induced them to attach themselves to human society of some sort, though their master was one, and they were many—he was poor, and they were hungry.



EASTERN WATER-SELLER.

THE WOLF.

Identity of the animal indisputable—its numbers, past and present—The Wolf never mentioned directly—its general habits—References in Scripture—its mingled ferocity and cowardice—its association into packs—The Wolf's bite—How it takes its prey—its ravages among the flocks—Allusions to this habit—The shepherd and his nightly enemies—Mr. Tristram and the Wolf—A semi tamed Wolf at Marsaba.

THERE is no doubt that the Hebrew word *Zeëb*, which occurs in a few passages of the Old Testament, is rightly translated as WOLF, and signifies the same animal as is frequently mentioned in the New Testament.

This fierce and dangerous animal was formerly very plentiful in Palestine, but is now much less common, owing to the same causes which have extirpated the lion from the country. It is a rather remarkable fact, that in no passage of Holy Writ is the Wolf directly mentioned. Its name is used as a symbol of a fierce and treacherous enemy, but neither in the Old nor New Testament does any sacred writer mention any act as performed by the Wolf. We have already heard of the lion which attacked Samson and was killed by him, of the lion which slew the disobedient prophet, and of the lions which spared Daniel when thrown into their den. We also read of the dogs which licked Ahab's blood, and ate the body of Jezebel, also of the bears which tore the mocking children.

But in no case is the Wolf mentioned, except in a metaphorical sense; and this fact is the more remarkable, because the animals were so numerous that they were very likely to have exercised some influence on a history extending over such a lengthened range of years, and limited to so small a portion of the earth. Yet we never hear of the Wolf attacking any of the personages mentioned in Scripture; and although we are told of the exploit of David, who pursued a lion and a bear that had taken a lamb out of his fold, we are never told of any similar deed in connexion with the Wolf.

This animal was then what it is now. Seldom seen by day, it lies hidden in its covert as long as the light lasts, and steals out in search of prey in the evening. This custom of the Wolf is mentioned in several passages of Holy Scripture, such as that in Jer. v. 5, 6: "These have altogether broken the yoke, and burst the bonds. Wherefore a lion out of the forest shall slay them, and a wolf of the evenings shall spoil them." In this passage the reader will see that the rebellious Israelites are



WOLVES ATTACKING A FLOCK OF SHEEP.

compared to restive draught cattle which have broken away from their harness and run loose, so that they are deprived of the protection of their owners, and exposed to the fury of wild beasts. A similar reference is made in Hab. i. 8: "Their horses also are swifter than the leopards, and are more fierce than the evening wolves." The same habit of the Wolf is alluded to in

Zeph. iii. 3 : " Her princes within her are roaring lions ; her judges are evening wolves."

Individually, the Wolf is rather a timid animal. It will avoid a man rather than meet him. It prefers to steal upon its prey and take it unawares, rather than to seize it openly and boldly. It is ever suspicious of treachery, and is always imagining that a trap is laid for it. Even the shallow device of a few yards of rope trailing from any object, or a strip of cloth fluttering in the breeze, is quite sufficient to keep the Wolf at bay for a considerable time. This fact is well known to hunters, who are accustomed to secure the body of a slain deer by simply tying a strip of cloth to its horn. If taken in a trap of any kind, or even if it fancies itself in an enclosure from which it can find no egress, it loses all courage, and will submit to be killed without offering the least resistance. It will occasionally endeavour to effect its escape by feigning death, and has more than once been known to succeed in this device.

But, collectively, the Wolf is one of the most dangerous animals that can be found. Herding together in droves when pressed by hunger, the wolves will openly hunt prey, performing this task as perfectly as a pack of trained hounds. Full of wiles themselves, they are craftily wise in anticipating the wiles of the animals which they pursue ; and even in full chase, while the body of the pack is following on the footsteps of the flying animal, one or two are detached on the flanks, so as to cut it off if it should attempt to escape by doubling on its pursuers.

There is no animal which a herd of wolves will not attack, and very few which they will not ultimately secure. Strength avails nothing against the numbers of these savage foes, which give no moment of rest, but incessantly assail their antagonist, dashing by instinct at those parts of the body which can be least protected, and lacerating with their peculiar short, snapping bite. Should several of their number be killed or disabled, it makes no difference to the wolves, except that a minute or two are wasted in devouring their slain or wounded brethren, and they only return to the attack the more excited by the taste of blood. Swiftmess of foot avails nothing against the tireless perseverance of the wolves, who press on in their peculiar, long, slinging gallop, and in the end are sure to tire out the swifter footed but less enduring animal that flees before them. The

stately buffalo is conquered by the ceaseless assaults of the wolves ; the bear has been forced to succumb to them, and the fleet-footed stag finds his swift limbs powerless to escape the pursuing band, and his branching horns unable to resist their furious onset when once they overtake him.



WOLVES CHASING DEER.

That the Wolf is a special enemy to the sheep-fold is shown in many parts of the Scriptures, both in the Old and New Testaments, especially in the latter. In John x. 1-16, Jesus compares himself to a good shepherd, who watches over the fold, and, if the wolves should come to take the sheep, would rather give up His life than they should succeed. But the false teachers are compared to bad shepherds, hired for money, but having no interest in the sheep, and who therefore will not expose themselves to danger in defence of their charge.

This metaphor was far more effective in Palestine, and at that time, than it is in this country and at the present day. In this



THE WOLF.

land, the shepherd has no anxiety about the inroads of wild beasts, but in Palestine one of his chief cares was to keep watch at night lest the wolves should attack the fold, and to drive them away himself in case they should do so. Therefore the shepherd's life was one which involved no small danger as well as anxiety, and the metaphor used by our Lord gains additional force from the knowledge of this fact.

A similar metaphor is used when Jesus wished to express in forcible terms the dangers to which the chosen seventy would oft be subjected, and the impossibility that they should be able to overcome the many perils with which they would be surrounded. "Go your ways : behold, I send you forth as lambs among wolves" (Luke x. 3).

Mr. Tristram several times met wolves while he was engaged in his travels, and mostly saw solitary specimens. One such encounter took place in the wilderness of Judah : "On my way back, I met a fine solitary wolf, who watched me very coolly, at the distance of sixty yards, while I drew my charge and dropped a bullet down the barrel. Though I sent the ball into a rock between his legs as he stood looking at me in the wady, he was not sufficiently alarmed to do more than move on a little more quickly, ever and anon turning to look at me, while gradually increasing his distance. Darkness compelled me to desist from the chase, when he quietly turned and followed me at a respectful distance. He was a magnificent animal, larger than any European wolf, and of a much lighter colour."

Those who are acquainted with the character of the animal will appreciate the truthfulness of this description. The cautious prowls at a distance, the slow trot away when he fancied he might be attacked, the reverted look, and the final turning back and following at a respectful distance, are all characteristic traits of the Wolf, no matter to what species it may belong, nor what country it may inhabit.

On another occasion, while riding in the open plain of Genesaret, the horse leaped over the bank of a little ditch, barely three feet in depth. After the horse had passed, and not until then, a Wolf started out of the ditch, literally from under the horse's hoofs, and ran off. The animal had been crouching under the little bank, evidently watching for some cows and calves which were grazing at a short distance, under the charge of a



WOLVES ATTACKING WILD GOATS.

Bedouin boy. The same author mentions that one of the monks belonging to the monastery at Marsaba had contrived to render a Wolf almost tame. Every evening at six o'clock the Wolf

came regularly across the ravine, ate a piece of bread, and then went back again.

With the peculiar jealousy of all tamed animals, the Wolf would not suffer any of his companions to partake of his good fortune. Several of them would sometimes accompany him, but as soon as they came under the wall of the monastery he always drove them away.

The inhabitants of Palestine say that the Wolves of that country hunt singly, or at most in little packs of few in number. Still they dread the animal exceedingly on account of the damage it inflicts upon their flocks of sheep and goats.



THE JACKAL.

THE FOX OR JACKAL.

The two animals comprehended under one name—The Jackal—its numbers in ancient and modern Palestine—General habits of the Jackal—Localities where the Jackal is found—Samson, and the three hundred “foxes”—Popular objections to the narrative—The required number easily obtained—Signor Pierotti’s remarks upon the Jackal—An unpleasant position—How the fields were set on fire—The dread of fire inherent in wild beasts—The truth of the narrative proved—The Fox and Jackal destructive among grapes

THERE are several passages in the Old Testament in which the word Fox occurs, and it is almost certain that the Hebrew word *Shuál*, which is rendered in our translation as Fox, is used rather loosely, and refers in some places to the Jackal, and in others to

the Fox. We will first take those passages in which the former rendering of the word is evidently the right one, and will begin by examining those characteristics of the animal which afford grounds for such an assertion.

Even at the present time, the Jackal is extremely plentiful in Palestine; and as the numbers of wild beasts have much decreased in modern days, the animals must have been even more



FOXES OR JACKALS DEVOURING THE CARCASE OF A GOAT.

numerous than they are at present. It is an essentially nocturnal and gregarious animal. During the whole of the day the Jackals lie concealed in their holes or hiding-places, which are usually cavities in the rocks, in tombs, or among ruins. At nightfall they issue from their dens, and form themselves into packs, often consisting of several hundred individuals, and prowl about in search of food. Carrion of various kinds forms their

chief subsistence, and they perform in the country much the same task as is fulfilled by the dogs in the cities.

If any animal should be killed, or even severely wounded, the Jackals are sure to find it out and to devour it before the day-break. They will scent out the track of the hunter, and feed upon the offal of the beasts which he has slain. If the body of a human being were to be left on the ground, the Jackals would certainly leave but little traces of it; and in the olden times of warfare, they must have held high revelry in the battle-field after the armies had retired. It is to this propensity of the Jackal that David refers—himself a man of war, who had fought on many a battle-field, and must have seen the carcasses of the slain mangled by these nocturnal prowlers: "Those that seek my soul, to destroy it, shall go into the lower parts of the earth. They shall fall by the sword; they shall be a portion for foxes" (Ps. lxxiii. 9, 10). Being wild beasts, afraid of man, and too cowardly to attack him even when rendered furious by hunger, and powerful by force of numbers, they keep aloof from towns and cities, and live in the uninhabited parts of the country. Therefore the prophet Jeremiah, in his Book of Lamentations, makes use of the following forcible image, when deploring the pitiful state into which Judæa had fallen: "For this our heart is faint; for these things our eyes are dim: because of the mountain of Zion, which is desolate, the foxes walk upon it" (Lam. v. 17). And Ezekiel makes use of a similar image: "O Israel, thy prophets are like foxes in the desert."

But, by far the most important passage in which the Fox is mentioned, is that wherein is recorded the grotesque vengeance of Samson upon the Philistines: "And Samson went and caught three hundred foxes, and took firebrands, and turned tail to tail, and put a firebrand in the midst between two tails. And when he had set the brands on fire, he let them go into the standing corn of the Philistines, and burnt up both the shocks and also the standing corn, with the vineyards and olives" (Judges xv. 4, 5). Now, as this is one of the passages of Holy Writ to which great objections have been taken, it will be as well to examine these objections, and see whether they have any real force. The first of these objections is, that the number of foxes is far too great to have been caught at one time, and to this objection two answers have been given. The first answer is, that



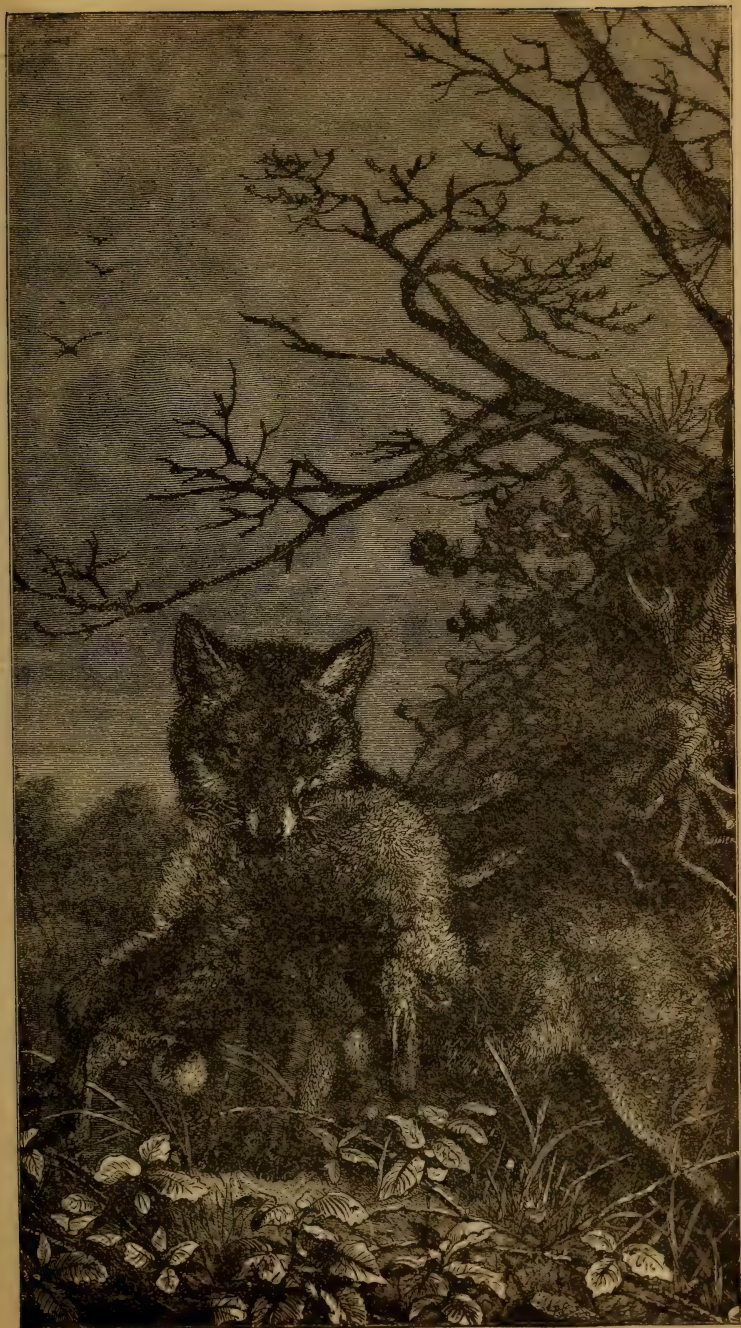
A FEAST IN PROSPECT.

they need not have been caught at once, but by degrees, and kept until wanted. But the general tenor of the narrative is undoubtedly in favour of the supposition that this act of Samson was unpremeditated, and that it was carried into operation at once, before his anger had cooled. The second answer is, that the requisite number of Foxes might have been miraculously sent to Samson for this special purpose. This theory is really so foolish and utterly untenable, that I only mention it because it has been put forward. It fails on two grounds: the first being that a miracle would hardly have been wrought to enable Samson to revenge himself in so cruel and unjustifiable a manner; and the second, that there was not the least necessity for any miracle at all.

If we put out of our minds the idea of the English Fox, an animal comparatively scarce in this country, and solitary in its habits, and substitute the extremely plentiful and gregarious Jackal, wandering in troops by night, and easily decoyed by hunger into a trap, we shall see that double the number might have been taken, if needful. Moreover, it is not to be imagined that Samson caught them all with his own hand. He was at the head of his people, and had many subordinates at his command, so that a large number of hunters might have been employed simultaneously in the capture. In corroboration of this point, I insert an extremely valuable extract from Signor Pierotti's work, in which he makes reference to this very portion of the sacred history:—

“It is still very abundant near Gaza, Askalon, Ashdod, Ekron, and Ramleh. I have frequently met with it during my wanderings by night, and on one occasion had an excellent opportunity of appreciating their number and their noise.

“One evening in the month of January, while it was raining a perfect deluge, I was obliged, owing to the dangerous illness of a friend, to return from Jerusalem to Jaffa. The depth of snow on the road over a great part of the mountain, the clayey mud in the plain, and the darkness of the night, prevented my advancing quickly; so that about half-past three in the morning I arrived on the bank of a small torrent, about half an hour's journey to the east of Ramleh. I wished to cross: my horse at first refused, but, on my spurring it, advanced and at once sank up to the breast, followed of course by



my legs, thus teaching me to respect the instinct of an Arab horse for the future.

"There I stuck, without the possibility of escape, and consoled my horse and myself with some provisions that I had in my saddle-bags, shouting and singing at intervals, in the hope of obtaining succour, and of preventing accidents, as I knew that the year before a mule in the same position had been mistaken for a wild beast, and killed. The darkness was profound, and the wind very high; but, happily, it was not cold; for the only things attracted by my calls were numbers of jackals, who remained at a certain distance from me, and responded to my cries, especially when I tried to imitate them, as though they took me for their music-master.

"About five o'clock, one of the guards of the English consulate at Jerusalem came from Ramleh and discovered my state. He charitably returned thither, and brought some men, who extricated me and my horse from our unpleasant bath, which, as may be supposed, was not beneficial to our legs.

"During this most uncomfortable night, I had good opportunity of ascertaining that, if another Samson had wished to burn again the crops in the country of the Philistines, he would have had no difficulty in finding more than three hundred jackals, and catching as many as he wanted in springs, traps, or pitfalls. (See Ps. cxl. 5.)"

The reader will now see that there was not the least difficulty in procuring the requisite number of animals, and that consequently the first objection to the truth of the story is disposed of.

We will now proceed to the second objection, which is, that if the animals were tied tail to tail, they would remain on or near the same spot, because they would pull in different directions, and that, rather than run about, they would turn round and fight each other. Now, in the first place, we are nowhere told that the tails of the foxes, or jackals, were placed in contact with each other, and it is probable that some little space was left between them. That animals so tied would not run in a straight line is evident enough, and this was exactly the effect which Samson wished to produce. Had they been at liberty, and the fiery brand fastened to their tails, they would have run straight to their dens, and produced but little effect. But their captor,



A TRESPASSER.

with cruel ingenuity, had foreseen this contingency, and, by the method of securing them which he adopted, forced them to pursue a devious course, each animal trying to escape from the dreaded firebrand, and struggling in vain endeavours to drag its companion towards its own particular den.

All wild animals have an instinctive dread of fire; and there is none, not even the fierce and courageous lion, that dares enter within the glare of the bivouac fire. A lion has even been struck in the face with a burning brand, and has not ventured to attack the man that wielded so dreadful a weapon. Consequently it may be imagined that the unfortunate animals that were used by Samson for his vindictive purpose, must have been filled with terror at the burning brands which they dragged after them, and the blaze of the fire which was kindled wherever they went. They would have no leisure to fight, and would only think of escaping from the dread and unintelligible enemy which pursued them.

When a prairie takes fire, all the wild inhabitants flee in terror, and never think of attacking each other, so that the bear, the wolf, the cougar, the deer, and the wild swine, may all be seen huddled together, their natural antagonism quelled in the presence of a common foe. So it must have been with the miserable animals which were made the unconscious instruments of destruction. That they would stand still when a burning brand was between them, and when flames sprang up around them, is absurd. That they would pull in exactly opposite directions with precisely balanced force is equally improbable, and it is therefore evident that they would pursue a devious path, the stronger of the two dragging the weaker, but being jerked out of a straight course and impeded by the resistance which it would offer. That they would stand on the same spot and fight has been shown to be contrary to the custom of animals under similar circumstances.

Thus it will be seen that every objection not only falls to the ground, but carries its own refutation, thus vindicating this episode in sacred history, and showing, that not only were the circumstances possible, but that they were highly probable. Of course every one of the wretched animals must have been ultimately burned to death, after suffering a prolonged torture from the firebrand that was attached to it. Such a consideration

would, however, have had no effect for deterring Samson from employing them. The Orientals are never sparing of pain, even when inflicted upon human beings, and in too many cases they seem utterly unable even to comprehend the cruelty of which they are guilty. And Samson was by no means a favourable specimen of his countrymen. He was the very incarnation of strength, but was as morally weak as he was corporeally powerful; and to that weakness he owed his fall. Neither does he seem to possess the least trace of forbearance any more than of self-control, but he yields to his own undisciplined nature, places himself, and through him the whole Israelitish nation, in jeopardy, and then, with a grim humour, scatters destruction on every side in revenge for the troubles which he has brought upon himself by his own acts.

THE HYÆNA.

The Hyæna not mentioned by name, but evidently alluded to—Signification of the word *Zabua*—Translated in the Septuagint as *Hyæna*—A scene described by the prophet Isaiah—The Hyæna plentiful in Palestine at the present day—its well-known cowardice and fear of man—The uses of the Hyæna and the services which it renders—The particular species of *Hyæna*—The Hyæna in the burial-grounds—Hunting the Hyæna—Curious superstition respecting the talismanic properties of its skin—Precautions adopted in slaying it—Popular legends of the Hyæna and its magical powers—The cavern home of the Hyæna—The valley of Zeboim.

ALTHOUGH in our version of the Scriptures the Hyæna is not mentioned by that name, there are two passages in the Old Testament which evidently refer to that animal, and therefore it is described in these pages. If the reader will refer to the prophet Jeremiah, xii. 7-9, he will find these words: "I have forsaken mine house, I have left mine heritage; I have given the dearly beloved of my soul into the hand of her enemies. Mine heritage is unto me as a lion in the forest; it crieth out against me: therefore have I hated it. Mine heritage is unto me as a speckled bird; the birds round about are against her: come ye, assemble all the beasts of the field, come to devour." Now, the word *zabua* signifies something that is streaked, and in the Authorized Version it is rendered as a

speckled bird. But in the Septuagint it is rendered as *Hyæna*, and this translation is thought by many critical writers to be the true one. It is certain that the word *zabua* is one of the four names by which the Talmudical writers mention the *Hyæna*, when treating of its character; and it is equally certain that such a rendering makes the passage more forcible, and is in perfect accordance with the habits of predacious animals.

The whole scene which the Prophet thus describes was evidently familiar to him. First, we have the image of a deserted country, allowed to be overrun with wild beasts. Then we have the lion, which has struck down its prey, roaring with exultation, and defying any adversary to take it from him. Then, the lion having eaten his fill and gone away, we have the *Hyænas*, vultures, and other carrion-eating creatures, assembling around the carcase, and hastening to devour it. This is a scene which has been witnessed by many hunters who have pursued their sport in lands where lions, *hyænas*, and vultures are found; and all these creatures were inhabitants of Palestine at the time when Jeremiah wrote.

At the present day, the *Hyæna* is still plentiful in Palestine, though in the course of the last few years its numbers have sensibly diminished. The solitary traveller, when passing by night from one town to another, often falls in with the *Hyæna*, but need suffer no fear, as it will not attack a human being, and prefers to slink out of his way. But dead, and dying, or wounded animals are the objects for which it searches; and when it finds them, it devours the whole of its prey. The lion will strike down an antelope, an ox, or a goat—will tear off its flesh with its long fangs, and lick the bones with its rough tongue until they are quite cleaned. The wolves and jackals will follow the lion, and eat every soft portion of the dead animal, while the vultures will fight with them for the coveted morsels. But the *Hyæna* is a more accomplished scavenger than lion, wolf, jackal, or vulture; for it will eat the very bones themselves, its tremendously-powerful jaws and firmly-set teeth enabling it to crush even the leg-bone of an ox, and its unparalleled digestive powers enabling it to assimilate the sharp and hard fragments which would kill any creature not constituted like itself.

In a wild, or even a partially-inhabited country, the *Hyæna*



LEOPARD ROBBED OF ITS PREY BY HYÆNAS.

is, therefore, a most useful animal. It may occasionally kill a crippled or weakly ox, and sometimes carry off a sheep; but, even in that case, no very great harm is done, for it does not meddle with any animal that can resist. But these few delinquencies are more than compensated by the great services which it renders as scavenger, consuming those substances which even the lion cannot eat, and thus acting as a scavenger in removing objects which would be offensive to sight and injurious to health.

The species which is mentioned in the Scriptures is the Striped Hyæna (*Hyæna striata*); but the habits of all the species are almost exactly similar. We are told by travellers of certain towns in different parts of Africa which would be unendurable but for the Hyænas. With the disregard for human life which prevails throughout all savage portions of that country, the rulers of these towns order executions almost daily, the bodies of the victims being allowed to lie where they happened to fall. No one chooses to touch them, lest they should also be added to the list of victims, and the decomposing bodies would soon cause a pestilence but for the Hyænas, who assemble at night round the bodies, and by the next morning have left scarcely a trace of the murdered men.

Even in Palestine, and in the present day, the Hyæna will endeavour to rifle the grave, and to drag out the interred corpse. The bodies of the rich are buried in rocky caves, whose entrances are closed with heavy stones, which the Hyæna cannot move; but those of the poor, which are buried in the ground, must be defended by stones heaped over them. Even when this precaution is taken, the Hyæna will sometimes find out a weak spot, drag out the body, and devour it.

In consequence of this propensity, the inhabitants have an utter detestation of the animal. They catch it whenever they can, in pitfalls or snares, using precisely the same means as were employed two thousand years ago; or they hunt it to its den, and then kill it, stripping off the hide, and carrying it about still wet, receiving a small sum of money from those to whom they show it. Afterwards the skin is dressed, by rubbing it with lime and salt, and steeping it in the waters of the Dead Sea. It is then made into sandals and leggings, which are thought to be powerful charms, and to defend the wearer from the Hyæna's bite.

They always observe certain superstitious precautions in flaying the dead animal. Believing that the scent of the flesh would corrupt the air, they invariably take the carcase to the leeward of the tents before they strip off the skin. Even in the animal which has been kept for years in a cage, and has eaten nothing but fresh meat, the odour is too powerful to be agreeable,



HYÆNAS DEVOURING BONES.

as I can testify from practical experience when dissecting a Hyæna that had died in the Zoological Gardens; and it is evident that the scent of an animal that has lived all its life on carrion must be almost unbearable. The skin being removed, the carcase is burnt, because the hunters think that by this process the other Hyænas are prevented from finding the body of their comrade, and either avenging its death or taking warning by its fate.

Superstitions seem to be singularly prevalent concerning the Hyæna. In Palestine, there is a prevalent idea that if a Hyæna meets a solitary man at night, it can enchant him in such a manner as to make him follow it through thickets and over rocks, until he is quite exhausted, and falls an unresisting prey; but that over two persons he has no such influence, and therefore a solitary traveller is gravely advised to call for help as soon as he sees a Hyæna, because the fascination of the beast would be neutralized by the presence of a second person. So firmly is this idea rooted in the minds of the inhabitants, that they will never travel by night, unless they can find at least one companion in their journey.

In Northern Africa there are many strange superstitions connected with this animal, one of the most curious of which is founded on its well-known cowardice. The Arabs fancy that any weapon which has killed a Hyæna, whether it be gun, sword, spear, or dagger, is thenceforth unfit to be used in warfare. "Throw away that sword," said an Arab to a French officer, who had killed a Hyæna, "it has slain the Hyæna, and it will be treacherous to you."

At the present day, its numbers are not nearly so great in Palestine as they used to be, and are decreasing annually. The cause of this diminution lies, according to Signor Pierotti, more in the destruction of forests than in the increase of population and the use of fire-arms, though the two latter causes have undoubtedly considerable influence.

There is a very interesting account by Mr. Tristram of the haunt of these animals. While exploring the deserted quarries of Es Sumrah, between Beth-arabah and Bethel, he came upon a wonderful mass of hyænine relics. The quarries in which were lying the half-hewn blocks, scored with the marks of wedges, had evidently formed the resort of Hyænas for a long series of years. "Vast heaps of bones of camels, oxen, and sheep had been collected by these animals, in some places to the depth of two or three feet, and on one spot I counted the skulls of seven camels. There were no traces whatever of any human remains. We had here a beautiful recent illustration of the mode of foundation of the old bone caverns, so valuable to the geologist. These bones must all have been brought in by the Hyænas, as no camel or sheep could possibly have entered the caverns alive,

nor could any floods have washed them in. Near the entrance where the water percolates, they were already forming a soft breccia."

The second allusion to the Hyæna is made in 1 Sam. xiii. 18, "Another company turned to the way of the border that looketh to the Valley of Zeboim towards the wilderness," *i.e.* to the Valley of Hyænas.

The colour of the Striped Hyæna varies according to its age. When young, as is the case with many creatures, birds as well as mammals, the stripes from which it derives its name are much more strongly marked than in the adult specimen. The general hue of the fur is a pale grey-brown, over which are drawn a number of dark stripes, extending along the ribs and across the limbs.

In the young animal these stripes are nearly twice as dark and twice as wide as in the adult, and they likewise appear on the face and on other parts of the body, whence they afterwards vanish. The fur is always rough; and along the spine, and especially over the neck and shoulders, it is developed into a kind of mane, which gives a very fierce aspect to the animal. The illustration shows a group of Hyænas coming to feed on the relics of a dead animal. The jackals and vultures have eaten as much of the flesh as they can manage, and the vultures are sitting, gorged, round the stripped bones. The Hyænas are now coming up to play their part as scavengers, and have already begun to break up the bones in their crushing-mills of jaws.

THE WEASEL.

Difficulty of identifying the Weasel of Scripture—The Weasel of Palestine –
Suggested identity with the Ichneumon.

THE word Weasel occurs once in the Holy Scriptures, and therefore it is necessary that the animal should be mentioned. There is a great controversy respecting the identification of the animal, inasmuch as there is nothing in the context which gives the slightest indication of its appearance or habits.

The passage in question is that which prohibits the Weasel and the mouse as unclean animals (see Lev. xi. 29). Now the word which is here translated Weasel is *Choled*, or *Cho'd*; and, I believe, never occurs again in the whole of the Old Testament. Mr. W. Houghton conjectures that the Hebrew word *Choled* is identical with the Arabic *Child* and the Syriac *Chuldo*, both words signifying a mole; and therefore infers that the unclean animal in question is not a Weasel, but a kind of mole.

The Weasel does exist in Palestine, and seems to be as plentiful there as in our own country. Indeed, the whole tribe of Weasels is well represented, and the polecat is seen there as well as the Weasel.

There is hardly any animal which, for its size, is so much dreaded by the creatures on it which it preys as the common Weasel.

Although its small proportions render a single Weasel an insignificant opponent to man or dog, yet it can wage a sharp battle even with such powerful foes, and refuses to yield except at the last necessity.

The proportions of the Weasel are extremely small, a full-grown male not exceeding ten inches in length. The color of its fur is bright reddish-brown on the upper parts of the body, and the under-portions are pure white. The audacity and courage of this little animal are really remarkable. It seems to hold every being except itself in the most sovereign contempt, and, to all appearances, is as ready to match itself against a man as against a mouse.

It is a terrible foe to many of the smaller animals, such as rats

WEASELS.



and mice, and performs a really good service to the farmer in destroying many of these farmyard pests. The Weasel is specially dreaded by rats and mice, because there is no hole through which they can pass that will not also admit the passage of their enemy; and, as the Weasel is most persevering and determined in pursuit, it seldom happens that rats or mice escape when their little foe has set itself fairly on their track.

Not only does the Weasel pursue its prey through the windings of the burrows, but it will even cross water in the chase. When it has at last reached its victim, it leaps upon the devoted creature and endeavours to fix its teeth in the back of the neck, where it retains its deadly hold in spite of every struggle on the part of the wounded animal. If the attack be rightly made and the animal a small one, the Weasel can drive its teeth into the brain and cause instantaneous death.

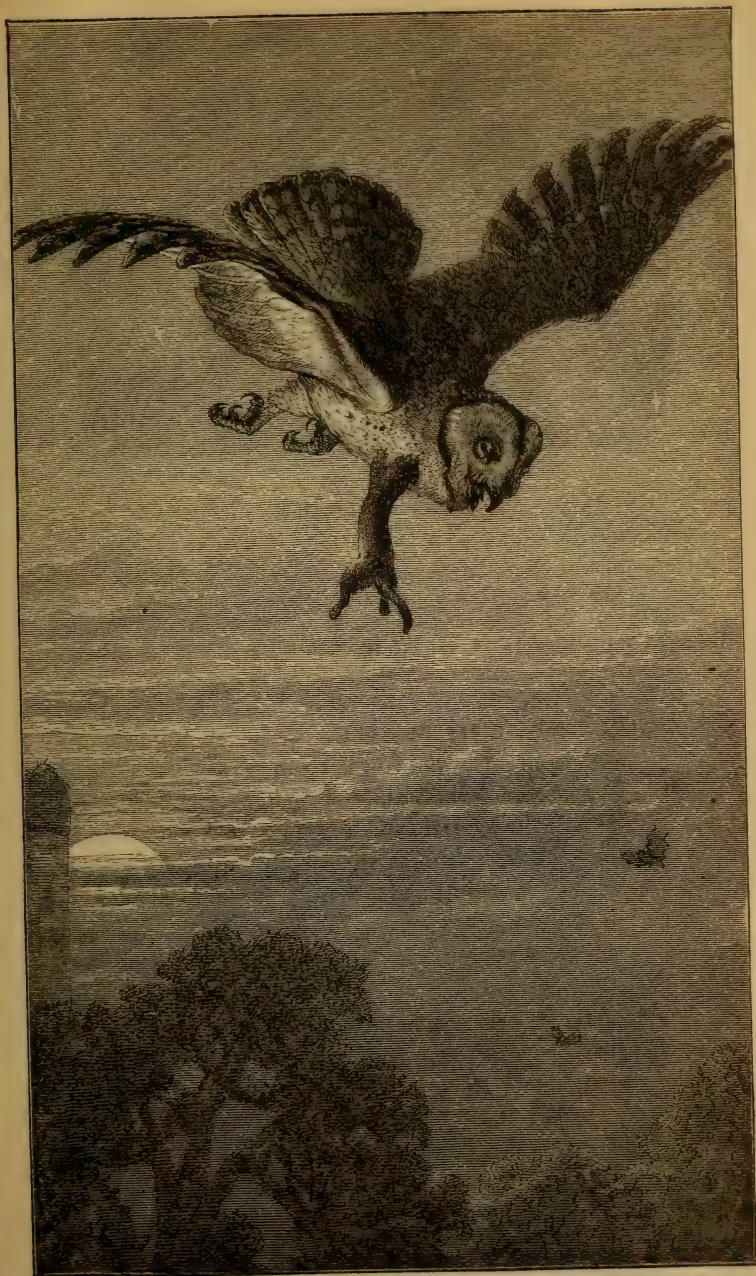
The Weasel is very fond of eggs, and young birds of all kinds. It is said that an egg that has been broken by a Weasel, can always be recognized, by the peculiar mode which the little creature employs for the purpose.

Instead of breaking the egg to pieces or biting a large hole in the shell, the Weasel contents itself with making quite a small aperture at one end, through which it abstracts the liquid contents.

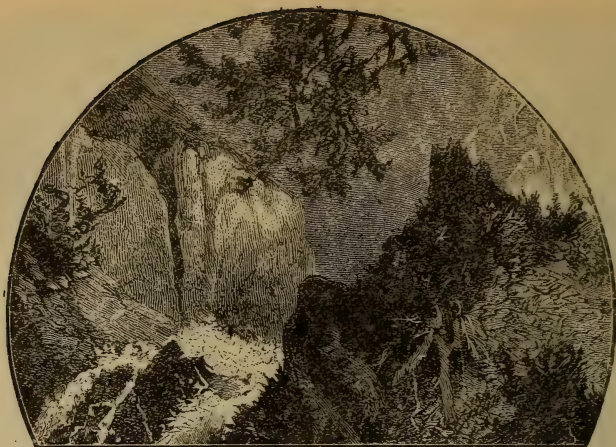
A curious example of the courage of the Weasel, is related by a gentleman who while crossing a field at dusk, saw an owl pounce upon some object on the ground, and carry it in the air.

In a short time the bird showed signs of distress, trying to free itself from some annoying object by means of its talons, and flapping about in a very bewildered manner.

Soon afterwards the owl fell dead to the earth; and when the spectator of the aerial combat approached, a weasel ran away from the dead body of the bird, itself being apparently uninjured. On examination of the owl's body, it was found that the Weasel, which had been marked out for the owl's repast, had in its turn become the assailant, and had attacked the unprotected parts which lie beneath the wings. A considerable wound had been made in that spot, and the large blood-vessels torn through.



THE BITER E.T.



THE BADGER.

Difficulty in identifying the *Tachash* of Scripture—References to “Badgers’ skins”—The Dugong thought to be the Badger—The Bedouin sandals—Nature of the materials for the Tabernacle—Habits of the Badger—The species found in Palestine—Uses of the Badgers’ skins—Looseness of zoological terms.

UNTIL very lately, there was much difficulty in ascertaining whether the word *Tachash* has been rightly translated as Badger. It occurs in several parts of the Scriptures, and almost invariably is used in relation to a skin or fur of some sort. We will first examine the passages in which the Badger is mentioned, and then proceed to identify the animal.

Nearly all the references to the Badger occur in the book of Exodus, and form part of the directions for constructing the Tabernacle and its contents. The first notice of the word occurs in Exodus xxv. 5, where the people of Israel are ordered to bring their offerings for the sanctuary, among which offerings are gold, silver, and brass, blue, purple, and scarlet, fine linen, goats’ hair, rams’ skins dyed red, badgers’ skins, and shittim wood—all these to be used in the construction of the Tabernacle. Then a little farther on, in chapter xxvi. 14, we find one of the special uses to which the badgers’ skins were to be put, namely, to make the outer covering or roof of the tabernacle. Another use for the badgers’ skins was to form an outer covering for the ark, table

of shewbread, and other furniture of the Tabernacle, when the people were on the march.

In all these cases the badger-skin is used as a covering to defend a building or costly furniture, but there is one example where it is employed for a different purpose. This passage occurs in the book of Ezekiel, chapter xvi. 10. The prophet is speaking of Jerusalem under the image of a woman, and uses these words, "I anointed thee with oil; I clothed thee also with brodered work, and shod thee with badger's skin, and I girded thee about with fine linen, and I covered thee with silk. I decked thee also with ornaments, and I put bracelets upon thy hands, and a chain upon thy neck, and I put a jewel on thy forehead, and earrings in thine ears, and a beautiful crown upon thine head."

So we have here the fact, that the same material which was used for the covering of the Tabernacle, and of the sacred furniture, could also be used for the manufacture of shoes. This passage is the more valuable because of an inference which may be drawn from it. The reader will see that the badger-skin, whatever it may have been, must have been something of considerable value, and therefore, in all probability, something of much rarity.

In the present instance, it is classed with the most luxurious robes that were known in those days, and it is worthy of special mention among the bracelet, earrings, necklace, and coronal with which the symbolized city was adorned. If the reader will now refer to the passage in which the children of Israel were commanded to bring their offerings, he will see that in those cases also the badger-skins were ranked with the costliest articles of apparel that could be found, and had evidently been brought from Egypt, the peculiar home of all the arts; together with the vast quantity of gold and jewels which were used for the same sacred purpose.

Now we find that the badger-skins in question must possess three qualities: they must be costly, they must be capable of forming a defence against the weather, and they must be strong enough to be employed in the manufacture of shoes. If we accept the word *Tachash* as signifying a Badger, we shall find that these conditions have been fulfilled.

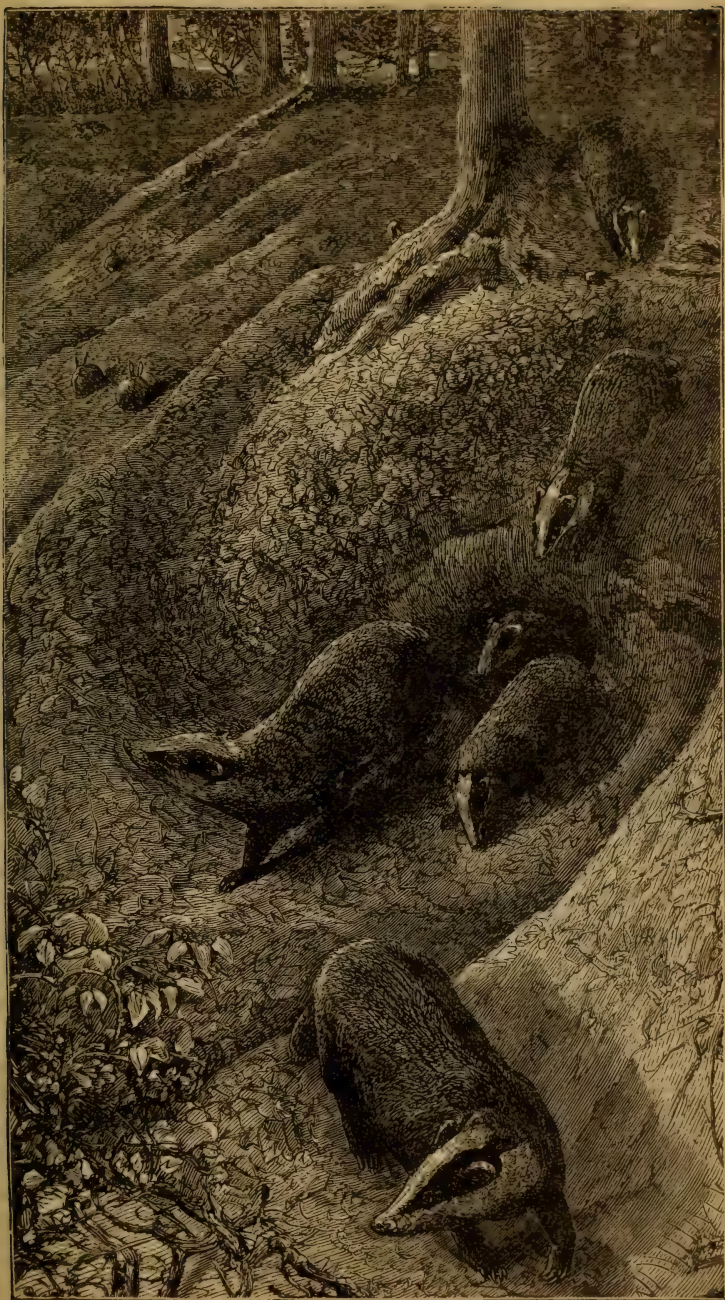
But many commentators have thought that badger-skins could

not have been procured in sufficient numbers for the purpose, and have therefore conjectured that some other animal must be signified by the word Tachash.

A species of dugong (*Halicore hemprichii*) is the animal that has been selected as the Badger of the Scriptures. It is one of the marine mammalia, and always lives near the shore, where it can find the various algæ on which it feeds. It is a gregarious animal, and, as it frequently ascends rivers for some distance, it may be captured in sufficient numbers to make both its flesh and skin useful. Moreover, it is of considerable size, fourteen or fifteen feet in length being its usual dimensions, so that a comparatively small number of the skins would be required for the covering of the Tabernacle.

That shoes can be made of it is evident from the fact that at the present day shoes, or rather sandals, are made from its hide, and are commonly used by the Bedouins. But the very qualities and peculiarities which render it a fit material for the sandal of a half-naked Bedouin Arab, who has to walk continually over hard, hot, sandy, and rough ground, would surely make it unsuitable for the delicate shoes worn by a woman of rank who spends her time in the house, and the rest of whose clothing is of fine linen and silk, embroidered with gold and jewels. In our own country, the hobnailed shoes of the ploughman and the slight shoe of a lady are made of very different materials, and it is reasonable to conjecture that such was the case when the passage in question was written.

Then Dr. Robinson, who admits that the hide of the dugong could hardly have been used as the material for a lady's shoe, thinks that it would have answered very well for the roof of the Tabernacle, because it was large, clumsy, and coarse. It seems strange that he did not also perceive that the two latter qualities would completely disqualify such skins for that service. Everything clumsy and coarse was studiously prohibited, and nothing but the very best was considered fit for the Tabernacle of the Lord. By special revelation, Moses was instructed to procure, not merely the ordinary timber of the country for the framework—not only the fabrics which would keep out rain and wind—not simply the metals in common use, from which to make the lamps and other furniture—not the ordinary oils for supplying the lamps; but, on the contrary, the finest



BADGERS.

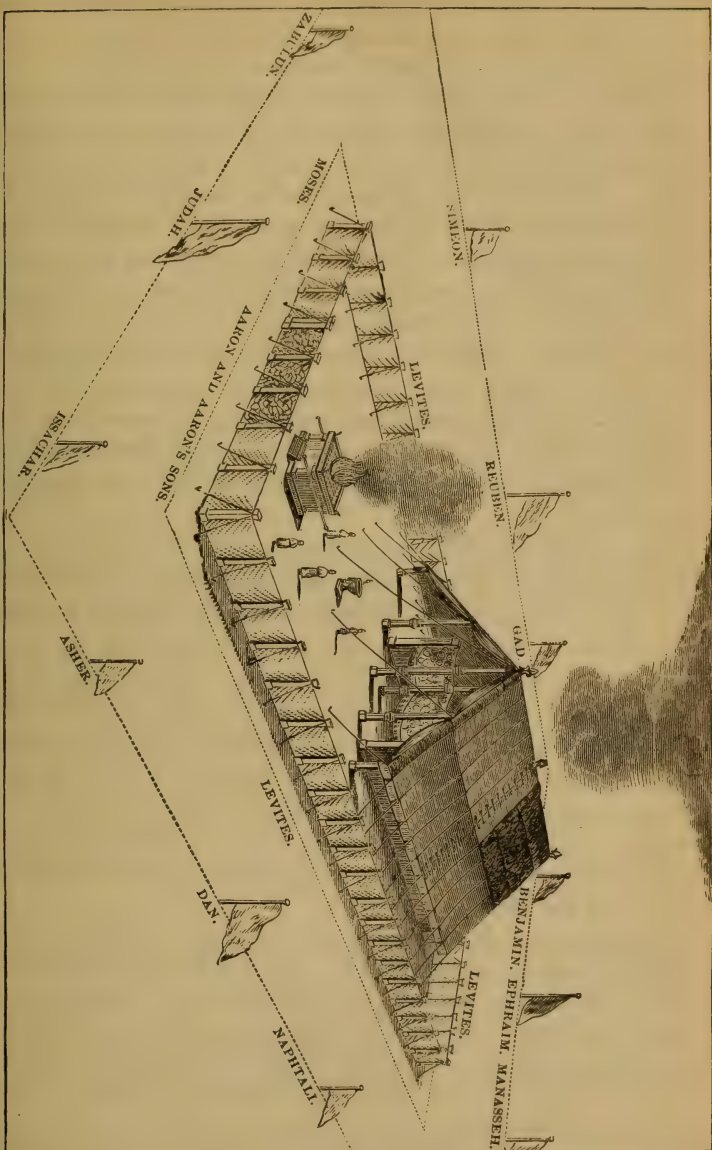
linen, the most elaborate embroidery, the rarest woods, the purest gold, the costliest gems, were demanded, and nothing common or inferior was accepted. The commonest material that was permitted was the long, soft fleece of rams' wool; but, even in that case, the wool had to be dyed of the regal scarlet—a dye so rare and so costly that none but the wealthiest rulers could use it. Even the very oil that burned in the lamps must be the purest olive-oil, prepared expressly for that purpose.

The very fact, therefore, that any article was plentiful and could easily be obtained, would be a proof that such article was not used for so sacred a purpose; while it is impossible that anything coarse and clumsy could have been accepted for the construction of that Tabernacle within which the Shekinah ever burned over the Mercy-seat—over which the cloud rested by day, and the fire shone by night, visible external proofs of the Divine glory within.

We therefore dismiss from our minds the possibility of accepting any material for it which was not exceptionably valuable, and which would be employed in the uses of ordinary life. The great object of the minutely-elaborate directions which were given through Moses to the Israelites was evidently to keep continually before their eyes the great truth that they owed all to God, and that their costliest offerings were but acknowledgments of their dependence.

We will now presume that the Tachash of the Pentateuch and Ezekiel is really the animal which we know by the name of Badger. It exists throughout the whole of the district traversed by the Israelites, though it is not very plentiful, nor is it easily taken. Had such been the case, its fur would not have been employed in the service of the sanctuary.

It is nocturnal in its habits, and very seldom is seen during the hours of daylight, so that it cannot be captured by chase. It is not gregarious, so that it cannot be taken in great numbers, as is the case with certain wild animals which have been thought to be the Tachash of Scripture. It is not a careless animal, so that it cannot be captured or killed without the exercise of considerable ingenuity, and the expenditure of much time and trouble. It is one of the burrowing animals, digging for itself a deep subterranean home, and always ready whenever it is



SUPPOSED FORM AND ARRANGEMENT OF THE TABERNACLE, CAMP, ETC.

alarmed to escape into the dark recesses of its dwelling, from which it can scarcely be dislodged. It is not a large animal, so that a considerable number of skins would be required in order to make a covering which should overlap a structure forty-five feet in length and fifteen in breadth. Were it a solitary animal, there might be a difficulty in procuring a sufficient number of skins. But it is partly gregarious in its habits, living together in small families, seven or eight being sometimes found to inhabit a single dwelling-place. It is, therefore, sufficiently rare to make its skin valuable, and sufficiently plentiful to furnish the requisite number of skins. All these facts tend to show that the cost of such a covering must have been very great, even though it was the outermost, and, consequently, the least valuable of the four. It has been suggested that these skins were only used to lay over the lines where the different sets of coverings overlapped each other, and that, in consequence, they need not have been very numerous.

But we find that these same skins, which were evidently those which formed the external roof, were used, when the Tabernacle was taken down, for the purpose of forming distinct coverings for the ark of the testimony, the table of shewbread, the seven-branched candlestick, the golden altar, the various vessels used in the ministrations, and lastly, the altar of sacrifice itself. Thus, when we recollect the dimensions of the ark, the table, the candlestick, and the two altars, we shall see that, in order to make separate covers for them, a quantity of material would be used which would be amply sufficient to cover the whole roof of the Tabernacle, even if it had, as was most probably the case, a ridged, and not a flat roof.

We now come to our next point, namely, the aptitude of the Badger's skin to resist weather. Any one who has handled the skin of the Badger will acknowledge that a better material could hardly be found. The fur is long, thick, and, though light, is moderately stiff, the hairs falling over each other in such a manner as to throw off rain or snow as off a penthouse. And, as to the third point, namely, its possible use as a material for the manufacture of shoes, we may call to mind that the skin of the Badger is proverbially tough, and that this very quality has caused the animal to be subjected to most cruel treatment by a class of sporting men which is now almost extinct.

The Septuagint gives little assistance in determining the precise nature of the Tachash, and rather seems to consider the word as expressive of the colour with which the fur was dyed than that of the animal from which it was taken. Still, it must be remembered that not only are zoological terms used very loosely in the Scriptures, but that in Hebrew, as in all other languages, the same combination of letters often expresses two different ideas, so that the word Tachash may equally signify a colour and an animal. Moreover, it has been well pointed out that the repeated use of the word in the plural number shows that it cannot refer to colour; while its almost invariable combination with the Hebrew word that signifies a skin implies that it does not refer to colour, but to an animal.

What that animal may be, is, as I have already mentioned, conjectural. But, as the authorized translation renders the word as Badger, and as this reading fulfils the conditions necessary to its identification, and as no other reading does fulfil them, we cannot be very far wrong if we accept that translation as the correct one, and assume the Tachash of the Scriptures to be the animal which we call by the name of Badger.

THE BEAR.

The Syrian Bear—Identity of the Hebrew and Arabic titles—Its colour variable according to age—Bears once numerous in Palestine, and now only occasionally seen—Reason for their diminution—Present localities of the Bear, and its favourite haunts—Food of the Bear—Its general habits—Its ravages among the flocks—The Bear dangerous to mankind—The Bear robbed of her whelps—Illustrative passages—Its mode of fighting—Various references to the Bear, from the time of Samuel to that of St. John.

WHATEVER doubt may exist as to the precise identity of various animals mentioned in the Scriptures, there is none whatever as to the creature which is frequently alluded to under the name of Bear.

The Hebrew word is *Dôb*, and it is a remarkable fact that the name of this animal in the Arabic language is almost identical with the Hebrew term, namely, *Dubb*. The peculiar species of Bear which inhabits Palestine is the Syrian Bear (*Ursus Isabellinus*), and, though it has been variously described by different eye-witnesses, there is no doubt that the same species was seen by them all. As is the case with many animals, the Syrian Bear changes its colour as it grows older. When a cub, it is of a darkish brown, which becomes a light brown as it approaches maturity. But, when it has attained its full growth, it becomes cream-coloured, and each succeeding year seems to lighten its coat, so that a very old Bear is nearly as white as its relative of the Arctic regions. Travellers, therefore, who have met the younger specimens, have described them as brown in hue, while those who have seen more aged individuals have stated that the colour of the Syrian Bear is white.

Owing to the destruction of forests, the Bear, which is essentially a lover of the woods, has decreased considerably in number. Yet, even at the present time, specimens may be seen by the watchful traveller, mostly about the range of Lebanon, but sometimes at a considerable distance from that locality. Mr. Tristram, for example, saw it close to the Lake of Gennesaret. "We never met with so many wild animals as on one of those days. First of all, a wild boar got out of some scrub close to us, as we were ascending the valley. Then a deer was started below, ran up the cliff, and wound along the ledge, passing close to us. Then a large ichneumon almost crossed my feet and ran into a cleft; and, while endeavouring to trace him, I was amazed to see a brown Syrian Bear clumsily but rapidly clamber down the rocks and cross the ravine. He was, however, far too cautious to get within hailing distance of any of the riflemen."

The same author mentions that some of the chief strongholds of this Bear are certain clefts in the face of a precipitous chasm through which the river Leontes flows. This river runs into the sea a few miles northward of Tyre, and assists in carrying off the melted snows from the Lebanon range of mountains. His description is so picturesque, that it must be given in his own words. "The channel, though a thousand feet deep, was so narrow that the opposite ridge was within gunshot. Looking down the giddy abyss, we could see the cliff on our side partially



covered with myrtle, bay, and caper hanging from the fissures, while the opposite side was perforated with many shallow caves, the inaccessible eyries of vultures, eagles, and lanner falcons, which were sailing in multitudes around. The lower part had many ledges clad with shrubs, the strongholds of the Syrian Bear, though inaccessible even to goats. Far beneath dashed the milk-white river, a silver line in a ruby setting of oleanders, roaring doubtless fiercely, but too distant to be heard at the height on which we stood. This *cleft* of the Leontes was the only true Alpine scenery we had met with in Palestine, and in any country, and amidst any mountains, it would attract admiration."

On those elevated spots the Bear loves to dwell, and throughout the summer-time generally remains in such localities. For the Bear is one of the omnivorous animals, and is able to feed on vegetable as well as animal substances, preferring the former when they can be found. There is nothing that a Bear likes better than strawberries and similar fruits, among which it will revel throughout the whole fruit season, daintily picking the ripest berries, and becoming wonderfully fat by the constant banquet. Sometimes, when the fruits fail, it makes incursions among the cultivated grounds, and is noted for the ravages which it makes among a sort of vetch which is much grown in the Holy Land.

But during the colder months of the year the Bear changes its diet, and becomes carnivorous. Sometimes it contents itself with the various wild animals which it can secure, but sometimes it descends to the lower plains, and seizes upon the goats and sheep in their pastures. This habit is referred to by David, in his well-known speech to Saul, when the king was trying to dissuade him from matching himself against the gigantic Philistine. "And Saul said to David, Thou art not able to go against this Philistine to fight with him: for thou art but a youth, and he a man of war from his youth. . . . Thy servant kept his father's sheep, and there came a lion and a bear, and took a lamb out of the flock: and I went out after him, and smote him, and delivered it out of his hand; and when he arose against me, I caught him by the beard, and smote him, and slew him. Thy servant slew both the lion and the bear: and this uncircumcised Philistine shall be as one of them, seeing he hath defied the armies of the living God."—1 Sam. xvii. 33—36.



Though not generally apt to attack mankind, it will do so if first attacked, and then becomes a most dangerous enemy. See, for example, that most graphic passage in the book of the prophet Amos, whose business as a herdsman must have made him conversant with the habits, not only of the flocks and herds which he kept, but of the wild beasts which might devour them:—"Woe unto you that desire the day of the Lord! to what end is it for you? the day of the Lord is darkness, and not light. As if a man did flee from a lion, and a bear met him; or went into a house, and leaned his hand on the wall, and a serpent bit him." (v. 19.)

Another reference to the dangerous character of the Bear is made in 2 Kings ii. 23, 24, in which is recorded that two she-bears came out of the wood near Bethel, and killed forty-two of the children that mocked at Elisha.

As the Bear is not swift of foot, but rather clumsy in its movements, it cannot hope to take the nimbler animals in open chase. It prefers to lie in wait for them in the bushes, and to strike them down with a sudden blow of its paw, a terrible weapon, which it can wield as effectively as the lion uses its claws. An allusion to this habit is made in the Lamentations of Jeremiah (iii. 10), "He was unto me as a bear lying in wait, and as a lion in secret places."

Harmless to man as it generally is, there are occasions on which it becomes a terrible and relentless foe, not seeking to avoid his presence, but even searching for him, and attacking him as soon as seen. In the proper season of the year, hunters, or those who are travelling through those parts of the country infested by the Bear, will sometimes find the cubs, generally two in number, their mother having left them in the den while she has gone to search for food. Although they would not venture to take the initiative in an attack upon either of the parents, they are glad of an opportunity which enables them to destroy one or two Bears without danger to themselves. The young Bears are easily killed or carried off, because at a very early age they are as confident as they are weak, and do not try to escape when they see the hunters approaching.

The only danger lies in the possibility that their deed may be discovered by the mother before they can escape from the locality, and, if she should happen to return while the robbers



SEEKING AN OUTLOOK.

are still in the neighbourhood, a severe conflict is sure to follow. At any time an angry Bear is a terrible antagonist, especially if it be wounded with sufficient severity to cause pain, and not severely enough to cripple its movements. But, when to this easily-roused ferocity is added the fury of maternal feelings, it may be imagined that the hunters have good reason to fear its attack.

To all animals that rear their young is given a sublime and almost supernatural courage in defending their offspring, and from the lioness, that charges a host of armed men when her cubs are in danger, to the hen, which defies the soaring kite or prowling fox, or to the spider, that will give up her life rather than abandon her yet unhatched brood, the same self-sacrificing spirit actuates them all. Most terrible therefore is the wrath of a creature which possesses, as is the case of the Bear, the strongest maternal affections, added to great size, tremendous weapons, and gigantic strength. That the sight of a Bear bereaved of her young was well known to both writers and contemporary readers of the Old Testament, is evident from the fact that it is mentioned by several writers, and always as a familiar illustration of furious anger. See for example 2 Sam. xvii. 8, when Hushai is dissuading Absalom from following the cautious counsel of Ahithophel, "For thou knowest thy father and his men, that they be mighty men of war, and they be chafed in their minds as a bear robbed of her whelps in the field." Solomon also, in the Proverbs (xvii. 12), uses the same image, "Let a bear robbed of her whelps meet a man, rather than a fool in his folly."

When the Bear fights, it delivers rapid strokes with its armed paw, tearing and rending away everything that it strikes. A blow from a bear's paw has been several times known to strip the entire skin, together with the hair, from a man's head, and, when fighting with dogs, to tear its enemies open as if each claw were a chisel.

Bears are capable of erecting themselves on their hinder limbs, and of supporting themselves in an upright position with the greatest ease. When attacked in close combat, they have a habit of rearing themselves upon their hinder feet—a position which enables them to deliver with the greatest effect the terrific blows with their fore paws, upon which they chiefly rely in defending themselves.

With fearful ingenuity, the Bear, when engaged with a human foe, directs its attack upon the head of its antagonist, and, as previously stated, has been known to strike off the entire scalp with a single blow.



A FAMILY-PARTY.

A hunter who had the misfortune to be struck down by a Bear—and the singular good fortune to afterwards escape from it—says, that when he was lying on the ground at the mercy of the angry

beast, the animal, after biting him upon the arms and legs, deliberately settled itself upon his head and began to scarify it in the fiercest manner, leaving wounds eight and nine inches in length.

Bears are the more terrible antagonists from their extreme tenacity of life, and the fearful energy which they compress into the last moment of existence, when they are suffering from a mortal wound. Unless struck in the heart or brain, the mortally-wounded Bear is more to be feared than if it had received no injury whatever, and contrives to wreak more harm in the few minutes that immediately precede its death, than it had achieved while still uninjured.

Many a hunter has received mortal hurts by incautiously approaching a Bear, which lay apparently dead, but was in reality only stunned.





THE PORCUPINE.

Presumed identity of the Kippôd with the Porcupine—Habits of the Porcupine—the common Porcupine found plentifully in Palestine.

ALTHOUGH, like the hedgehog, the Porcupine is not mentioned by name in the Scriptures, many commentators think that the word Kippôd signifies both the hedgehog and Porcupine.

That the two animals should be thought to be merely two varieties of one species is not astonishing, when we remember the character of the people among whom the Porcupine lives. Not having the least idea of scientific geology, they look only to the most conspicuous characteristics, and because the Porcupine and hedgehog are both covered with an armature of quills, and the quills are far more conspicuous than the teeth, the inhabitants of Palestine naturally class the two animals together. In reality, they belong to two very different orders, the hedgehog being classed with the shrew-mice and moles, while the Porcupine is a rodent animal, and is classed with the rats, rabbits, beavers, marmots, and other rodents.

It is quite as common in Palestine as the hedgehog, a fact which increases the probability that the two animals may have been mentioned under a common title. Being a nocturnal animal, it retires during the day-time to some crevice in a rock or burrow in the ground, and there lies sleeping until the sunset

awakens it and calls it to action. And as the hedgehog is also a nocturnal animal, the similarity of habit serves to strengthen the mutual resemblance.

The Porcupine is peculiarly fitted for living in dry and unwatered spots, as, like many other animals, of which our common rabbit is a familiar example, it can exist without water, obtaining the needful moisture from the succulent roots on which it feeds.

The sharply pointed quills with which its body is covered are solid, and strengthened in a most beautiful manner by internal ribs, that run longitudinally through them, exactly like those of the hollow iron masts, which are now coming so much into use. As they are, in fact, greatly developed hairs, they are continually shed and replaced, and when they are about to fall are so loosely attached that they fall off if pulled slightly, or even if the animal shakes itself. Consequently the shed quills that lie about the localities inhabited by the Porcupine indicate its whereabouts, and so plentiful are these quills in some places, that quite a bundle can be collected in a short time.

There are many species of Porcupines which inhabit different parts of the world, but that which has been mentioned is the common Porcupine of Europe, Asia, and Africa.

THE MOLE.

The two Hebrew words which are translated as Mole—Obscurity of the former name—A parallel case in our own language—The second name—The Moles and the Bats, why associated together—The real Mole of Scripture, its different names, and its place in zoology—Description of the Mole-rat and its general habits—Curious superstition—Discovery of the species by Mr. Tristram—Scripture and science—How the Mole-rat finds its food—Distinction between the Mole and the present animal.

THERE are two words which are translated as Mole in our authorized version of the Bible. One of them is so obscure that there seems no possibility of deciding the creature that is represented by it. We cannot even tell to what class of the animal

kingdom it refers, because in more than one place it is mentioned as one of the unclean birds that might not be eaten (translated as *swan* in our version), whereas, in another place, it is enumerated among the unclean creeping things.

We may conjecture that the same word might be used to designate two distinct animals, though we have no clue to their identification. It is rather a strange coincidence, in corroboration of this theory, that our word Mole signifies three distinct objects—firstly, an animal; secondly, a cutaneous growth; and thirdly, a bank of earth. Now, supposing English to be a dead



THE MOLE-RAT.

language, like the Hebrew, it may well be imagined that a translator of an English book would feel extremely perplexed when he saw the word Mole used in such widely different senses.

The best Hebraists can do no more than offer a conjecture founded on the structure of the word *Tinshemeth*, which is thought by some to be the chameleon. Some think that it is the Mole, some the ibis, some the salamander, while others

consider it to be the centipede ; and in neither case have any decisive arguments been adduced.

We will therefore leave the former of these two names, and proceed to the second, *Chephor-peroth*.

This word occurs in that passage of Isaiah which has already been quoted when treating of the bat. "In that day a man shall cast his idols of silver and his idols of gold, which they made each one to himself to worship, to the moles and to the bats ; to go into the clefts of the rocks and into the tops of the ragged rocks, for fear of the Lord and for the glory of his majesty, when he ariseth to shake terribly the earth."

It is highly probable that the animal in question is the Mole of Palestine, which is not the same as our European species, but is much larger in size, and belongs to a different order of mammalia. The true Mole is one of the insectivorous and carnivorous animals, and is allied to the shrews and the hedgehogs ; whereas the Mole of Palestine (*Spalax typhlus*) is one of the rodents, and allied to the rabbits, mice, marmots, and jerboas. A better term for it is the Mole-rat, by which name it is familiar to zoologists. It is also known by the names of *Slepez* and *Nenni*.

In length it is about eight inches, and its colour is a pale slate. As is the case with the true Moles, the eyes are of very minute dimensions, and are not visible through the thick soft fur with which the whole head and body are covered. Neither are there any visible external ears, although the ear is really very large, and extremely sensitive to sound. This apparent privation of both ears and eyes gives to the animal a most singular and featureless appearance, its head being hardly recognisable as such but for the mouth, and the enormous projecting teeth, which not only look formidable, but really are so. There is a curious superstition in the Ukraine, that if a man will dare to grasp a Mole-rat in his bare hand, allow it to bite him, and then squeeze it to death, the hand that did the deed will ever afterwards possess the virtue of healing goitre or scrofula.

This animal is spread over a very large tract of country, and is very common in Palestine. Mr. Tristram gives an interesting account of its discovery. "We had long tried in vain to capture the Mole of Palestine. Its mines and its mounds we had seen everywhere, and reproached ourselves with having omitted the

mole-trap among the items of our outfit. From the size of the mounds and the shallowness of the subterranean passages, we felt satisfied it could not be the European species, and our hopes of solving the question were raised when we found that one of them had taken up its quarters close to our camp. After several vain attempts to trap it, an Arab one night brought a live Mole in a jar to the tent. It was no Mole properly so called, but the Mole-rat, which takes its place throughout Western Asia. The man, having observed our anxiety to possess a specimen, refused to part with it for less than a hundred piastres, and scornfully rejected the twenty piastres I offered. Ultimately, Dr. Chaplin purchased it for five piastres after our departure, and I kept it alive for some time in a box, feeding it on sliced onions."

The same gentleman afterwards caught many of the Mole-rats, and kept them in earthen vessels, as they soon gnawed their way through wood. They fed chiefly on bulbs, but also ate sopped bread. Like many other animals, they reposed during the day, and were active throughout the night.

The author then proceeds to remark on the peculiarly appropriate character of the prophecy that the idols should be cast to the Moles and the bats. Had the European Mole been the animal to which reference was made, there would have been comparatively little significance in the connexion of the two names, because, although both animals are lovers of darkness, they do not inhabit similar localities. But the Mole-rat is fond of frequenting deserted ruins and burial-places, so that the Moles and the bats are really companions, and as such are associated together in the sacred narrative. Here, as in many other instances, we find that closer study of the Scriptures united to more extended knowledge are by no means the enemies of religion, as some well-meaning, but narrow-minded persons think. On the contrary, the Scriptures were never so well understood, and their truth and force so well recognised, as at the present day; and science has proved to be, not the destroyer of the Bible, but its interpreter. We shall soon cease to hear of "*Science versus the Bible*," and shall substitute "*Science and the Bible versus Ignorance and Prejudice*."

The Mole-rat needs not to dig such deep tunnels as the true Moles, because its food does not lie so deep. The Moles live chiefly upon earthworms, and are obliged to procure them in the

varying depths to which they burrow. But the Mole-rat lives mostly upon roots, preferring those of a bulbous nature. Now bulbous roots are, as a rule, situated near the surface of the ground, and, therefore, any animal which feeds upon them must be careful not to burrow too deeply, lest it should pass beneath them. The shallowness of the burrows is thus accounted for. Gardens are often damaged by this animal, the root-crops, such as carrots and onions, affording plenty of food without needing much exertion.

The Mole-rat does not keep itself quite so jealously secluded as does our common Mole, but occasionally will come out of the burrow and lie on the ground, enjoying the warm sunshine. Still it is not easily to be approached; for though its eyes are almost useless, the ears are so sharp, and the animal is so wary, that at the sound of a footstep it instantly seeks the protection of its burrow, where it may bid defiance to its foes.

How it obtains its food is a mystery. There seems to be absolutely no method of guiding itself to the precise spot where a bulb may be growing. It is not difficult to conjecture the method by which the Mole discovers its prey. Its sensitive ears may direct it to the spot where a worm is driving its way through the earth, and should it come upon its prey, the very touch of the worm, writhing in terror at the approach of its enemy, would be sufficient to act as a guide. I have kept several Moles, and always noticed that, though they would pass close to a worm without seeming to detect its presence, either by sight or scent, at the slightest touch they would spring round, dart on the worm, and in a moment seize it between their jaws. But with the Mole-rat the case is different. The root can utter no sound, and can make no movement, nor is it likely that the odour of the bulb should penetrate through the earth to a very great distance.



THE MOUSE.

The Mice which marred the land—The Field-mouse—Its destructive habits and prolific nature—The Hamster, and its habits—The Jerboa, its activity and destructiveness—Various species of Dormice and Sand-rats.

THAT the Mouse mentioned in the Old Testament was some species of rodent animal is tolerably clear, though it is impossible to state any particular species as being signified by the Hebrew word *Akbar*. The probable derivation of this name is from two words which signify "destruction of corn," and it is therefore evident that allusion is made to some animal which devours the produce of the fields, and which exists in sufficient numbers to make its voracity formidable.

Some commentators on the Old Testament translate the word *Akbar* as jerboa. Now, although the jerboa is common in Syria, it is not nearly so plentiful as other rodent animals, and would scarcely be selected as the means by which a terrible disaster is made to befall a whole country. The student of Scripture is well aware that, in those exceptional occurrences which are called miracles, a needless development of the wonder-working power is never employed. We are not to suppose, for example, that the clouds of locusts that devoured the harvests of the Egyptians were created for this express purpose, but that their already existing hosts were concentrated upon a limited area, instead of being spread over a large surface. Nor need we fancy that the frogs which rendered their habitations unclean, and contaminated their food, were brought into existence simply to inflict a severe punishment on the fastidious and superstitious Egyptians.

Of course, had such an exercise of creative power been needed, it would have been used, but we can all see that a needless miracle is never worked. He who would not suffer even a crumb of the miraculously multiplied bread to be wasted, is not likely to waste that power by which the miracle was wrought.



DAGON FALLEN DOWN BEFORE THE ARK.

If we refer to the early history of the Israelitish nation, as told in 1 Sam. iv.—vi., we shall find that the Israelites made an unwarrantable use of the ark, by taking it into battle, and that it was captured and carried off into the country of the Philistines. Then various signs were sent to warn the captors to send the ark back to its rightful possessors. Dagon, their great god, was prostrated before it, painful diseases attacked them, so that many died, and scarcely any seem to have escaped, while their harvests were ravaged by numbers of “mice that marred the land.”

The question is now simple enough. If the ordinary translation is accepted, and the word Akbar rendered as Mouse, would the necessary conditions be fulfilled, *i.e.* would the creature be



MOUSE AND NEST.

destructive, and would it exist in very great numbers? Now we shall find that both these conditions are fulfilled by the common Field-mouse.

This little creature is, in proportion to its size, one of the most destructive animals in the world. Let its numbers be increased from any cause whatever, and it will most effectually "mar the land." It will devour every cereal that is sown, and kill almost any sapling that is planted. It does not even wait for the corn to spring up, but will burrow beneath the surface, and dig out the seed before it has had time to sprout. In the early part of the year, it will eat the green blade as soon as it springs out of the ground, and is an adept at climbing the stalks of corn, and plundering the ripe ears in the autumn.



JERBOA, OR LEAPING MOUSE.

When stacked or laid up in barns, the harvest is by no means safe, for the Mice will penetrate into any ordinary barn, and find their way into any carelessly-built stack, from which they can scarcely be ejected. The rat itself is not so dire a foe to the farmer, as the less obtrusive, but equally mischievous Field-mouse. The ferret will drive the rats out of their holes, and if they have taken possession of a wheat-stack they can be ejected by depriving them of access to water. But the burrows of the Field-mouse are so small that a ferret cannot make its way

through them, and the nightly dew that falls on the stack affords an ample supply of water.

When the Field-mouse is deprived of the food which it loves best, it finds a subsistence among the trees. Whenever mice can discover a newly-planted sapling, they hold great revel upon it, eating away the tender young bark as high as they can reach, and consequently destroying the tree as effectually as if it were



THE FIELD-MOUSE.

cut down. Even when the young trees fail them, and no tender bark is to be had, the Field-mice can still exert their destructive powers. They will then betake themselves to the earth, burrow beneath its surface, and devour the young rootlets of the forest trees. All botanists know that a healthy tree is continually pushing forward fresh roots below the ground, in order to gain sufficient nourishment to supply the increasing growth above. If, therefore, these young roots are destroyed, the least harm

that can happen to the tree is that its further growth is arrested ; while, in many cases, the tree, which cannot repair the injuries it has received, droops gradually, and finally dies. Even in this country, the Field-mouse has proved itself a terrible enemy to the agriculturist, and has devastated considerable tracts of land.

So much for the destructive powers of the Field-mouse, and the next point to be considered is its abundance.

Nearly all the rats and mice are singularly prolific animals, producing a considerable number at a brood, and having several broods in a season. The Field-mouse is by no means an exception to the general rule, but produces as many young in a season as any of the Mice.

Not only is it formidable from its numbers, but from the insidious nature of its attacks. Any one can see a rabbit, a hare, or even a rat ; but to see a Field-mouse is not easy, even when the little creatures are present in thousands. A Field-mouse never shows itself except from necessity, its instinct teaching it to escape the observation of its many furred and feathered enemies. Short-legged and soft-furred, it threads its noiseless way among the herbage with such gentle suppleness that scarcely a grass-blade is stirred, while, if it should be forced to pass over a spot of bare ground, the red-brown hue of its fur prevents it from being detected by an inexperienced eye. Generally the Field-mouse is safe from human foes, and has only to dread the piercing eye and swift wings of the hawk, or the silent flight and sharp talons of the owl.

Although there can be no doubt that the Field-mouse is one of the animals to which the name of Akbar is given, it is probable that many species were grouped under this one name. Small rodents of various kinds are very plentiful in Palestine, and there are several species closely allied to the Field-mouse itself.

Among them is the Hamster (*Cricetus frumentarius*), so widely known for the ravages which it makes among the crops. This terribly destructive animal not only steals the crops for immediate subsistence, but lays up a large stock of provisions for the winter, seeming to be actuated by a sort of miserly passion for collecting and storing away. There seems to be no bounds to the quantity of food which a Hamster will carry into its subterranean store-house, from seventy to one hundred

pounds' weight being sometimes taken out of the burrow of a single animal. The fact of the existence of these large stores shows that the animal must need them, and accordingly we find that the Hamster is only a partial hibernator, as it is awake during a considerable portion of the winter months, and is consequently obliged to live on the stores which it has collected.

It is an exceedingly prolific animal, each pair producing on an average twenty-five young in the course of a year. The families are unsociable, and, as soon as they are strong enough to feed themselves, the young Hamsters leave their home, and make separate burrows for themselves. Thus we see that the Hamster, as well as the Field-mouse, fulfils the conditions which are needed in order to class it under the general title of Akbar.

I have already stated that some translators of the Bible use the word Jerboa as a rendering of the Hebrew Akbar. As the Jerboa certainly is found in Palestine, there is some foundation for this idea, and we may safely conjecture that it also is one of the smaller rodents which are grouped together under the appellation of Mouse.

The Common Jerboa (*Dipus Ægyptiacus*) is plentiful in Palestine, and several other species inhabit the same country, known at once by their long and slender legs, which give them so curious a resemblance to the kangaroos of Australia. The Jerboas pass over the ground with astonishing rapidity. Instead of creeping stealthily among the grass-blades, like the short-limbed field-mouse, the Jerboa flies along with a succession of wonderful leaps, darting here and there with such rapidity that the eye can scarcely follow its wayward movements. When quiet and undisturbed, it hops along gently enough, but as soon as it takes alarm, it darts off in its peculiar manner, which is to the ordinary walk of quadrupeds what the devious course of a frightened snipe is to the steady flight of birds in general.

It prefers hot and dry situations, its feet being defended by a thick coating of stiff hairs, which serve the double purpose of protecting it from the heat, and giving it a firm hold on the ground. It is rather a destructive animal, its sharp and powerful teeth enabling it to bite its way through obstacles which would effectually stop an ordinary Mouse. That the Jerboa may be one of the Akbarim is rendered likely by the prohibition in Lev. xi. 29, forbidding the Mouse to be eaten. It would be

scarcely probable that such a command need have been issued against eating the common Mouse, whereas the Jerboa, a much larger and palatable animal, is always eaten by the Arabs. The Hamster is at the present day eaten in Northern Syria.

Beside these creatures there are the Dormice, several species of which animal inhabit Palestine at the present day. There are also the Sand-rats, one species of which is larger than our ordinary rats. The Sand-rats live more in the deserts than the cultivated lands, making their burrows at the foot of hills, and among the roots of bushes.

THE HARE.

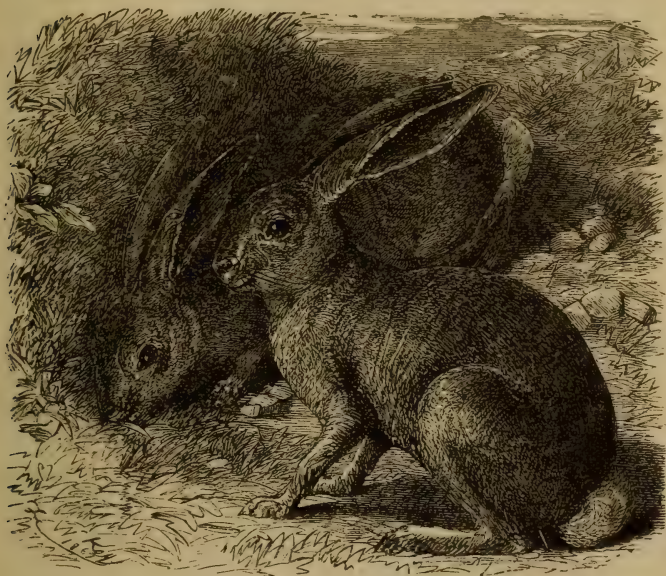
The prohibitions of the Mosaic law—The chewing of the cud, and division of the hoof—Identity of the Hare of Scripture—Rumination described—The Hare a rodent and not a ruminant—Cowper and his Hares—Structure of the rodent tooth—The Mosaic law accommodated to its recipients—The Hares of Palestine and their habits.

AMONG the many provisions of the Mosaic law are several which refer to the diet of the Israelites, and which prohibit certain kinds of food. Special stress is laid upon the flesh of animals, and the list of those which may be lawfully eaten is a singularly restricted one, all being excluded except those which "divide the hoof and chew the cud." And, lest there should be any mistake about the matter, examples are given both of those animals which may and those which may not be eaten.

The ox, sheep, goat, and antelopes generally are permitted as lawful food, because they fulfil both conditions; whereas there is a special prohibition of the swine, because it divides the hoof but does not chew the cud, and of the camel, coney, and hare because they chew the cud, but do not divide the hoof. Our business at present is with the last of these animals.

Considerable discussion has been raised concerning this animal, because, as is well known to naturalists, the Hare is not

one of the ruminant animals, but belongs to the same order as the rat, rabbit, beaver, and other rodents. Neither its teeth nor its stomach are constructed for the purpose of enabling it to ruminate, *i.e.* to return into the mouth the partially-digested food, and then to masticate it afresh; and therefore it has been thought that either there is some mistake in the sacred narrative, or that the Hebrew word has been mistranslated.



THE SYRIAN HARE.

Taking the latter point first, as being the simplest of the two, we find that the Hebrew word which is rendered as Hare is *Arnebeth*, and that it is rendered in the Septuagint as *Dasypus*, or the Hare,—a rendering which the Jewish Bible adopts. That the *Arnebeth* is really the Hare may also be conjectured from the fact that the Arabic name for that animal is *Arneb*. In consequence of the rather wide sense to which the Greek word *Dasypus* (*i.e.* hairy-foot) is used, some commentators have suggested that the rabbit may have been included in the same title. This, however, is not at all likely, inasmuch as the Hare

is very plentiful in Palestine, and the rabbit is believed not to be indigenous to that part of the world. And, even if the two animals had been classed under the same title, the physiological difficulty would not be removed.

Before proceeding further, it will be as well to give a brief description of the curious act called rumination, or "chewing the cud."

There are certain animals, such as the oxen, antelopes, deer, sheep, goats, camels, &c. which have teeth unfitted for the rapid mastication of food, and which therefore are supplied with a remarkable apparatus by which the food can be returned into the mouth when the animal has leisure, and be re-masticated before it passes into the true digestive organs.

For this purpose they are furnished with four stomachs, which are arranged in the following order. First comes the paunch or "rumen" (whence the word "ruminating"), into which passes the food in a very rough state, just as it is torn, rather than bitten, from the herbage, and which is analogous to the crop in birds. It thence passes into the second stomach, or "honeycomb," the walls of which are covered with small angular cells. Into those cells the food is received from the first stomach, and compressed into little balls, which can be voluntarily returned into the mouth for mastication.

After the second mastication has been completed, the food passes at once into the third stomach, and thence into the fourth, which is the true digesting cavity. By a peculiar structure of these organs, the animal is able to convey its food either into the first or third stomach, at will, *i.e.* into the first when the grass is eaten, and into the third after rumination. Thus it will be seen that an animal which chews the cud must have teeth of a certain character, and be possessed of the fourfold stomach which has just been described.

Two points are conceded which seem to be utterly irreconcilable with each other. The first is that the Mosaic law distinctly states that the Hare chews the cud; the second is, that in point of fact the Hare is not, and cannot be, a ruminating animal, possessing neither the teeth nor the digestive organs which are indispensable for that process. Yet, totally opposed as these statements appear to be, they are in fact, not so irreconcilable as they seem.



A TIMID GROUP.

Why the flesh of certain animals was prohibited, we do not at the present time know. That the flesh of swine should be forbidden food is likely enough, considering the effects which the habitual eating of swine's flesh is said to produce in hot countries. But it does seem very strange that the Israelites should have been forbidden to eat the flesh of the camel, the coney (or hyrax), and the Hare, and that these animals should have been specified is a proof that the eating or refraining from their flesh was not a mere sanitary regulation, but was a matter of importance. The flesh of all these three animals is quite as good and nutritious as that of the oxen, or goats, which are eaten in Palestine, and that of the Hare is far superior to them. Therefore, the people of Israel, who were always apt to take liberties with the restrictive laws, and were crafty enough to evade them on so many occasions, would have been likely to pronounce that the flesh of the Hare was lawful meat, because the animal chewed the cud, or appeared to do so, and they would discreetly have omitted the passage which alluded to the division of the hoof.

To a non-scientific observer the Hare really does appear to chew the cud. When it is reposing at its ease, it continually moves its jaws about as if eating something, an action which may readily be mistaken for true rumination. Even Cowper, the poet, who kept some hares for several years, and had them always before his eyes, was deceived by this mumbling movement of the jaws. Speaking of his favourite hare, "Puss," he proceeds as follows: "Finding him exceedingly tractable, I made it my custom to carry him always after breakfast into the garden, where he hid himself generally under the leaves of a cucumber vine, sleeping, *or chewing the cud*, till evening."

The real object of this continual grinding or mumbling movement is simple enough. The chisel-like incisor teeth of the rodent animals need to be rubbed against each other, in order to preserve their edge and shape, and if perchance such friction should be wanting to a tooth, as, for example, by the breaking of the opposite tooth, it becomes greatly elongated, and sometimes grows to such a length as to prevent the animal from eating. Instinctively, therefore, the Hare, as well as the rabbit and other rodents, always likes to be nibbling at something, as any one knows who has kept rabbits in wooden hutches, the object of

this nibbling not being to eat the wood, but to keep the teeth in order.

But we may naturally ask ourselves, why the Mosaic law, an emanation from heaven, should mention an animal as being a ruminant, when its very structure shows that such an act was utterly impossible? The answer is clear enough. The law was suited to the capacity of those for whom it was intended, and was never meant to be a handbook of science, as well as a code of religious duties and maxims. The Jews, like other Orientals, were indifferent to that branch of knowledge which we designate by the name of physical science, and it was necessary that the language in which the law was conveyed to them should be accommodated to their capabilities of receiving it.

It would have been worse than useless to have interrupted the solemn revelation of Divine will with a lesson in comparative anatomy; the object of the passage in question being, not to teach the Jews the distinctive characteristics of a rodent and a ruminant, but to guard against their mistaking the Hare for one of the ruminants which were permitted as food. That they would in all probability have fallen into that mistake is evident from the fact that the Arabs are exceedingly fond of the flesh of the Hare, and accept it, as well as the camel, as lawful food, because it chews the cud, the division of the hoof not being considered by them as an essential.

Hares are very plentiful in Palestine, and at least two species are found in that country. One of them, which inhabits the more northern and hilly portion of Palestine, closely resembles our own species, but has not ears quite so long in proportion, while the head is broader. The second species, which lives in the south, and in the valley of the Jordan, is very small, is of a light dun colour, and has very long ears. In their general habits, these Hares resemble the Hare of England.

CATTLE.

The cattle of Palestine, and their decadence at the present day—Ox-flesh not used for food in modern times—Oxen of the stall, and oxen of the pasture—The use of the ox in agriculture—The yoke and its structure—The plough and the goad—The latter capable of being used as a weapon—Treading out the corn—The cart and its wheels—The ox used as a beast of burden—Cattle turned loose to graze—The bulls of Bashan—Curiosity of the ox-tribe—A season of drought—Branding the cattle—An Egyptian field scene—Cattle-keeping an honourable post—The ox as used for sacrifice—Ox-worship—The bull Apis, and his history—Persistency of the bull-worship—Jeroboam's sin—Various names of cattle—The Indian buffalo.

UNDER this head we shall treat of the domesticated oxen of Scripture, whether mentioned as Bull, Cow, Ox, Calf, Heifer, &c.

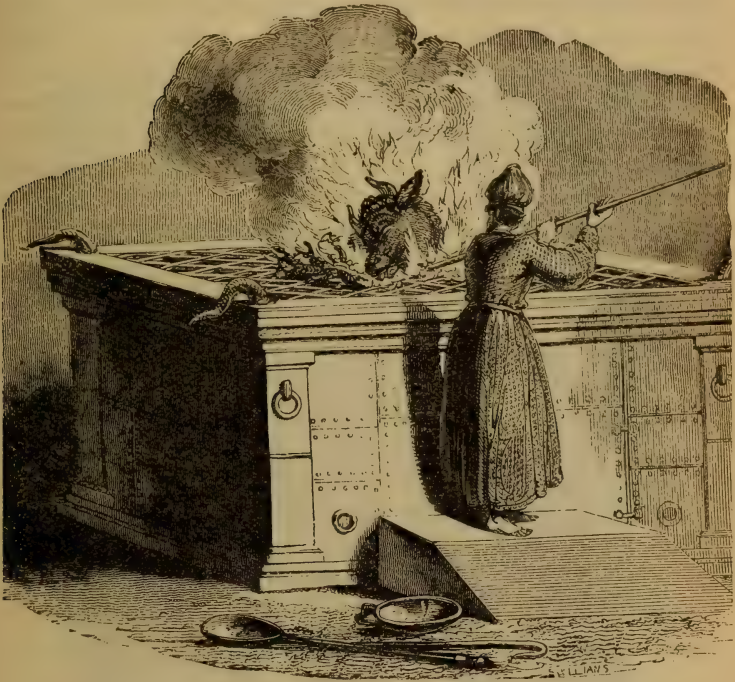
Two distinct species of cattle are found in Palestine, namely, the ordinary domesticated ox, and the Indian buffalo, which lives in the low-lying and marshy valley of the Jordan. Of this species we shall treat presently.

The domesticated cattle are very much like our own, but there is not among them that diversity of breed for which this country is famous; nor is there even any distinction of long and short horned cattle. There are some places where the animals are larger than in others, but this difference is occasioned simply by the better quality and greater quantity of the food.

As is the case in most parts of the world where civilization has made any progress, Domesticated Cattle were, and still are, plentiful in Palestine. Even at the present time the cattle are in common use, though it is evident, from many passages of Holy Writ, that in the days of Judæa's prosperity cattle were far more numerous than they are now, and were treated in a better fashion.

To take their most sacred use first, a constant supply of cattle was needed for the sacrifices, and, as it was necessary that every animal which was brought to the altar should be absolutely perfect, it is evident that great care was required in order

that the breed should not deteriorate, a skill which has long been rendered useless by the abandonment of the sacrifices.



ALTAR OF BURNT-OFFERING.

Another reason for their better nurture in the times of old is that in those days the ox was largely fed and fattened for the table, just as is done with ourselves. At the present day, the flesh of the cattle is practically unused as food, that of the sheep or goat being always employed, even when a man gives a feast to his friends. But, in the old times, stalled oxen, *i. e.* oxen kept asunder from those which were used for agricultural purposes, and expressly fattened for the table, were in constant use. See for example the well-known passage in the Prov. xv. 17, "Better is a dinner of herbs where love is, than a stalled ox and hatred therewith." Again, the Prophet Jeremiah makes use of a curious simile, "Egypt is like a very fair heifer, but destruction cometh; it cometh out of the north. Also her hired men are in the midst of her like fatted bullocks [or, bullocks of the stall],

for they also are turned back, and are fled away together." (Jer. xlv. 20.) And in 1 Kings iv. 22, 23, when describing the glories of Solomon's household, the sacred writer draws a distinction between the oxen which were especially fattened for the table of the king and the superior officers, and those which were consumed by the lower orders of his household: "And Solomon's provision for one day was thirty measures of fine flour, and three-score measures of meal, ten fat oxen, and twenty oxen out of the pastures, and an hundred sheep, beside harts, and roebucks, and fallow-deer, and fatted fowl."



THE PRODIGAL SON RETURNS, AND THE FATTED CALF IS KILLED.

Calves—mostly, if not always, bull-calves—were largely used for food in Palestine, and in the households of the wealthy were fattened for the table. See, for example, the familiar parable of the prodigal son, in which the rejoicing father is mentioned as preparing a great feast in honour of his son's return, and ordering the fatted calf to be killed—the calf in question being evidently

one of the animals that were kept in good condition against any festive occasion. And, even in the earliest history of the Bible, the custom of keeping a fatted calf evidently prevailed, as is shown by the conduct of Abraham, who, when he was visited by



ABRAHAM OFFERS FOOD TO THE THREE STRANGERS.

the three heavenly guests, “ran unto the herd, and fetched a calf, tender and good,” and had it killed and dressed at once, after the still existing fashion of the East.

But, even in the times of Israel’s greatest prosperity, the chief

use of the ox was as an agricultural labourer, thus reversing the custom of this country, where the horse has taken the place of the ox as a beast of draught, and where cattle are principally fed for food. Ploughing was, and is, always performed by oxen, and allusions to this office are scattered plentifully through the Old and New Testaments.

When understood in this sense, oxen are almost always spoken of in connexion with the word "yoke," and as each yoke comprised two oxen, it is evident that the word is used as we employ the term "brace," or pair. The yoke, which is the chief part of the harness, is a very simple affair. A tolerably stout beam of wood is cut of a sufficient length to rest upon the necks of the oxen standing side by side, and a couple of hollows are scooped out to receive the crest of the neck. In order to hold it in its place, two flexible sticks are bent under their necks, and the ends fixed into the beam of the yoke. In the middle of this yoke is fastened the pole of the plough or cart, and this is all the harness that is used, not even traces being required.

It will be seen that so rude an implement as this would be very likely to gall the necks of the animals, unless the hollows were carefully smoothed, and the heavy beam adapted to the necks of the animals. This galling nature of the yoke, so familiar to the Israelites, is used repeatedly as a metaphor in many passages of the Old and New Testaments. These passages are too numerous to be quoted, but I will give one or two of the most conspicuous among them. The earliest mention of the yoke in the Scriptures is a metaphor.

After Jacob had deceived his father, in procuring for himself the blessing which was intended for his elder brother, Isaac comforts Esau by the prophecy that, although he must serve his brother, yet "it shall come to pass when thou shalt have the dominion, that thou shalt break his yoke from off thy neck." Again, in the next passage where the yoke is mentioned, namely, Lev. xxvi. 13, the word is employed in the metaphorical sense: "I am the Lord your God, which brought you forth out of the land of Egypt, that ye should not be their bondmen, and I have broken the bands of your yoke, and made you go upright."

The plough was equally simple, and consisted essentially of a bent branch, one end of which was armed with an iron point by way of a share, while the other formed the pole or beam, and

was fastened to the middle of the yoke. It was guided by a handle, which was usually a smaller branch that grew from the principal one. A nearly similar instrument is used in Asia Minor to the present day, and is a curious relic of the most ancient times of history, for we find on the Egyptian monuments figures of the various agricultural processes, in which the plough is made after this simple manner.

Of course such an instrument is a very ineffective one, and can but scratch, rather than plough the ground, the warmth of the climate and fertility of the land rendering needless the deep ploughing of our own country, where the object is to turn up the earth to the greatest possible depth. One yoke of oxen was generally sufficient to draw a plough, but occasionally a much greater number were required. We read, for example, of Elisha, who, when he received his call from Elijah, was ploughing with twelve yoke of oxen, *i. e.* twenty-four. It has been suggested, that the twelve yoke of oxen were not all attached to the same plough, but that there were twelve ploughs, each with its single yoke of oxen. This was most probably the case.

The instrument with which the cattle were driven was not a whip, but a goad. This goad was a long and stout stick, armed with a spike at one end, and having a kind of spud at the other, with which the earth could be scraped off the share when it became clogged. Such an instrument might readily be used as a weapon, and, in the hands of a powerful man, might be made even more formidable than a spear. As a weapon, it often was used, as we see from many passages of the Scriptures. For example, it is said in Judges iii. 31, "that Shamgar the son of Anath killed six hundred Philistines with an ox-goad."

Afterwards, in the beginning of Saul's reign, when the Israelites fairly measured themselves against the Philistines, it was found that only Saul and Jonathan were even tolerably armed. Fearful of the numbers and spirit of the Israelites, the Philistines had disarmed them, and were so cautious that they did not even allow them to possess forges wherewith to make or sharpen the various agricultural instruments which they possessed, lest they should surreptitiously provide themselves with weapons. The only smith's tool which they were allowed to retain was a file with which each man might trim the edges of the ploughshares, mattocks, axes, and sharpen the points of the goad.

The only weapons which they could muster were made of their agricultural implements, and among the most formidable of them was the goad.

How the goad came into use in Palestine may easily be seen. The Egyptians, from among whom the people of Israel passed into the Promised Land, did not use the goad in ploughing, but the whip, which, from the representations on the Egyptian monuments, was identical with the *koorbash*, or "cow-hide" whip, which is now in use in the same country. But this terrible whip, which is capable, when wielded by a skilful hand, of cutting deep grooves through the tough hide of the ox, could not be obtained by the Jews, because the hippopotamus, of whose hide it was made, did not live in or near Palestine. They therefore were forced to use some other instrument wherewith to urge on the oxen, and the goad was clearly the simplest and most effective implement for this purpose.

After the land was ploughed and sown, and the harvest was ripened, the labours of the oxen were again called into requisition, first for threshing out the corn, and next for carrying or drawing the grain to the storehouses.

In the earlier days, the process of threshing was very simple. A circular piece of ground was levelled, and beaten very hard and flat, its diameter being from fifty to a hundred feet. On this ground the corn was thrown, and a number of oxen were driven here and there on it, so that the constant trampling of their feet shook the ripe grain out of the ears. The corn was gathered together in the middle of the floor, and as fast as it was scattered by the feet of the oxen, it was thrown back towards the centre.

Afterwards, an improvement was introduced in the form of a rough sledge, called "*moreg*," to which the oxen were harnessed by a yoke, and on which the driver stood as he guided his team round the threshing-floor. This instrument is mentioned in Isa. xli. 15: "Behold, I will make thee a new and sharp threshing instrument having teeth [or mouths]: thou shalt thresh the mountains, and beat them small, and shalt make the hills as chaff." Mention is also made of the same implement in 2 Sam. xxiv. 22, where it is related that Araunah the Jebusite offered to give David the oxen for a burnt-sacrifice, and the *moregs* and other implements as wood with which they could be burned.

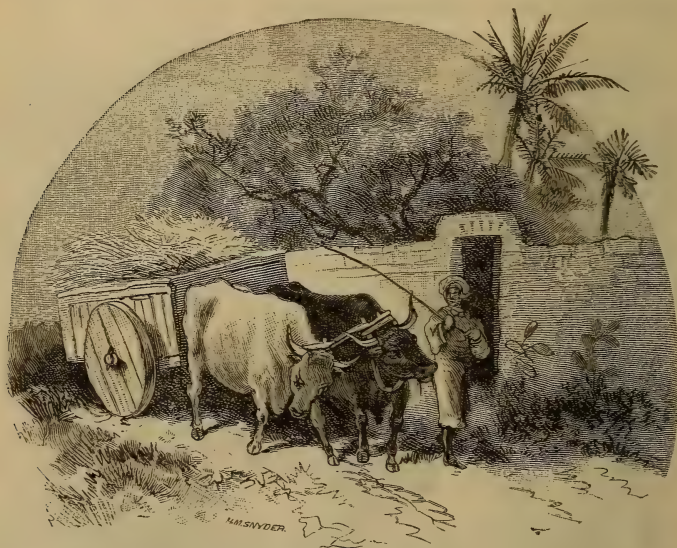
The work of treading out the corn was a hard and trying one for the oxen, and it was probably on this account that the kindly edict was made, that the oxen who trod out the corn should not be muzzled. As a rule, the cattle were not fed nearly as carefully as is done with us, and so the labours of the threshing-floor would find a compensation in the temporary abundance of which the animals might take their fill.



OXEN TREADING OUT GRAIN.

After the corn was threshed, or rather trodden out, the oxen had to draw it home in carts. These were but slight improvements on the threshing-sledge, and were simply trays or shallow boxes on a pair of wheels. As the wheels were merely slices cut from the trunk of a tree, and were not furnished with iron tires, they were not remarkable for roundness, and indeed, after a little time, were worn into rather irregular ovals, so that the task

of dragging a cart over the rough roads was by no means an easy one. And, as the axle was simply a stout pole fastened to the bottom of the cart, and having its rounded ends thrust through holes in the middle of the wheels, the friction was enormous. As, moreover, oil and grease were far too precious



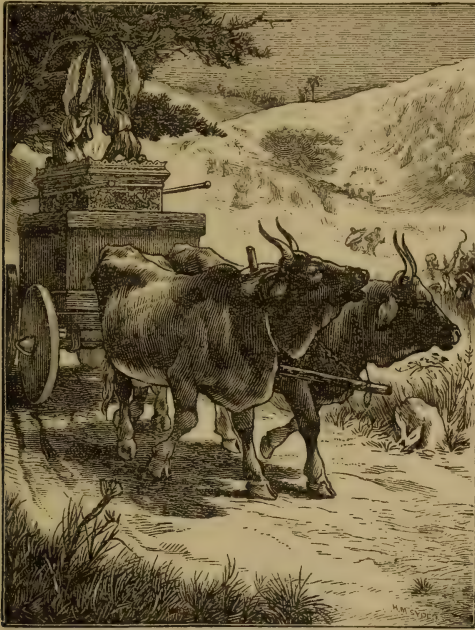
EASTERN OX-CART.

luxuries to be wasted in lubricating the axles, the creaking and groaning of the wheels was a singularly disagreeable and ear-piercing sound.

The common hackery of India is a good example of the carts mentioned in the Scriptures. As with the plough, the cart was drawn by a couple of oxen, connected by the yoke. The two kinds of cart, namely, the tray and the box, are clearly indicated in the Scriptures. The new cart on which the Ark was placed when it was sent back by the Philistines (see 1 Sam. vi. 7) was evidently one of the former kind, and so was that which was made twenty years afterwards, for the purpose of conveying the Ark to Jerusalem.

Although the cattle were evidently better tended in the olden times than at present, those animals which were used for agri-

culture seem to have passed rather a rough life, especially in the winter time. It is rather curious that the Jews should have had no idea of preserving the grass by making it into hay, as is done in Europe. Consequently the chief food of the cattle was the straw and chaff which remained on the threshing-floor after the grain had been separated.



THE ARK OF THE COVENANT BEING DRAWN BY COWS.

This, indeed, was the only use to which the straw could be put, for it was so crushed and broken by the feet of the oxen and the threshing-sledge that it was rendered useless.

The want of winter forage is the chief reason why cattle are so irregularly disposed over Palestine, many parts of that country being entirely without them, and only those districts containing them in which fresh forage may be found throughout the year.

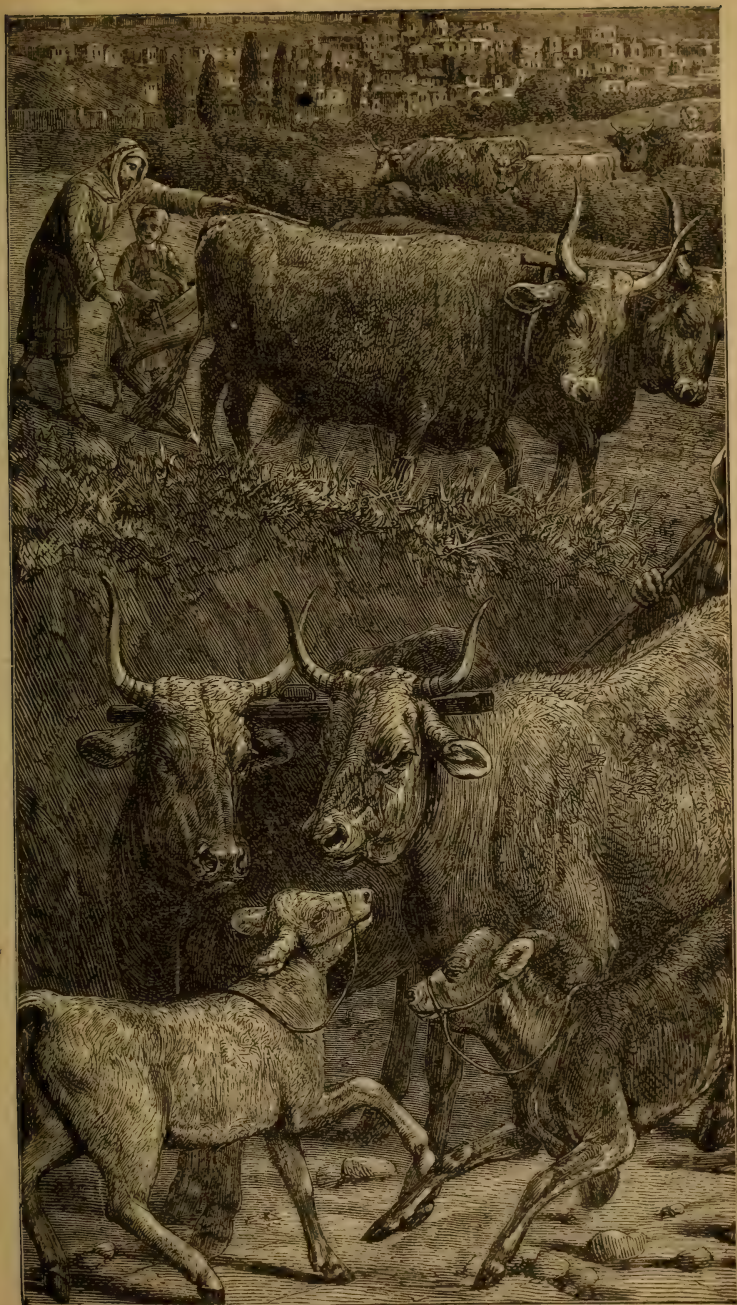
Except a few yoke of oxen, which are kept in order to draw carts, and act as beasts of burden, the cattle are turned loose for a considerable portion of the year, and run about in herds

from one pasturage to another. Thus they regain many of the characteristics of wild animals, and it is to this habit of theirs that many of the Scriptural allusions can be traced.

For example, see Ps. xxii. 12, "Many bulls have compassed me, strong bulls of Bashan have beset me round. They gaped on me with their mouths [or, their mouths opened against me] as a ravening and a roaring lion." This passage alludes to the curiosity inherent in cattle, which have a habit of following objects which they do not understand or dislike, and surrounding it with looks of grave wonderment. Even in their domesticated state this habit prevails. When I was a boy, I sometimes amused myself with going into a field where a number of cows and oxen were grazing, and lying down in the middle of it. The cattle would soon become uneasy, toss their heads about, and gradually draw near on every side, until at last they would be pressed together closely in a circle, with their heads just above the object of their astonishment. Their curious, earnest looks have always been present to my mind when reading the above quoted passage.

The Psalmist does not necessarily mean that the bulls in question were dangerous animals. On the contrary, the bulls of Palestine are gentle in comparison with our own animals, which are too often made savage by confinement and the harsh treatment to which they are subjected by rough and ignorant labourers. In Palestine a pair of bulls may constantly be seen attached to the same yoke, a thing that never would be seen in this country.

The custom of turning the herds of cattle loose to find pasture for themselves is alluded to in Joel i. 18, "How do the beasts groan! the herds of cattle are perplexed because they have no pasture." We can easily imagine to ourselves the terrible time to which the prophet refers, "when the rivers of waters are dried up, and the fire hath devoured the pastures of the wilderness," as it is wont to do when a spark falls upon grass dried up and withered, by reason of the sun's heat and the lack of water. Over such a country, first withered by drought, and then desolated by fire, would the cattle wander, vainly searching on the dusty and blackened surface for the tender young blades which always spring up on a burnt pasture as soon as the first rains fall. Moaning and bellowing with



PLOUGHING WITH OXEN.

thirst and disappointment, they would vainly seek for food or water in places where the seed lies still under the clods where it was sown (v. 17), where the vines are dried up, and the fig, the pomegranate and the palm (v. 12) are all withered for want of moisture.

Such scenes are still to be witnessed in several parts of the world. Southern Africa is sometimes sadly conspicuous for them, an exceptional season of drought keeping back the fresh grass after the old pastures have been burned (the ordinary mode of cultivating pasture land). Then the vast herds of cattle, whose milk forms the staff of life to the inhabitants, wander to and fro, gathering in masses round any spot where a spring still yields a little water, and bellowing and moaning with thirst as they press their way towards the spot where their owners are doling out to each a small measure of the priceless fluid.

The cattle are branded with the mark of their owners, so that in these large herds there might be no difficulty in distinguishing them when they were re-captured for the plough and the cart. On one of the Egyptian monuments there is a very interesting group, which has furnished the idea for the plate which illustrates this article. It occurs in the tombs of the kings at Thebes, and represents a ploughing scene. The simple two-handled plough is being dragged by a pair of cows, who have the yoke fastened across the horns instead of lying on the neck, and a sower is following behind, scattering the grain out of a basket into the newly-made furrows. In front of the cows is a young calf, which has run to meet its mother, and is leaping for joy before her as she steadily plods along her course.

The action of both animals is admirably represented; the steady and firm gait of the mother contrasting with the light, gambolling step and arched tail of her offspring.

In the olden times of the Israelitish race, herd-keeping was considered as an honourable occupation, in which men of the highest rank might engage without any derogation to their dignity. We find, for instance, that Saul himself, even after he had been appointed king, was acting as herdsman when the people saw the mistake they had made in rejecting him as their monarch, and came to fetch their divinely-appointed leader from his retirement. (See 1 Sam. xi. 5.) Doeg, too, the faithful companion of Saul, was made the chief herdsman of his master's

cattle, so that for Saul to confer such an office, and Doeg to accept it, shows that the post was one of much honour. And afterwards, when David was in the zenith of his power, he completed the organization of his kingdom, portioning out not only his army into battalions, and assigning a commanding officer to each battalion, but also appointing a ruler to each tribe, and setting officers over his treasury, over the vineyards, over the olive-trees, over the storehouses, and over the cattle. And these offices were so important that the names of their holders are given at length in 1 Chron. xxvii. those of the various herdsmen being thought as worthy of mention as those of the treasurers, the military commanders, or the headmen of the tribes.

Before concluding this necessarily short account of the domesticated oxen of Palestine, it will be needful to give a few lines to the animal viewed in a religious aspect. Here we have, in bold contrast to each other, the divine appointment of certain cattle to be slain as sacrifices, and the reprobation of worship paid to those very cattle as living emblems of divinity. This false worship was learned by the Israelites during their long residence in Egypt, and so deeply had the customs of the Egyptian religion sunk into their hearts, that they were not eradicated after the lapse of centuries. It may easily be imagined that such a superstition, surrounded as it was with every external circumstance which could make it more imposing, would take a powerful hold of the Jewish mind.

Chief among the multitude of idols or symbols was the god Apis, represented by a bull. Many other animals, specially the cat and the ibis, were deeply honoured among the ancient Egyptians, as we learn from their own monuments and from the works of the old historians. All these creatures were symbols as well as idols, symbols to the educated and idols to the ignorant.

None of them was held in such universal honour as the bull Apis. The particular animal which represented the deity, and which was lodged with great state and honour in his temple at Memphis, was thought to be divinely selected for the purpose, and to be impressed with certain marks. His colour must be black, except a square spot on the forehead, a crescent-shaped white spot on the right side, and the figure of an eagle on his

back. Under the tongue must be a knob shaped like the sacred scarabæus, and the hairs of his tail must be double.

This representative animal was only allowed to live for a certain time, and when he had reached this allotted period, he was taken in solemn procession to the Nile, and drowned in

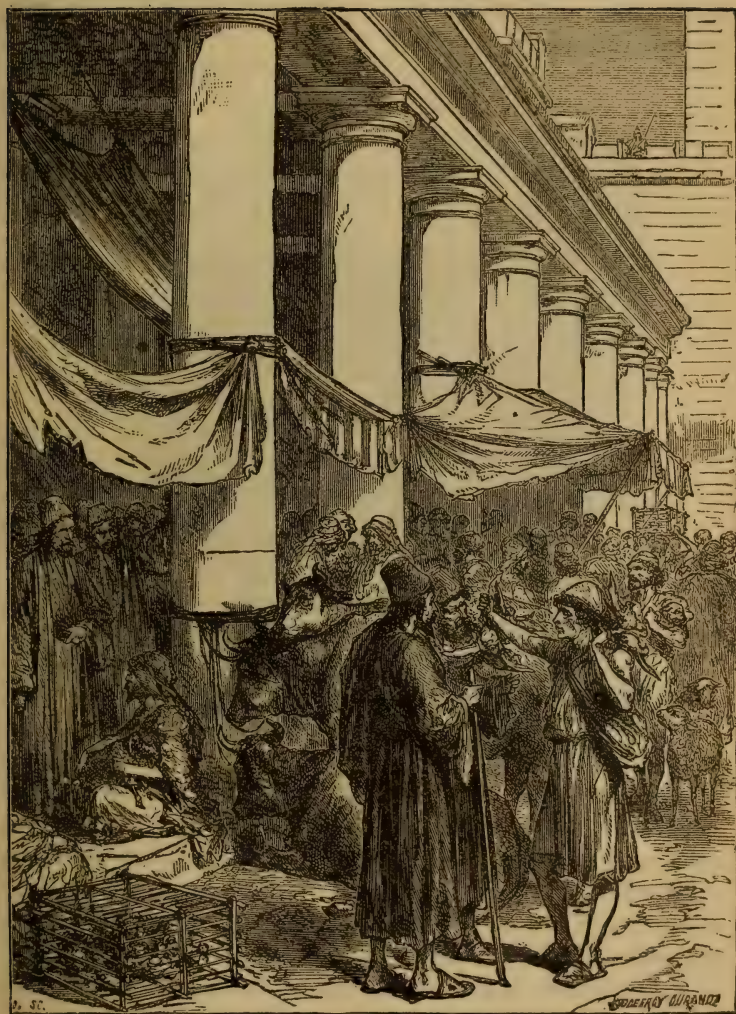


MUMMY OF A SACRED BULL TAKEN FROM AN EGYPTIAN TOMB.

its sacred waters. His body was then embalmed, and placed with great state in the tombs at Memphis.

After his death, whether natural or not, the whole nation went into mourning, and exhibited all the conventional signs of sorrow, until the priests found another bull which possessed the distinctive marks. The people then threw off their mourning robes, and appeared in their best attire, and the sacred bull was exhibited in state for forty days before he was taken to his temple at Memphis. The reader will here remember the analogous case of the Indian cattle, some of which are held to be little less than incarnations of divinity.

Even at the very beginning of the exodus, when their minds must have been filled with the many miracles that had been wrought in their behalf, and with the cloud and fire of Sinai actually before their eyes, Aaron himself made an image of a calf in gold, and set it up as a symbol of the Lord. That the idol in question was intended as a symbol by Aaron is evident from the words which he used when summoning the people to worship, "To-morrow is a feast of the Lord" (Gen. xxxii. 5). The people, however, clearly lacked the power of discriminating between the



ANIMALS BEING SOLD FOR SACRIFICE IN THE PORCH OF THE TEMPLE.

symbol and that which it represented, and worshipped the image just as any other idol might be worshipped. And, in spite of the terrible and swift punishment that followed, and which showed the profanity of the act, the idea of ox-worship still remained among the people.

Five hundred years afterwards we find a familiar example of it in the conduct of Jeroboam, "who made Israel to sin," the peculiar crime being the open resuscitation of ox-worship. "The king made two calves of gold and said unto them, It is too much for you to go up to Jerusalem: behold thy gods, O Israel, which



JEROBOAM SETS UP A GOLDEN CALF AT BETHEL.

brought thee up out of the land of Egypt. And he set the one in Bethel, and the other put he in Dan. . . . And he made an house of high places, and made priests of the lowest of the people, which were not of the tribe of Levi. And Jeroboam ordained a feast. . . . like unto the feast in Judah, and he offered upon the altar. So did he in Bethel, sacrificing unto the calves that he had made."

Here we have a singular instance of a king of Israel repeating, after a lapse of five hundred years, the very acts which had drawn down on the people so severe a punishment, and which were so contrary to the law that they had incited Moses to fling down and break the sacred tables on which the commandments had been divinely inscribed.

ANOTHER species of the ox-tribe now inhabits Palestine, though commentators rather doubt whether it is not a comparatively late importation. This is the true BUFFALO (*Bubalus buffelus*, Gray), which is spread over a very large portion of the earth, and is very plentiful in India. In that country there are two distinct breeds of the Buffalo, namely, the Arnee, a wild



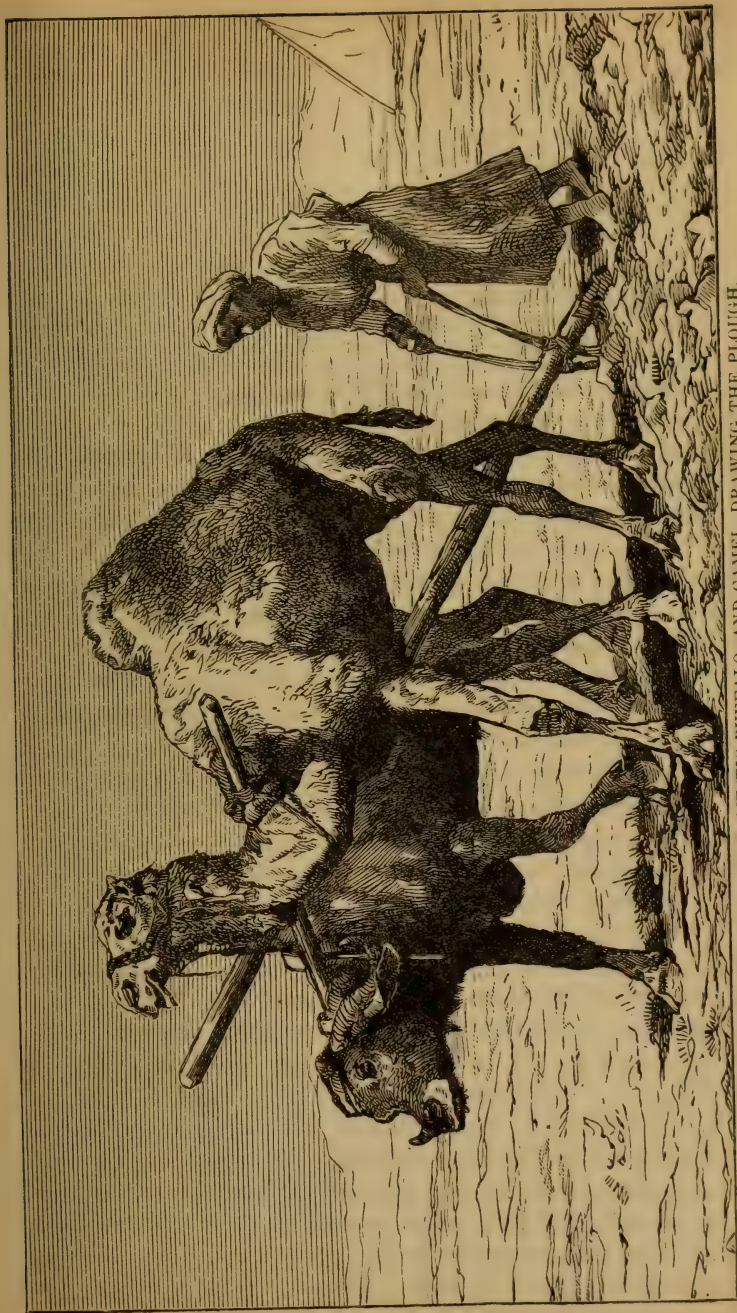
THE BUFFALO.

variety, and the Bhainsa, a tamed variety. The former animal is much larger than the latter, being sometimes more than ten feet in length from the nose to the root of the tail, and measuring between six and seven feet in height at the shoulder. Its horns are of enormous length, the tail is very short, and tufts of hair grow on the forehead and horns. The tamed variety is at least one-third smaller, and, unlike the Arnee, never seems to get into high condition. It is an ugly, ungainly kind of beast, and is rendered very unprepossessing to the eye by the bald patches which are mostly found upon its hide.

Being a water-loving animal, the Buffalo always inhabits the low-lying districts, and is fond of wallowing in the oozy marshes in which it remains for hours, submerged all but its head, and tranquilly chewing the cud while enjoying its mud-bath. While thus engaged the animal depresses its horns so that they are scarcely visible, barely allowing more than its eyes, ears, and nostrils to remain above the surface, so that the motionless heads are scarcely distinguishable from the grass and reed tufts which stud the marshes. Nothing is more startling to an inexperienced traveller than to pass by a silent and tranquil pool where the muddy surface is unbroken except by a number of black lumps and rushy tufts, and then to see these tufts suddenly transformed into twenty or thirty huge beasts rising out of the still water as if by magic. Generally, the disturber of their peace had better make the best of his way out of their reach, as the Buffalo, whether wild or tame, is of a tetchy and irritable nature, and resents being startled out of its state of dreamy repose.

In the Jordan valley the Buffalo is found, and is used for agriculture, being of the Bhainsa, or domesticated variety. Being much larger and stronger than the ordinary cattle, it is useful in drawing the plough, but its temper is too uncertain to render it a pleasant animal to manage. As is the case with all half-wild cattle, its milk is very scanty, but compensates by the richness of the quality for the lack of quantity.

In the picture which appears on a following page, one of these domesticated Buffaloes is represented, harnessed with a camel, to a rude form of plough used in the East.



THE BHAINSA, OR DOMESTIC BUFFALO, AND CAMEL, DRAWING THE PLOUGH.

THE WILD BULL.

The Tô, Wild Bull of the Old Testament—Passages in which it is mentioned—The Wild Bull in the net—Hunting with nets in the East—The Oryx supposed to be the Tô of Scripture—Description of the Oryx, its locality, appearance, and habits—The points in which the Oryx agrees with the Tô—The “snare” in which the foot is taken, as distinguished from the net.

IN two passages of the Old Testament an animal is mentioned, respecting which the translators and commentators have been somewhat perplexed, in one passage being translated as the “Wild Ox,” and in the other as the “Wild Bull.” In the Jewish Bible the same rendering is preserved, but the sign of doubt is added to the word in both cases, showing that the translation is an uncertain one.

The first of these passages occurs in Deut. xiv. 5, where it is classed together with the ox, sheep, goats, and other ruminants, as one of the beasts which were lawful for food. Now, although we cannot identify it by this passage, we can at all events ascertain two important points—the first, that it was a true ruminant, and the second, that it was not the ox, the sheep, or the goat. It was, therefore, some wild ruminant, and we now have to ask how we are to find out the species.

If we turn to Isa. li. 20, we shall find a passage which will help us considerably. Addressing Jerusalem, the prophet uses these words, “By whom shall I comfort thee? Thy sons have fainted, they lie at the head of all the streets, as a wild bull in a net; they are full of the fury of the Lord, the rebuke of thy God.” We now see that the Tô or Teô must be an animal which is captured by means of nets, and therefore must inhabit spots wherein the toils can be used. Moreover, it is evidently a powerful animal, or the force of the simile would be lost. The prophet evidently refers to some large and strong beast which has been entangled in the hunter’s nets, and which lies helplessly struggling in them. We are, therefore, almost perforce driven to recognise it as some large antelope.

The expression used by the prophet is so characteristic that it needs a short explanation. In this country, and at the present day, the use of the net is almost entirely restricted to fishing and bird-catching; but in the East nets are still employed in the capture of very large game.

A brief allusion to the hunting-net is made at page 31, but, as the passage in Isaiah li. requires a more detailed account of this mode of catching large animals, it will be as well to describe the sport as at present practised in the East.

When a king or some wealthy man determines to hunt game without taking much trouble himself, he gives orders to his men to prepare their nets, which vary in size or strength according to the particular animal for which they are intended. If, for example, only the wild boar and similar animals are to be hunted, the nets need not be of very great width; but for agile creatures, such as the antelope, they must be exceedingly wide, or the intended prey will leap over them. As the net is much used in India for the purpose of catching game, Captain Williamson's description of it will explain many of the passages of Scripture wherein it is mentioned.

The material of the net is hemp, twisted loosely into a kind of rope, and the mode in which it is formed is rather peculiar. The meshes are not knotted together, but only twisted round each other, much after the fashion of the South American hammocks, so as to obtain considerable elasticity, and to prevent a powerful animal from snapping the cord in its struggles. Some of these nets are thirteen feet or more in width, and even such a net as this has been overleaped by a herd of antelopes. Their length is variable, but, as they can be joined in any number when set end to end, the length is not so important as the width.

The mode of setting the nets is singularly ingenious. When a suitable spot has been selected, the first care of the hunters is to stretch a rope as tightly as possible along the ground. For this purpose stout wooden stakes or truncheons are sunk cross-wise in the earth, and between these the rope is carefully strained. The favourite locality of the net is a ravine, through which the animals can be driven so as to run against the net in their efforts to escape, and across the ravine a whole row of these stakes is sunk. The net is now brought to the spot, and its lower edge fastened strongly to the ground rope.

The strength of this mode of fastening is astonishing, and, although the stakes are buried scarcely a foot below the surface, they cannot be torn up by any force which can be applied to them ; and, however strong the rope may be, it would be broken before the stakes could be dragged out of the ground.

A smaller rope is now attached to the upper edge of the net, which is raised upon a series of slight poles. It is not stretched quite tightly, but droops between each pair of poles, so that a net which is some thirteen feet in width will only give nine or ten feet of clear height when the upper edge is supported on the poles. These latter are not fixed in the ground, but merely held in their places by the weight of the net resting upon them.

When the nets have been properly set, the beaters make a wide circuit through the country, gradually advancing towards the fatal spot, and driving before them all the wild animals that inhabit the neighbourhood. As soon as any large beast, such, for example, as an antelope, strikes against the net, the supporting pole falls, and the net collapses upon the unfortunate animal, whose struggles—especially if he be one of the horned animals—only entangle him more and more in the toils.

As soon as the hunters see a portion of the net fall, they run to the spot, kill the helpless creature that lies enveloped in the elastic meshes, drag away the body, and set up the net again in readiness for the next comer. Sometimes the line of nets will extend for half a mile or more, and give employment to a large staff of hunters, in killing the entangled animals, and raising afresh those portions of the net which had fallen.

Accepting the theory that the Tô is one of the large antelopes that inhabit, or used to inhabit, the Holy Land and its neighbourhood, we may safely conjecture that it may signify the beautiful animal known as the ORYX (*Oryx leucoryx*), an animal which has a tolerably wide range, and is even now found on the borders of the Holy Land. It is a large and powerful antelope, and is remarkable for its beautiful horns, which sometimes exceed a yard in length, and sweep in a most graceful curve over the back.

Sharp as they are, and evidently formidable weapons, the manner in which they are set on the head renders them appa-

rently unserviceable for combat. When, however, the Oryx is brought to bay, or wishes to fight, it stoops its head until the nose is close to the ground, the points of the horns being thus



WILD BULL, OR ORYX.

brought to the front. As the head is swung from side to side, the curved horns sweep through a considerable space, and are so formidable that even the lion is chary of attacking their owner. Indeed, instances are known where the lion has been transfixed and killed by the horns of the Oryx. Sometimes the animal is not content with merely standing to repel the attacks of its adversaries, but suddenly charges forward with astonishing rapidity, and strikes upwards with its horns as it makes the leap.

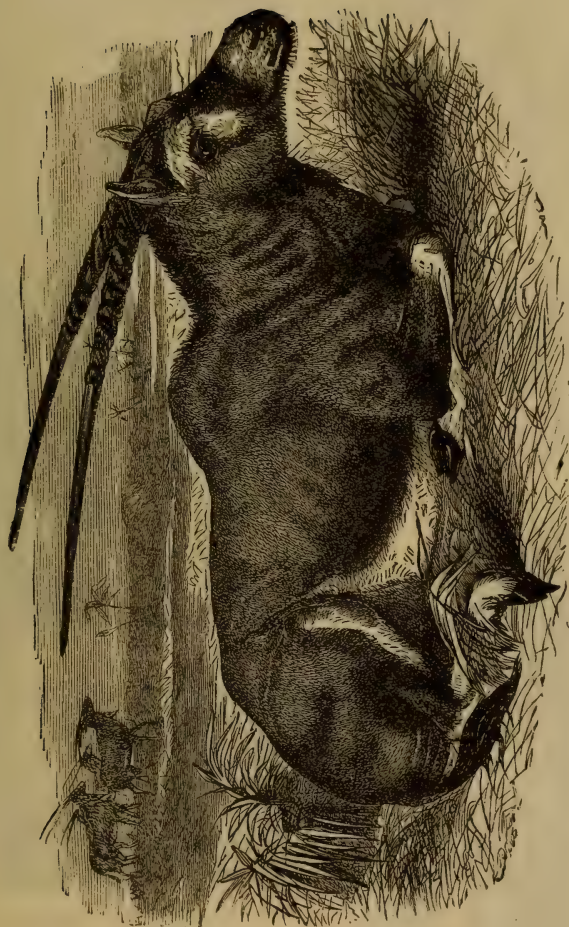
But these horns, which can be used with such terrible effect in battle, are worse than useless when the animal is hampered in the net. In vain does the Oryx attempt its usual defence: the curved horns get more and more entangled in the elastic meshes, and become a source of weakness rather than strength. We see now how singularly appropriate is the passage, "Thy

sons lie at the heads of all the streets, as a wild bull (or Oryx) in a net," and how completely the force of the metaphor is lost without a knowledge of the precise mode of fixing the nets, of driving the animals into them, and of the manner in which they render even the large and powerful animals helpless.

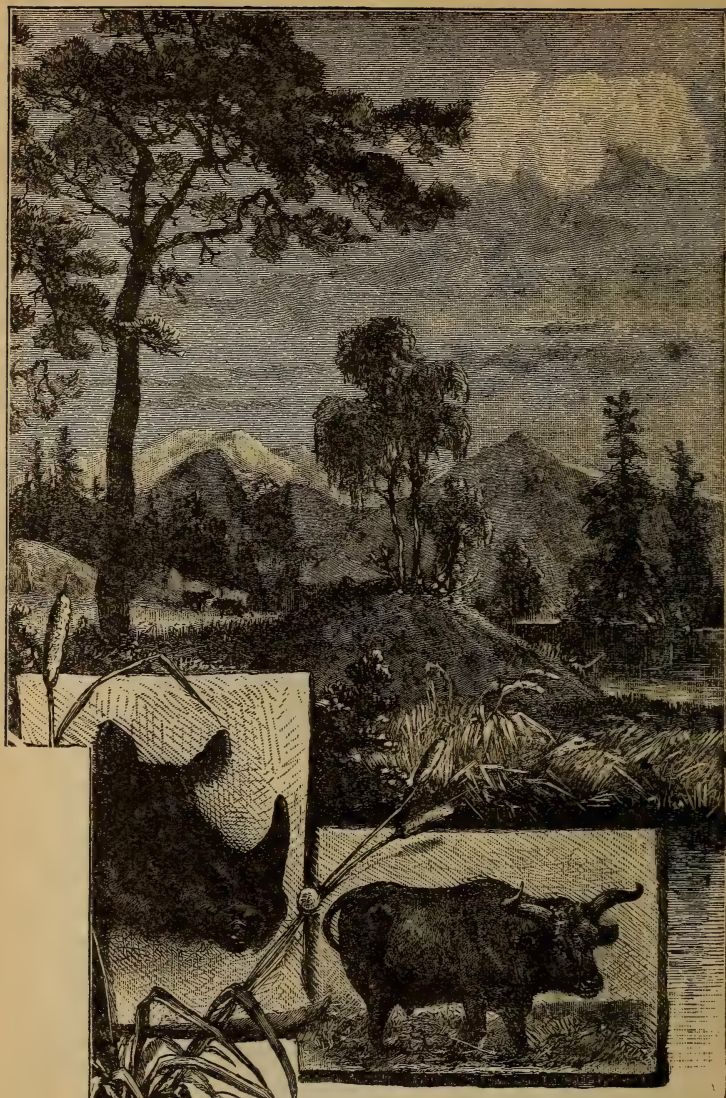
The height of the Oryx at the shoulder is between three and four feet, and its colour is greyish white, mottled profusely with black and brown in bold patches. It is plentiful in Northern Africa, and, like many other antelopes, lives in herds, so that it is peculiarly suited to that mode of hunting which consists in surrounding a number of animals, and driving them into a trap of some kind, whether a fenced enclosure, a pitfall, or a net.

There is, by the way, the term "snare," which is specially used with especial reference to catching the foot as distinguished from the net which enveloped the whole body. For example, in Job xviii. 8, "He is cast into a net, he walketh on a snare," where a bold distinction is drawn between the two and their mode of action. And in ver. 10, "The snare is laid for him in the ground." Though I would not state definitely that such is the case, I believe that the snare which is here mentioned is one which is still used in several parts of the world.

It is simply a hoop, to the inner edge of which are fastened a number of elastic spikes, the points being directed towards the centre. This is merely laid in the path which the animal will take, and is tied by a short cord to a log of wood. As the deer or antelope treads on the snare, the foot passes easily through the elastic spikes, but, when the foot is raised, the spikes run into the joint and hold the hoop upon the limb. Terrified by the check and the sudden pang, the animal tries to run away, but, by the united influence of sharp spikes and the heavy log, it is soon forced to halt, and so becomes an easy prey to its pursuers.



THE ORYX.



THE UNICORN.

The Unicorn apparently known to the Jews—
 Its evident connection with the Ox tribe—
 Its presumed identity with the now extinct Urus—Enormous
 size and dangerous character of the Urus.

THERE are many animals mentioned in the Scrip-
 tures which are identified with difficulty, partly because their

names occur only once or twice in the sacred writings, and partly because, when they are mentioned, the context affords no clue to their identity by giving any hint as to their appearance or habits. In such cases, although the translators would have done better if they had simply given the Hebrew word without endeavouring to identify it with any known animal, they may be excused for committing errors in their nomenclature. There is one animal, however, for which no such excuse can be found, and this is the Reêm of Scripture, translated as Unicorn in the authorized version.

Even in late years the Unicorn has been erroneously supposed to be identical with the Rhinoceros of India. It is, however, now certain that the Unicorn was not the Rhinoceros, and that it can be almost certainly identified with an animal which, at the time when the passages in question were written, was plentiful in Palestine, although, like the Lion, it is now extinct.

On turning to the Jewish Bible we find that the word Reêm is translated as buffalo, and there is no doubt that this rendering is nearly the correct one. At the present day naturalists are nearly all agreed that the Unicorn of the Old Testament must have been of the Ox tribe. Probably the Urus, a species now extinct, was the animal alluded to. A smaller animal, the Bonassus or Bison, also existed in Palestine, and even to the present day continues to maintain itself in one or two spots, though it will probably be as soon completely erased from the surface of the earth as its gigantic congener.

That the Unicorn was one of the two animals is certain, and that it was the larger is nearly as certain. The reason for deciding upon the Urus is, that its horns were of great size and strength, and therefore agree with the description of the Unicorn; whereas those of the Bonassus, although powerful, are short, and not conspicuous enough to deserve the notice which is taken of them by the sacred writers.

Of the extinct variety we know but little. We do know, however, that it was a huge and most formidable beast, as is evident from the skulls and other bones which have been discovered. Their character also indicates that the creature was nothing more than a very large Ox, probably measuring twelve feet in length, and six feet in height. Such a wild animal, armed, as it was, with enormous horns, would prove a most formidable antagonist.



THE BISON.

The Bison tribe and its distinguishing marks—Its former existence in Palestine—
 Its general habits—Origin of its name—Its musky odour—Size and speed of
 the Bison—Its dangerous character when brought to bay—Its defence against
 the wolf—Its untameable disposition.

A FEW words are now needful respecting the second animal which has been mentioned in connexion with the Reém; namely, the Bison, or Bonassus. The Bisons are distinguishable from ordinary cattle by the thick and heavy mane which covers the neck and shoulders, and which is more conspicuous in the male than in the female. The general coating of the body is also rather different, being thick and woolly instead of lying closely to the skin like that of the other oxen. The Bison certainly inhabited Palestine, as its bones have been found in that country. It has, however, been extinct in the Holy Land for many years, and, not being an animal that is capable of withstanding the encroachments of man, it has gradually died out from the greater part of Europe and Asia, and is now to be found only in a very limited locality, chiefly in a Lithuanian forest, where it is strictly preserved, and in some parts of the Caucasus. There it still preserves the habits which made its

ancient and gigantic relative so dangerous an animal. Unlike the buffalo, which loves the low-lying and marshy lands, the Bison prefers the high wooded localities, where it lives in small troops.

Its name of Bison is a modification of the word Bisam, or musk, which was given to it on account of the strong musky



BISON KILLING WOLF.

odour of its flesh, which is especially powerful about the head and neck. This odour is not so unpleasant as might be supposed, and those who have had personal experience of the animal say that it bears some resemblance to the perfume of violets. It is developed most strongly in the adult bulls, the cows and young male calves only possessing it in a slight degree.

It is a tolerably large animal, being about six feet high at the shoulder—a stature nearly equivalent to that of the ordinary Asiatic elephant; and, in spite of its great bulk, is a fleet and active animal, as indeed is generally the case with those oxen

which inhabit elevated localities. Still, though it can run with considerable speed, it is not able to keep up the pace for any great distance, and at the end of a mile or two can be brought to bay.

Like most animals, however large and powerful they may be, it fears the presence of man, and, if it sees or scents a human being, will try to slip quietly away; but when it is baffled in this attempt, and forced to fight, it becomes a fierce and dangerous antagonist, charging with wonderful quickness, and using its short and powerful horns with great effect. A wounded Bison, when fairly brought to bay, is perhaps as awkward an opponent as can be found, and to kill it without the aid of firearms is no easy matter.

Although the countries in which it lives are infested with wolves, it seems to have no fear of them when in health; and, even when pressed by their winter's hunger, the wolves do not venture to attack even a single Bison, much less a herd of them. Like other wild cattle, it likes to dabble in muddy pools, and is fond of harbouring in thickets near such localities; and those who have to travel through the forest keep clear of such spots, unless they desire to drive out the animal for the purpose of killing it.

Like the extinct Aurochs, the Bison has never been domesticated, and, although the calves have been captured while very young, and attempts have been made to train them to harness, their innate wildness of disposition has always baffled such efforts.



THE GAZELLE, OR ROE OF SCRIPTURE.

Its swiftness, its beauty, and the quality of its flesh—Different varieties of the Gazelle—How the Gazelle defends itself against wild beasts—Chase of the Gazelle.

WE now leave the Ox tribe, and come to the Antelopes, several species of which are mentioned in the Scriptures. Four kinds of antelope are found in or near the Holy Land, and there is little doubt that all of them are mentioned in the sacred volume.

The first that will be described is the GAZELLE, which is acknowledged to be the animal that is represented by the word *Tsebi*, or *Tsebiyah*. The Jewish Bible accepts the same rendering.

This word occurs many times, sometimes as a metaphor, and sometimes representing some animal which was lawful food, and which therefore belonged to the true ruminants. Moreover, its flesh was not only legally capable of being eaten, but was held in such estimation that it was provided for the table of Solomon himself, together with other animals which will be described in their turn.



THE GAZELLE.

It is even now considered a great dainty, although it is not at all agreeable to European taste, being hard, dry, and without flavour. Still, as has been well remarked, tastes differ as well as localities, and an article of food which is a costly luxury in one land is utterly disdained in another, and will hardly be eaten except by one who is absolutely dying of starvation.

The Gazelle is very common in Palestine in the present day, and, in the ancient times, must have been even more plentiful. There are several varieties of it, which were once thought to be

distinct species, but are now acknowledged to be mere varieties, all of which are referable to the single species *Gazella Dorcas*. There is, for example, the Corinna, or Corine Antelope, which is a rather boldly-spotted female; the Kevella Antelope, in which the horns are slightly flattened; the small variety called the Ariel, or Cora; the grey Kevel, which is a rather large variety; and the Long-horned Gazelle, which owes its name to a rather large development of the horns.

Whatever variety may inhabit any given spot, they all have the same habits. They are gregarious animals, associating together in herds often of considerable size, and deriving from their numbers an element of strength which would otherwise be wanting. Against mankind, numbers are of no avail; but when the agile though feeble Gazelle has to defend itself against the predatory animals of its own land, it can only defend itself by the concerted action of the whole herd. Should, for example, the wolves prowl round a herd of Gazelles, after their treacherous wont, the Gazelles instantly assume a posture of self-defence. They form themselves into a compact phalanx, all the males coming to the front, and the strongest and boldest taking on themselves the honourable duty of facing the foe. The does and the young are kept within their ranks, and so formidable is the array of sharp, menacing horns, that beasts as voracious as the wolf, and far more powerful, have been known to retire without attempting to charge.

As a rule, however, the Gazelle does not desire to resist, and prefers its legs to its horns as a mode of insuring safety. So fleet is the animal, that it seems to fly over the ground as if propelled by volition alone, and its light, agile frame is so enduring, that a fair chase has hardly any prospect of success. Hunters, therefore, prefer a trap of some kind, if they chase the animal merely for food or for the sake of its skin, and contrive to kill considerable numbers at once. Sometimes they dig pitfalls, and drive the Gazelles into them by beating a large tract of country, and gradually narrowing the circle. Sometimes they use nets, such as have already been described, and sometimes they line the sides of a ravine with archers and spearmen, and drive the herd of Gazelles through the treacherous defile.

These modes of slaughter are, however, condemned by the true hunter, who looks upon those who use them much in the

same light as an English sportsman looks on a man who shoots foxes. The greyhound and the falcon are both employed in the legitimate capture of the Gazelle, and in some cases both are trained to work together. Hunting the Gazelle with the greyhound very much resembles coursing in our own country, and chasing it with the hawk is exactly like the system of falconry that was once so popular an English sport, and which even now shows signs of revival.

It is, however, when the dog and the bird are trained to work together that the spectacle becomes really novel and interesting to an English spectator.

As soon as the Gazelles are fairly in view, the hunter unhoods his hawk, and holds it up so that it may see the animals. The bird fixes its eye on one Gazelle, and by that glance the animal's doom is settled. The falcon darts after the Gazelles, followed by the dog, who keeps his eye on the hawk, and holds himself in readiness to attack the animal that his feathered ally may select. Suddenly the falcon, which has been for some few seconds hovering over the herd of Gazelles, makes a stoop upon the selected victim, fastening its talons in its forehead, and, as it tries to shake off its strange foe, flaps its wings into the Gazelle's eyes so as to blind it. Consequently, the rapid course of the antelope is arrested, so that the dog is able to come up and secure the animal while it is struggling to escape from its feathered enemy. Sometimes, though rarely, a young and inexperienced hawk swoops down with such reckless force that it misses the forehead of the Gazelle, and impales itself upon the sharp horns, just as in England the falcon is apt to be spitted on the bill of the heron.

The most sportsmanlike mode of hunting the Gazelle is to use the falcon alone ; but for this sport a bird must possess exceptional strength, swiftness, and intelligence. A very spirited account of such a chase is given by Mr. G. W. Chasseaud, in his "*Druses of the Lebanon* :"—

"Whilst reposing here, our old friend with the falcon informs us that at a short distance from this spot is a khan called Nebbi Youni, from a supposition that the prophet Jonah was here landed by the whale ; but the old man is very indignant when we identify the place with a fable, and declare to him that similar sights are to be seen at Gaza and Scanderoon. But his

good humour is speedily recovered by reverting to the subject of the exploits and cleverness of his falcon. This reminds him that we have not much time to waste in idle talk, as the greater heats will drive the gazelles from the plains to the mountain retreats, and lose us the opportunity of enjoying the most sportsmanlike amusement in Syria. Accordingly, bestriding our animals again, we ford the river at that point where a bridge once stood.

"We have barely proceeded twenty minutes before the keen eye of the falconer has descried a herd of gazelles quietly grazing in the distance. Immediately he reins in his horse, and enjoining silence, instead of riding at them, as we might have felt inclined to do, he skirts along the banks of the river, so as to cut off, if possible, the retreat of these fleet animals where the banks are narrowest, though very deep, but which would be cleared at a single leap by the gazelles. Having successfully accomplished this manœuvre, he again removes the hood from the hawk, and indicates to us that precaution is no longer necessary. Accordingly, first adding a few slugs to the charges in our barrels, we balance our guns in an easy posture, and, giving the horses their reins, set off at full gallop, and with a loud hurrah, right towards the already startled gazelles.

"The timid animals, at first paralysed by our appearance, stand and gaze for a second terror-stricken at our approach ; but their pause is only momentary ; they perceive in an instant that the retreat to their favourite haunts has been secured, and so they dash wildly forward with all the fleetness of despair, coursing over the plain with no fixed refuge in view, and nothing but their fleetness to aid in their delivery. A stern chase is a long chase, and so, doubtless, on the present occasion it would prove with ourselves, for there is many and many a mile of level country before us, and our horses, though swift of foot, stand no chance in this respect with the gazelles.

"Now, however, the old man has watched for a good opportunity to display the prowess and skill of his falcon : he has followed us only at a hand-gallop ; but the hawk, long inured to such pastime, stretches forth its neck eagerly in the direction of the flying prey, and being loosened from its pinions, sweeps up into the air like a shot, and passes overhead with incredible velocity. Five minutes more, and the bird has outstripped even

the speed of the light-footed gazelle ; we see him through the dust and haze that our own speed throws around us, hovering but an instant over the terrified herd ; he has singled out his



THE FALCON USED IN OUR HUNT.

prey, and, diving with unerring aim, fixes his iron talons into the head of the terrified animal.

“This is the signal for the others to break up their orderly retreat, and to speed over the plain in every direction. Some, despite the danger that hovers on their track, make straight for their old and familiar haunts, and passing within twenty yards of where we ride, afford us an opportunity of displaying our skill as amateur huntsmen on horseback ; nor does it require but little nerve and dexterity to fix our aim whilst our horses are tearing over the ground. However, the moment presents itself, the loud report of barrel after barrel startles the unaccustomed inmates of that unfrequented waste ; one gazelle leaps twice its own height into the air, and then rolls over, shot through the heart ; another bounds on yet a dozen paces, but,

wounded mortally, staggering, halts, and then falls to the ground.

"This is no time for us to pull in and see what is the amount of damage done, for the falcon, heedless of all surrounding incidents, clings firmly to the head of its terrified victim, flapping its strong wings awhile before the poor brute's terrified eyes, half blinding it and rendering its head dizzy; till, after tearing round and round with incredible speed, the poor creature stops, panting for breath, and, overcome with excessive terror,



THE ARAB IS DELIGHTED AT THE SUCCESS OF THE HUNT.

drops down fainting upon the earth. Now the air resounds with the acclamations and hootings of the ruthless victors.

"The Arab is wild in his transports of delight. More cer-

tain of the prowess of his bird than ourselves, he had stopped awhile to gather together the fruits of our booty, and now galloped furiously up, waving his long gun, and shouting lustily the while the praises of his infallible hawk; then getting down, and hoodwinking the bird again, he first of all takes the precaution of fastening together the legs of the fallen gazelle, and then he humanely blows up into its nostrils. Gradually the natural brilliancy returns to the dimmed eyes of the gazelle, then it struggles valiantly, but vainly, to disentangle itself from its fetters.

"Pitying its efforts, the falconer throws a handkerchief over its head, and, securing this prize, claims it as his own, declaring that he will bear it home to his house in the mountains, where, after a few weeks' kind treatment and care, it will become as domesticated and affectionate as a spaniel. Meanwhile, Abou Shein gathers together the fallen booty, and, tying them securely with cords, fastens them behind his own saddle, declaring, with a triumphant laugh, that we shall return that evening to the city of Beyrout with such game as few sportsmen can boast of having carried thither in one day."

The gentle nature of the Gazelle is as proverbial as its grace and swiftness, and is well expressed in the large, soft, liquid eye, which has formed from time immemorial the stock comparison of Oriental poets when describing the eyes of beauty.



THE GAZELLE.

THE PYGARG, OR ADDAX.

The Dishon or Dyshon—Signification of the word Pygarg—Certainty that the Dishon is an antelope, and that it must be one of a few species—Former and present range of the Addax—Description of the Addax

THERE is a species of animal mentioned once in the Scriptures under the name of Dishon which the Jewish Bible leaves untranslated, and merely gives as Dyshon, and which is rendered in the Septuagint by Pugargos, or PYGARG, as one version gives it. Now, the meaning of the word Pygarg is white-crouped, and for that reason the Pygarg of the Scriptures is usually held to be one of the white-crouped antelopes, of which several species are known. Perhaps it may be one of them—it may possibly be neither, and it may probably refer to all of them.

But that an antelope of some kind is meant by the word Dishon is evident enough, and it is also evident that the Dishon must have been one of the antelopes which could be obtained by the Jews. Now as the species of antelope which could have furnished food for that nation are very few in number, it is clear that, even if we do not hit upon the exact species, we may be sure of selecting an animal that was closely allied to it. Moreover, as the nomenclature is exceedingly loose, it is probable that more than one species might have been included in the word Dishon.

Modern commentators have agreed that there is every probability that the Dishon of the Pentateuch was the antelope known by the name of Addax.

This handsome antelope is a native of Northern Africa. It has a very wide range, and, even at the present day, is found in the vicinity of Palestine, so that it evidently was one of the antelopes which could be killed by Jewish hunters. From its

large size, and long twisted horns, it bears a strong resemblance to the Koodoo of Southern Africa. The horns, however, are not so long, nor so boldly twisted, the curve being comparatively slight, and not possessing the bold spiral shape which distinguishes those of the koodoo.



THE ADDAX.

The ordinary height of the Addax is three feet seven or eight inches, and the horns are almost exactly alike in the two sexes. Their length, from the head to the tips, is rather more than two feet. Its colour is mostly white, but a thick mane of dark black hair falls from the throat, a patch of similar hair grows on the forehead, and the back and shoulders are greyish brown. There is no mane on the back of the neck, as is the case with the koodoo.

The Addax is a sand-loving animal, as is shown by the wide and spreading hoofs, which afford it a firm footing on the yielding

soil. In all probability, this is one of the animals which would be taken, like the wild bull, in a net, being surrounded and driven into the toils by a number of hunters. It is not, however, one of the gregarious species, and is not found in those vast herds in which some of the antelopes love to assemble.



THE FALLOW-DEER, OR BUBALE.

The word Jachmur evidently represents a species of antelope—Resemblance of the animal to the ox tribe—Its ox-like horns and mode of attack—Its capability of domestication—Former and present range of the Bubale—Its representation on the monuments of ancient Egypt—Delicacy of its flesh—Size and general appearance of the animal.

It has already been mentioned that in the Old Testament there occur the names of three or four animals, which clearly belong to one or other of three or four antelopes. Only one of these names now remains to be identified. This is the Jachmur, or Yachmur, a word which has been rendered in the Septuagint as Boubalos, and has been translated in our Authorized Version as FALLOW DEER.

We shall presently see that the Fallow Deer is to be identified with another animal, and that the word Jachmur must find another interpretation. If we follow the Septuagint, and call it the BUBALE, we shall identify it with a well-known antelope, called by the Arabs the "Bekk'r-el-Wash," and known to zoologists as the BUBALE (*Acronotus bubalis*).

This fine antelope would scarcely be recognised as such by an unskilled observer, as in its general appearance it much more resembles the ox tribe than the antelope. Indeed, the Arabic title, "Bekk'r-el-Wash," or Wild Cow, shows how close must be the resemblance to the oxen. The Arabs, and indeed all the Orientals in whose countries it lives, believe it not to be an antelope, but one of the oxen, and class it accordingly.

How much the appearance of the Bubale justifies them in this opinion may be judged by reference to the figure on page 143. The horns are thick, short, and heavy, and are first inclined forwards, and then rather suddenly bent backwards. This formation of the horns causes the Bubale to use his weapons after the manner of the bull, thereby increasing the resemblance between them. When it attacks, the Bubale lowers its head to the ground, and as soon as its antagonist is within reach, tosses its head violently upwards, or swings it with a sidelong upward blow. In either case, the sharp curved horns, impelled by the powerful neck of the animal, and assisted by the weight of the large head, become most formidable weapons.

It is said that in some places, where the Bubales have learned to endure the presence of man, they will mix with his herds for the sake of feeding with them, and by degrees become so accustomed to the companionship of their domesticated friends, that they live with the herd as if they had belonged to it all their lives. This fact shows that the animal possesses a gentle disposition, and it is said to be as easily tamed as the gazelle itself.

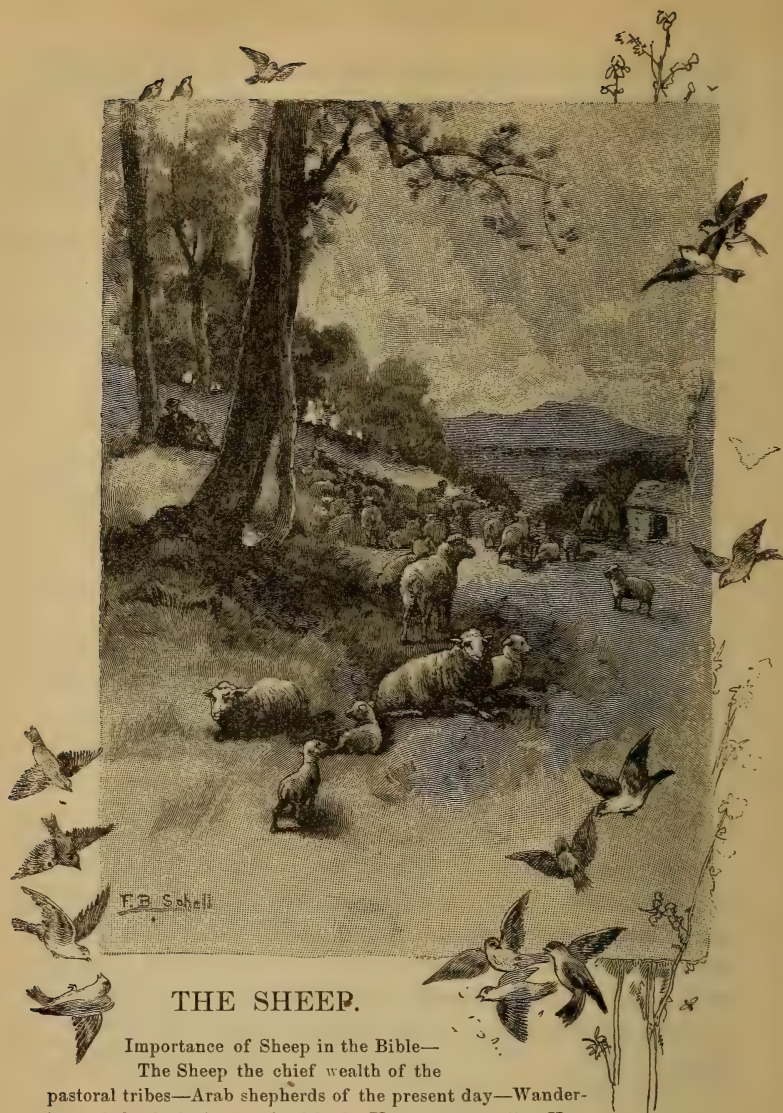
Even at the present day the Bubale has a very wide range, and formerly had in all probability a much wider. It is indigenous to Barbary, and has continued to spread itself over the greater part of Northern Africa, including the borders of the Sahara, the edges of the cultivated districts, and up the Nile for no small distance. In former days it was evidently a tolerably common animal of chase in Upper Egypt as there are

representations of it on the monuments, drawn with the quaint truthfulness which distinguishes the monumental sculpture of that period.



THE BUBALE, OR FALLOW-DEER OF SCRIPTURE.

It is probable that in and about Palestine it was equally common, so that there is good reason why it should be specially named as one of the animals that were lawful food. Not only was its flesh permitted to be eaten, but it was evidently considered as a great dainty, inasmuch as the Jachmur is mentioned in 1 Kings iv. 23 as one of the animals which were brought to the royal table. "Harts and Roebucks and Fallow-Deer" are the wild animals mentioned in the passage alluded to.



THE SHEEP.

Importance of Sheep in the Bible—

The Sheep the chief wealth of the pastoral tribes—Arab shepherds of the present day—Wanderings of the flocks in search of food—Value of the wells—How the Sheep are watered—The shepherd usually a part owner of the flocks—Structure of the sheepfolds—The rock caverns of Palestine—David's adventure with Saul—Use of the dogs—The broad-tailed Sheep, and its peculiarities.

WE now come to a subject which will necessarily occupy us for some little time.

There is, perhaps, no animal which occupies a larger space in the Scriptures than the SHEEP. Whether in religious, civil, or

domestic life, we find that the Sheep is bound up with the Jewish nation in a way that would seem almost incomprehensible, did we not recall the light which the New Testament throws upon the Old, and the many allusions to the coming Messiah under the figure of the Lamb that taketh away the sins of the world.

In treating of the Sheep, it will be perhaps advisable to begin the account by taking the animal simply as one of those creatures which have been domesticated from time immemorial, dwelling slightly on those points on which the sheep-owners of the old days differed from those of our own time.

The only claim to the land seems, in the old times of the Scriptures, to have lain in cultivation, or perhaps in the land immediately surrounding a well. But any one appears to have taken a piece of ground and cultivated it, or to have dug a well wherever he chose, and thereby to have acquired a sort of right to the soil. The same custom prevails at the present day among the cattle-breeding races of Southern Africa. The banks of rivers, on account of their superior fertility, were considered as the property of the chiefs who lived along their course, but the inland soil was free to all.

Had it not been for this freedom of the land, it would have been impossible for the great men to have nourished the enormous flocks and herds of which their wealth consisted; but, on account of the lack of ownership of the soil, a flock could be moved to one district after another as fast as it exhausted the herbage, the shepherds thus unconsciously imitating the habits of the gregarious animals, which are always on the move from one spot to another.

Pasturage being thus free to all, Sheep had a higher comparative value than is the case with ourselves, who have to pay in some way for their keep. There is a proverb in the Talmud which may be curtly translated, "Land sell, sheep buy."

The value of a good pasture-ground for the flocks is so great, that its possession is well worth a battle, the shepherds being saved from a most weary and harassing life, and being moreover fewer in number than is needed when the pasturage is scanty. Sir S. Baker, in his work on Abyssinia, makes some very interesting remarks upon the Arab herdsmen, who are placed in conditions very similar to those of the Israelitish shepherds

“The Arabs are creatures of necessity ; their nomadic life is compulsory, as the existence of their flocks and herds depends upon the pasturage. Thus, with the change of seasons they must change their localities according to the presence of fodder for their cattle. . . . The Arab cannot halt in one spot longer than the pasturage will support his flocks. The object of his life being fodder, he must wander in search of the ever-changing



ARABS JOURNEYING TO FRESH PASTURES.

supply. His wants must be few, as the constant change of encampment necessitates the transport of all his household goods ; thus he reduces to a minimum his domestic furniture and utensils. . . .

“This striking similarity to the descriptions of the Old Testament is exceedingly interesting to a traveller when residing among these curious and original people. With the Bible in one’s hand, and these unchanged tribes before the eyes, there is a thrilling illustration of the sacred record ; the past becomes the present, the veil of three thousand years is raised, and the living

picture is a witness to the exactness of the historical description. At the same time there is a light thrown upon many obscure passages in the Old Testament by the experience of the present customs and figures of speech of the Arabs, which are precisely those that were practised at the periods described. . . .

“Should the present history of the country be written by an Arab scribe, the style of the description would be precisely that of the Old Testament. There is a fascination in the



VIEW OF THE PYRAMIDS.

unchangeable features of the Nile regions. There are the vast pyramids that have defied time, the river upon which Moses was cradled in infancy, the same sandy desert through which he led his people, and the watering-places where their flocks were led to drink. The wild and wandering Arabs, who thousands of years ago dug out the wells in the wilderness, are represented by their descendants, unchanged, who now draw water from the deep wells of their forefathers, with the skins that have never altered their fashion.

“The Arabs, gathering with their goats and sheep around the

wells to-day, recall the recollection of that distant time when 'Jacob went on his journey, and came into the land of the people of the east. And he looked, and behold a well in the field, and lo! there were three flocks of sheep lying by it,' &c. The picture of that scene would be an illustration of Arab daily life in the Nubian deserts, where the present is a mirror of the past."

Owing to the great number of Sheep which they have to tend, and the peculiar state of the country, the life of the shepherd in Palestine is even now very different from that of an English shepherd, and in the days of the early Scriptures the distinction was even more distinctly marked.

Sheep had to be tended much more carefully than we generally think. In the first place, a thoughtful shepherd had always one idea before his mind,—namely, the possibility of obtaining sufficient water for his flocks. Even pasturage is less important than water, and, however tempting a district might be, no shepherd would venture to take his charge there if he were not sure of obtaining water. In a climate such as ours, this ever-pressing anxiety respecting water can scarcely be appreciated, for in hot climates not only is water scarce, but it is needed far more than in a temperate and moist climate. Thirst does its work with terrible quickness, and there are instances recorded where men have sat down and died of thirst in sight of the river which they had not strength to reach.

In places therefore through which no stream runs, the wells are the great centres of pasturage, around which are to be seen vast flocks extending far in every direction. These wells are kept carefully closed by their owners, and are only opened for the use of those who are entitled to water their flocks at them.

Noontide is the general time for watering the Sheep, and towards that hour all the flocks may be seen converging towards their respective wells, the shepherd at the head of each flock, and the Sheep following him. See how forcible becomes the imagery of David, the shepherd poet, "The Lord is my Shepherd; I shall not want. He maketh me to lie down in green pastures (or, in pastures of tender grass): He leadeth me beside the still waters" (Ps. xxiii. 1, 2). Here we have two of the principal duties of the good shepherd brought prominently before us,—namely, the

guiding of the Sheep to green pastures and leading them to fresh water. Very many references are made in the Scriptures to the pasturage of sheep, both in a technical and a metaphorical sense ; but as our space is limited, and these passages are very numerous, only one or two of each will be taken.

In the story of Joseph, we find that when his father and brothers were suffering from the famine, they seem to have cared as much for their Sheep and cattle as for themselves, inasmuch as among a pastoral people the flocks and herds constitute the only wealth. So, when Joseph at last discovered himself, and his family were admitted to the favour of Pharaoh, the first request which they made was for their flocks. "Pharaoh said unto his brethren, What is your occupation? And they said unto Pharaoh, Thy servants are shepherds, both we, and also our fathers.

"They said moreover unto Pharaoh, For to sojourn in the land are we come ; for thy servants have no pasture for their flocks ; for the famine is sore in the land of Canaan : now therefore, we pray thee, let thy servants dwell in the land of Goshen."

This one incident, so slightly remarked in the sacred history, gives a wonderfully clear notion of the sort of life led by Jacob and his sons. Forming, according to custom, a small tribe of their own, of which the father was the chief, they led a pastoral life, taking their continually increasing herds and flocks from place to place as they could find food for them. For example, at the memorable time when the story of Joseph begins, he was sent by his father to his brothers, who were feeding the flocks, and he wandered about for some time, not knowing where to find them. It may seem strange that he should be unable to discover such very conspicuous objects as large flocks of sheep and goats, but the fact is that they had been driven from one pasture-land to another, and had travelled in search of food all the way from Shechem to Dothan.

In 1 Chron. iv. 39, 40, we read of the still pastoral Israelities that "they went to the entrance of Gedor, even unto the east side of the valley, to seek pasture for their flocks. And they found fat pasture and good, and the land was wide, and quiet, and peaceable."

How it came to be quiet and peaceable is told in the context. It was peaceable simply because the Israelites were attracted by

the good pasturage, attacked the original inhabitants, and exterminated them so effectually that none were left to offer resistance to the usurpers. And we find from this passage that the value of good pasture-land where the Sheep could feed continually without being forced to wander from one spot to another was so considerable, that the owners of the flocks engaged in war, and exposed their own lives, in order to obtain so valuable a possession.



JACOB MEETS RACHEL AT THE WELL.

We will now look at one or two of the passages that mention watering the Sheep—a duty so imperative on an Oriental shepherd, and so needless to our own.

In the first place we find that most graphic narrative which occurs in Gen. xxix. to which a passing reference has already been made. When Jacob was on his way from his parents to the home of Laban in Padan-aram, he came upon the very well which belonged to his uncle, and there saw three flocks of Sheep lying around the well, waiting until the proper hour arrived. According to custom, a large stone was laid over the well, so as to perform the double office of keeping out the sand and dust, and of guarding the precious water against those who had no right to it. And when he saw his cousin Rachel arrive with



EASTERN SHEPHERD WATCHING HIS FLOCK.

the flock of which she had the management, he, according to the courtesy of the country and the time, rolled away the ponderous barrier, and poured out water into the troughs for the Sheep which Rachel tended.

About two hundred years afterwards, we find Moses performing a similar act. When he was obliged to escape into Midian on account of his fatal quarrel with a tyrannical Egyptian, he sat down by a well, waiting for the time when the stone might be rolled away, and the water be distributed. Now it happened that this well belonged to Jethro, the chief priest of the country, whose wealth consisted principally of Sheep. He entrusted his flock to the care of his seven daughters, who led their Sheep to the well and drew water as usual into the troughs. Presuming on their weakness, other shepherds came and tried to drive them away, but were opposed by Moses, who drove them away, and with his own hands watered the flock.

Now in both these examples we find that the men who performed the courteous office of drawing the water and pouring it into the sheep-troughs married afterwards the girl to whose charge the flocks had been committed. This brings us to the Oriental custom which has been preserved to the present day.

The wells at which the cattle are watered at noon-day are the meeting-places of the tribe, and it is chiefly at the well that the young men and women meet each other. As each successive flock arrives at the well, the number of the people increases, and while the sheep and goats lie patiently round the water, waiting for the time when the last flock shall arrive, and the stone be rolled off the mouth of the well, the gossip of the tribe is discussed, and the young people have ample opportunity for the pleasing business of courtship.

As to the passages in which the wells, rivers, brooks, water-springs, are spoken of in a metaphorical sense, they are too numerous to be quoted.

And here I may observe, that in reality the whole of Scripture has its symbolical as well as its outward signification ; and that, until we have learned to read the Bible strictly according to the spirit, we cannot understand one-thousandth part of the mysteries which it conceals behind its veil of language ; nor can we appreciate one-thousandth part of the treasures of wisdom which lie hidden in its pages

Another duty of the shepherd of ancient Palestine was to guard his flock from depredators, whether man or beast. Therefore the shepherd was forced to carry arms; to act as a sentry during the night; and, in fact, to be a sort of irregular soldier. A fully-armed shepherd had with him his bow, his spear, and his sword, and not even a shepherd lad was without his sling and the great quarter-staff which is even now universally carried by the tribes along the Nile—a staff as thick as a man's wrist, and six or seven feet in length. He was skilled in the use of all these weapons, especially in that of the sling.

In these days, the sling is only considered as a mere toy, whereas, before the introduction of fire-arms, it was one of the most formidable weapons that could be wielded by light troops. Round and smooth stones weighing three or four ounces were the usual projectiles, and, by dint of constant practice from childhood, the slingers could aim with a marvellous precision.



DAVID GATHERS STONES FROM THE BROOK TO CAST AT GOLIATH.

Of this fact we have a notable instance in David, who knew that the sling and the five stones in the hand of an active youth unencumbered by armour, and wearing merely the shepherd's

simple tunic, were more than a match for all the ponderous weapons of the gigantic Philistine.

It has sometimes been the fashion to attribute the successful aim of David to a special miracle, whereas those who are acquainted with ancient weapons know well that no miracle was wrought, because none was needed ; a good slinger at that time being as sure of his aim as a good rifleman of our days.

The sling was in constant requisition, being used both in directing the Sheep and in repelling enemies : a stone skilfully thrown in front of a straying Sheep being a well-understood signal that the animal had better retrace its steps if it did not want to feel the next stone on its back.



AN EASTERN SHEPHERD.

Passing his whole life with his flock, the shepherd was identified with his Sheep far more than is the case in this country. He knew all his Sheep by sight, he called them all by their names, and they all knew him and recognised his voice. He did not drive them, but he led them, walking in their front, and they following him. Sometimes he would play with them, pretending to run away while they pursued him, exactly as an infant-school teacher plays with the children.

Consequently, they looked upon him as their protector as well as their feeder, and were sure to follow wherever he led them.

We must all remember how David, who had passed all his early years as a shepherd, speaks of God as the Shepherd of



SHEEP FOLLOWING THEIR SHEPHERD.

Israel, and the people as Sheep; never mentioning the Sheep as being driven, but always as being led. "Thou leddest Thy people like a flock, by the hands of Moses and Aaron" (Ps. lxxvii. 20); "The Lord is my Shepherd. . . . He leadeth me beside the still waters" (Ps. xxiii. 1, 2); "Lead me in a plain path, because of mine enemies" (Ps. xxvii. 11); together with many other passages too numerous to be quoted.

Our Lord Himself makes a familiar use of the same image: "He calleth his own sheep by name, and leadeth them out And when he putteth forth his own sheep, he goeth before them, and the sheep follow him: for they know his voice.

Although the shepherds of our own country know their Sheep by sight, and say that there is as much difference in the faces of Sheep as of men, they have not, as a rule, attained the art of teaching their Sheep to recognise their names. This custom, however, is still retained, as may be seen from a well-known passage in Hartley's "*Researches in Greece and the Levant*:"—

"Having had my attention directed last night to the words in John x. 3, I asked my man if it were usual in Greece to give names to the sheep. He informed me that it was, and that the sheep obeyed the shepherd when he called them by their names. This morning I had an opportunity of verifying the truth of this remark. Passing by a flock of sheep, I asked the shepherd the same question which I had put to the servant, and he gave me the same answer. I then bade him call one of his sheep. He did so, and it instantly left its pasturage and its companions, and ran up to the hands of the shepherd, with signs of pleasure, and with a prompt obedience which I had never before observed in any other animal.

"It is also true that in this country, 'a stranger will they not follow, but will flee from him.' The shepherd told me that many of his sheep were still wild, that they had not learned their names, but that by teaching them they would all learn them."

Generally, the shepherd was either the proprietor of the flock, or had at all events a share in it, of which latter arrangement we find a well-known example in the bargain which Jacob made with Laban, all the white Sheep belonging to his father-in-law, and all the dark and spotted Sheep being his wages as shepherd. Such a man was far more likely to take care of the Sheep than if he were merely a paid labourer; especially in a country where the life of a shepherd was a life of actual danger, and he might at any time be obliged to fight against armed robbers, or to oppose the wolf, the lion, or the bear. The combat of the shepherd David with the last-mentioned animals has already been noticed.

In allusion to the continual risks run by the Oriental shepherd, our Lord makes use of the following well-known words:—"The thief cometh not but for to steal, and to kill, and to destroy: I am come that they might have life, and have it more abundantly. I am the Good Shepherd: the good shepherd giveth his life for

the sheep. But he that is an hireling, . . . whose own the sheep are not, seeth the wolf coming, and leaveth the sheep, and fleeth: and the wolf catcheth them, and scattereth the sheep. The hireling fleeth because he is an hireling, and careth not for the sheep."

Owing to the continual moving of the Sheep, the shepherd had very hard work during the lambing time, and was obliged to carry in his arms the young lambs which were too feeble to accompany their parents, and to keep close to him those Sheep who were expected soon to become mothers. At that time of year the shepherd might constantly be seen at the head of his flock, carrying one or two lambs in his arms, accompanied by their mothers.

In allusion to this fact Isaiah writes: "His reward is with Him, and His work before Him. He shall feed His flock like a shepherd; He shall gather the lambs with His arms and carry them in His bosom, and shall gently lead them that are with young" (or, "that give suck," according to the marginal reading). Here we have presented at once before us the good shepherd who is no hireling, but owns the Sheep; and who therefore has "his reward with him, and his work before him;" who bears the tender lambs in his arms, or lays them in the folds of his mantle, and so carries them in his bosom, and leads by his side their yet feeble mothers.

Frequent mention is made of the folds in which the Sheep are penned; and as these folds differed—and still differ—materially from those of our own land, we shall miss the force of several passages of Scripture if we do not understand their form, and the materials of which they were built. Our folds consist merely of hurdles, moveable at pleasure, and so low that a man can easily jump over them, and so fragile that he can easily pull them down. Moreover, the Sheep are frequently enclosed within the fold while they are at pasture.

If any one should entertain such an idea of the Oriental fold, he would not see the force of the well-known passage in which our Lord compares the Church to a sheepfold, and Himself to the door. "He that entereth not by the door into the sheepfold, but climbeth up some other way, the same is a thief and a robber. But he that entereth in by the door is the shepherd of the sheep. To him the porter openeth, and the sheep hear his

voice. . . All that ever came before me are thieves and robbers : but the sheep did not hear them. I am the door : by me if any man enter in, he shall be saved, and shall go in and out, and find pasture."



ANCIENT SHEEP PEN.

Had the fold here mentioned been a simple enclosure of hurdles, such an image could not have been used. It is evident that the fold to which allusion was made, and which was probably in sight at the time when Jesus was disputing with the Pharisees, was a structure of some pretensions; that it had walls which a thief could only enter by climbing over them—not by “breaking through” them, as in the case of a mud-walled private house; and that it had a gate, which was guarded by a watchman.

In fact, the fold was a solid and enduring building, made of stone. Thus in Numbers xxxii. it is related that the tribes of Reuben and Gad, who had great quantities of Sheep and other

cattle, asked for the eastward side of Jordan as a pasture-ground, promising to go and fight for the people, but previously to build fortified cities for their families, and folds for their cattle, the folds being evidently, like the cities, buildings of an enduring nature.

In some places the folds are simply rock caverns, partly natural and partly artificial, often enlarged by a stone wall built outside it. It was the absence of these rock caverns on the east side of Jordan that compelled the Reubenites and Gadites to build folds for themselves, whereas on the opposite side places of refuge were comparatively abundant.

See, for example, the well-known history related in 1 Sam. xxiii. xxiv. David and his miscellaneous band of warriors, some six hundred in number, were driven out of the cities by the fear of Saul, and were obliged to pass their time in the wilderness, living in the "strong holds" (xxiii. 14, 19), which we find immediately afterwards to be rock caves (ver. 25). These caves were of large extent, being able to shelter these six hundred warriors, and, on one memorable occasion, to conceal them so completely as they stood along the sides, that Saul, who had just come out of the open air, was not able to discern them in the dim light, and David even managed to approach him unseen, and cut off a portion of his outer robe.

That this particular cave was a sheepfold we learn from xxiv. 2-4: "Then Saul took three thousand chosen men out of all Israel, and went to seek David and his men upon the rocks of the wild goats. And he came to the sheepcotes by the way." Into these strongholds the Sheep are driven towards nightfall, and, as the flocks converge towards their resting-place, the bleatings of the sheep are almost deafening.

The shepherds as well as their flocks found shelter in these caves, making them their resting-places while they were living the strange, wild, pastoral life among the hills; and at the present day many of the smaller caves and "holes of the rock" exhibit the vestiges of human habitation in the shape of straw, hay, and other dried herbage, which has been used for beds, just as we now find the rude couches of the coast-guard men in the cliff caves of our shores.

The dogs which are attached to the sheepfolds were, as they are now, the faithful servants of man, although, as has already

been related, they are not made the companions of man as is the case with ourselves. Lean, gaunt, hungry, and treated with but scant kindness, they are yet faithful guardians against the attack of enemies. They do not, as do our sheepdogs, assist in driving the flocks, because the Sheep are not driven, but led, but they are invaluable as nocturnal sentries. Crouching together outside the fold, in little knots of six or seven together, they detect the approach of wild animals, and at the first sign of the wolf or the jackal they bark out a defiance, and scare away the invaders. It is strange that the old superstitious idea of their uncleanness should have held its ground through so many tens of centuries; but, down to the present day, the shepherd of Palestine, though making use of the dog as a guardian of his flock, treats the animal with utter contempt, not to say cruelty, beating and kicking the faithful creature on the least provocation, and scarcely giving it sufficient food to keep it alive.

Sometimes the Sheep are brought up by hand at home. "House-lamb," as we call it, is even now common, and the practice of house-feeding peculiar in the old Scriptural times.

We have an allusion to this custom in the well-known parable of the prophet Nathan: "The poor man had nothing, save one little ewe lamb, which he had bought and nourished up: and it grew up together with him, and with his children; it did eat of his own meat, and drank of his own cup, and lay in his bosom, and was unto him as a daughter" (2 Sam. xii. 3). A further, though less distinct, allusion is made to this practice in Isaiah vii. 21: "It shall come to pass in that day, that a man shall nourish a young cow, and two sheep."

How the Sheep thus brought up by hand were fattened may be conjectured from the following passage in Mr. D. Urquhart's valuable work on the Lebanon:—

"In the month of June, they buy from the shepherds, when pasturage has become scarce and sheep are cheap, two or three sheep; these they feed by hand. After they have eaten up the old grass and the provender about the doors, they get vine leaves, and, after the silkworms have begun to spin, mulberry leaves. They purchase them on trial, and the test is appetite. If a sheep does not feed well, they return it after three days. To increase their appetite they wash them twice a day, morning and evening, a care they never bestow on their own bodies.



THE POOR MAN'S LAMB.



THE RICH MAN'S FEAST.

"If the sheep's appetite does not come up to their standard, they use a little gentle violence, folding for them forced leaf-balls and introducing them into their mouths. The mulberry has the property of making them fat and tender. At the end of four months the sheep they had bought at eighty piastres will sell for one hundred and forty, or will realize one hundred and fifty.

"The sheep is killed, skinned, and hung up. The fat is then removed; the flesh is cut from the bones, and hung up in the sun. Meanwhile, the fat has been put in a cauldron on the fire, and as soon as it has come to boil, the meat is laid on. The proportion of the fat to the lean is as four to ten, eight 'okes' fat and twenty lean. A little salt is added, it is simmered for an hour, and then placed in jars for the use of the family during the year.

"The large joints are separated and used first, as not fit for keeping long. The fat, with a portion of the lean, chopped fine, is what serves for cooking the 'bourgoul,' and is called *Dehen*. The sheep are of the fat-tailed variety, and the tails are the great delicacy."

This last sentence reminds us that there are two breeds of Sheep in Palestine. One much resembles the ordinary English Sheep, while the other is a very different animal. It is much taller on its legs, larger-boned, and long-nosed. Only the rams have horns, and they are not twisted spirally like those of our own Sheep, but come backwards, and then curl round so that the point comes under the ear. The great peculiarity of this Sheep is the tail, which is simply prodigious in point of size, and is an enormous mass of fat. Indeed, the long-legged and otherwise lean animal seems to concentrate all its fat in the tail, which, as has been well observed, appears to abstract both flesh and fat from the rest of the body. So great is this strange development, that the tail alone will sometimes weigh one-fifth as much as the entire animal. A similar breed of Sheep is found in Southern Africa and other parts of the world. In some places, the tail grows to such an enormous size that, in order to keep so valuable a part of the animal from injury, it is fastened to a small board, supported by a couple of wheels, so that the Sheep literally wheels its own tail in a cart.

Frequent reference to the fat of the tail is made in the Authorized Version of the Scriptures, though in terms which



FLOCKS OF SHEEP BEING TAKEN INTO JERUSALEM.

would not be understood did we not know that the Sheep which is mentioned in those passages is the long-tailed Sheep of Syria. See, for example, the history narrated in *Exod. xxix. 22*, where special details are given as to the ceremony by which Aaron and his sons were consecrated to the priesthood. "Thou shalt take of the ram the fat and the rump, and the fat that covereth the inwards, and the caul above the liver, and the two kidneys, and the fat that is upon them."

Though this particular breed is not very distinctly mentioned in the Bible, the Talmudical writers have many allusions to it. In the *Mischna* these broad-tailed Sheep are not allowed to leave their folds on the Sabbath-day, because by wheeling their little tail-waggons behind them they would break the Sabbath. The writers describe the tail very graphically, comparing its shape to that of a saddle, and saying that it is fat, without bones, heavy and long, and looks as if the whole body were continued beyond the hind-legs, and thence hung down in place of a tail.

The Rabbinical writers treat rather fully of the Sheep, and

give some very amusing advice respecting their management. If the ewes cannot be fattened in the ordinary manner, that end may be achieved by tying up the udder so that the milk cannot flow, and the elements which would have furnished milk are forced to produce fat. If the weather should be chilly at the shearing time, and there is danger of taking cold after the wool is removed, the shepherd should dip a sponge in oil and tie it on the forehead of the newly-shorn animal. Or, if he should not have a sponge by him, a woollen rag will do as well. The same potent remedy is also efficacious if the Sheep should be ill in lambing time.

That the Sheep is liable to the attack of the gadfly, which deposits its eggs in the nostrils of the unfortunate animal, was as well known in the ancient as in modern times. It is scarcely necessary to mention that the insect in question is the *Æstrus ovis*. Instinctively aware of the presence of this insidious and dreaded enemy, which, though so apparently insignificant, is as formidable a foe as any of the beasts of prey, the Sheep display the greatest terror at the sharp, menacing sound produced by the gadfly's wings as the insect sweeps through the air towards its destination. They congregate together, placing their heads almost in contact with each other, snort and paw the ground in their terror, and use all means in their power to prevent the fly from accomplishing its purpose.

When a gadfly succeeds in attaining its aim, it rapidly deposits an egg or two in the nostril, and then leaves them. The tiny eggs are soon hatched by the natural heat of the animal, and the young larvæ crawl up the nostril towards the frontal sinus. There they remain until they are full-grown, when they crawl through the nostrils, fall on the ground, burrow therein, and in the earth undergo their changes into the pupal and perfect stages.

It need hardly be said that an intelligent shepherd would devote himself to the task of killing every gadfly which he could find, and, as these insects are fond of basking on sunny rocks or tree-trunks, this is no very difficult matter.

The Rabbinical writers, however, being totally ignorant of practical entomology, do not seem to have recognised the insect until it had reached its full larval growth. They say that the rams manage to shake the grubs out of their nostrils by butting

at one another in mimic warfare, and that the ewes, which are hornless, and are therefore incapable of relieving themselves by such means, ought to be supplied with plants which will make them sneeze, so that they may shake out the grubs by the convulsive jerkings of the head caused by inhaling the irritating substance.

The same writers also recommend that the rams should be furnished with strong leathern collars.

When the flock is on the march, the rams always go in the van, and, being instinctively afraid of their ancient enemy the wolf, they continually raise their heads and look about them. This line of conduct irritates the wolves, who attack the foremost rams and seize them by the throat. If, therefore, a piece of stout leather be fastened round the ram's neck, the wolf is baffled, and runs off in sullen despair.

Generally, the oldest ram is distinguished by a bell, and, when the flock moves over the hilly slopes, the Sheep walk in file after the leader, making narrow paths, which are very distinct from a distance, but are scarcely perceptible when the foot of the traveller is actually upon them. From this habit has arisen an ancient proverb, "As the sheep after the sheep, so the daughter after the mother," a saying which is another form of our own familiar proverb, "What is bred in the bone will not come out of the flesh."

WE now come to the Sheep considered with reference to its uses. First and foremost the Sheep was, and still is, one of the chief means of subsistence, being to the pastoral inhabitants of Palestine what the oxen are to the pastoral inhabitants of Southern Africa.

To ordinary persons the flesh of the Sheep was a seldom-tasted luxury; great men might eat it habitually, "faring sumptuously every day," and we find that, among the glories of Solomon's reign, the sacred chronicler has thought it worth while to mention that part of the daily provision for his household included one hundred Sheep. No particular pains seem to have been taken about the cooking of the animal, which seems generally to have been boiled. As, however, in such a climate the flesh could not be kept for the purpose of making it tender, as is the case in this part of the world, it was cooked as soon as the

animal was killed, the fibres not having time to settle into the rigidity of death.

Generally, when ordinary people had the opportunity of tasting the flesh of the Sheep, it was on the occasion of some rejoicing,—such, for example, as a marriage feast, or the advent of a guest, for whom a lamb or a kid was slain and cooked on the spot, a young male lamb being almost invariably chosen as less injurious than the ewe to the future prospects of the flock. Roasting over a fire was sometimes adopted, as was baking in an oven sunk in the ground, a remarkable instance of which we shall see when we come to the Jewish sacrifices. Boiling, however, was the principal mode; so much so, indeed, that the Hebrew word which signifies boiling is used to signify any kind of cooking, even when the meat was roasted.

The process of cooking and eating the Sheep was as follows.

The animal having been killed according to the legal form, the skin was stripped off, and the body separated joint from joint, the right shoulder being first removed. This, it will be remembered, was the priest's portion; see Lev. vii. 32: "The right shoulder shall ye give unto the priest for an heave offering of the sacrifices of your peace offerings." The whole of the flesh was then separated from the bones, and chopped small, and even the bones themselves broken up, so that the marrow might not be lost.

A reference to this custom is found in Micah iii. 2, 3, "Who pluck off their skin from off them, and their flesh from off their bones; who also eat the flesh of my people . . . and they break their bones, and chop them in pieces, as for the pot, and as flesh within the caldron." The reader will now understand more fully the force of the prophecy, "He keepeth all His bones: not one of them is broken" (Psa. xxxiv. 20).

The mixed mass of bones and flesh was then put into the caldron, which was generally filled with water, but sometimes with milk, as is the custom with the Bedouins of the present day, whose manners are in many respects identical with those of the early Jews. It has been thought by some commentators that the injunction not to "seethe a kid in his mother's milk" (Deut. xiv. 21) referred to this custom. I believe, however, that the expression "in his mother's milk" does not signify that the flesh of the kid might not be boiled in its mother's milk, but

that a kid might not be taken which was still in its mother's milk, *i.e.* unweaned.

Salt and spices were generally added to it ; see Ezek. xxiv. 10 : "Heap on wood, kindle the fire, consume the flesh, and spice it well." The surface was carefully skimmed, and, when the meat was thoroughly cooked, it and the broth were served up separately. The latter was used as a sort of sauce, into which unleavened bread was dipped. So in Judges vi. 19 we read that when Gideon was visited by the angel, according to the hospitable custom of the land, he "made ready a kid, and unleavened cakes of an ephah of flour: the flesh he put in a basket, and he put the broth in a pot, and brought it out unto him under the oak, and presented it to him."

Valuable, however, as was the Sheep for this purpose, there has always existed a great reluctance to kill the animal, the very sight of the flocks being an intense gratification to a pastoral Oriental. The principal part of the food supplied by the Sheep was, and is still, the milk ; which afforded abundant food without thinning the number of the flock. As all know who have tasted it, the milk of the Sheep is peculiarly rich, and in the East is valued much more highly than that of cattle. The milk was seldom drunk in a fresh state, as is usually the case with ourselves, but was suffered to become sour, curdled, and semi-solid.

WE now come to a portion of the Sheep scarcely less important than the flesh and the milk, *i.e.* the fleece, or wool.

In the ancient times nearly the whole of the clothing was made of wool, especially the most valuable part of it, namely the large mantle, or "haick," in which the whole person could be folded, and which was the usual covering during sleep. The wool, therefore, would be an article of great national value ; and so we find that when the king of Moab paid his tribute in kind to the king of Israel, it was carefully specified that the Sheep should not be shorn. "And Mesha king of Moab was a sheep-master, and rendered unto the king of Israel an hundred thousand lambs, and an hundred thousand rams, with the wool."

The wool of the Sheep of Palestine differed extremely in value ; some kinds being coarse and rough, while others were fine.

The wool was dressed in those times much as it is at present, being carded and then spun with the spindle, the distaff being apparently unused, and the wool simply drawn out by the hand. The shape of the spindle was much like that of the well-known flat spinning-tops that come from Japan—namely, a disc through which passes an axle. A smart twirl given by the fingers to the axle makes the disc revolve very rapidly, and its weight causes the rotation to continue for a considerable time. Spinning the wool was exclusively the task of the women, a custom which prevailed in this country up to a very recent time, and which still traditionally survives in the term “spinster,” and in the metaphorical use of the word “distaff” as synonymous with a woman’s proper work.

When spun into threads, the wool was woven in the simple loom which has existed up to our own day, and which is identical in its general principles throughout a very large portion of the world. It consisted of a framework of wood, at one end of which was placed the “beam” to which the warp was attached; and at the other end was the “pin” on which the cloth was rolled as it was finished.

The reader may remember that when Delilah was cajoling Samson to tell her the secret of his strength, he said, “If thou weavest the seven locks of my head with the web.” So, as he slept, she interwove his long hair with the fabric which was on her loom, and, to make sure, “fastened it with the pin,” *i.e.* wove it completely into the cloth which was rolled round the pin. So firmly had she done so, that when he awoke he could not disentangle his hair, but left the house with the whole of the loom, the beam and the pin, and the web hanging to his head.

Wool was often dyed of various colours; blue, purple, and scarlet being those which were generally employed. The rams’ skins which formed part of the covering of the Tabernacle were ordered to be dyed scarlet, partly on account of the significance of the colour, and partly because none but the best and purest fleeces would be chosen for so rare and costly a dye. How the colour was produced we shall learn towards the end of the volume.

Sheep-shearing was always a time of great rejoicing and revelry, which seem often to have been carried beyond the bounds of so-

briety. Thus when Nabal had gathered together his three thousand Sheep in Carmel, and held a shearing festival, David sent to ask for some provisions for his band, and was refused in accordance with the disposition of the man, who had inflamed his naturally churlish nature with wine. "He held a feast in his house, like the feast of a king: and Nabal's heart was merry within him, for he was very drunken" (1 Sam. xxv. 36).

The same was probably the case when Laban was shearing his Sheep (Gen. xxxi. 19). Otherwise it would scarcely have been possible for Jacob to have gone away unknown to Laban, taking with him his wives and children, his servants, his camels, and his flocks, the rapid increase of which had excited the jealousy of his uncle, and which were so numerous that, in fear of his brother Esau, he divided them into two bands, and yet was able to select from them a present to his brother, consisting in all of nearly six hundred sheep, camels, oxen, goats, and asses.

Sometimes the shepherds and others who lived in pastoral districts made themselves coats of the skins of the Sheep, with the wool still adhering to it. The custom extends to the present day, and even in many parts of Europe the sheep-skin dress of the shepherds is a familiar sight to the traveller. The skin was sometimes tanned and used as leather, but was considered as inferior to that of the goat. Mr. Tristram conjectures that the leathern "girdle" worn by St. John the Baptist was probably the **untanned** sheep-skin coat which has been just mentioned. So it is said of the early Christians, that "they wandered about in sheep-skins and goat-skins, being destitute, afflicted, tormented," the sheep-skins in question being evidently the rude shepherd's coats.

† The horn of the ram had a national value, as from it were made the sacred trumpets which played so important a part in the history of the Jewish nation. There is no doubt that the primitive trumpets were originally formed either from the horn of an animal, such as the ox, the large-horned antelopes, the sheep, and the goat, and that in process of time they were made of metal, generally copper or silver.

References are frequently made in the Bible to these trumpets, for which there were different names, probably on account of their different forms. These names are, however, very loosely

rendered in our version, the same word being sometimes translated the "cornet," and sometimes the "trumpet."



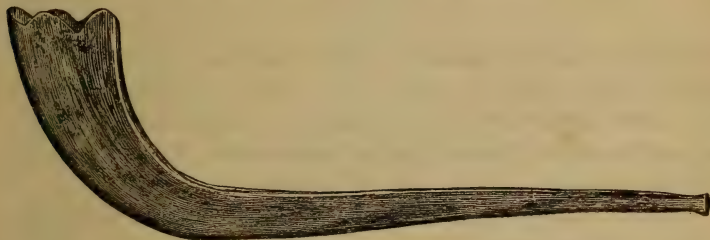
SOUNDING THE TRUMPETS IN THE YEAR OF JUBILEE.

The jubilee year was always ushered in by the blasts of the sacred trumpets. "Then shalt thou cause the trumpet of the jubilee to sound on the tenth day of the seventh month, in the day of atonement shall ye make the trumpet sound through-

out all your land" (Lev. xxv. 9). Then there was the festival known as the Feast of Trumpets. "In the seventh month, on the first day of the month, ye shall have an holy convocation; ye shall do no servile work: it is a day of blowing the trumpets unto you" (Numb. xxix. 1).

One of these trumpets is now before me, and is shown in the accompanying illustration.

In length it measures eighteen inches, *i.e.* a cubit, and it is formed entirely in one piece. As far as I can judge, it is made from the left horn of the broad-tailed Sheep, which, as has already been remarked, is not spiral, but flattish, curved backwards, and forming nearly a circle, the point passing under the ear. This structure, added to the large size of the horn, adapts it well for its purpose. In order to bring it to the proper shape, the horn is softened by heat, and is then modelled into the very form which was used by the Jewish priests who blew the trumpet before the ark.



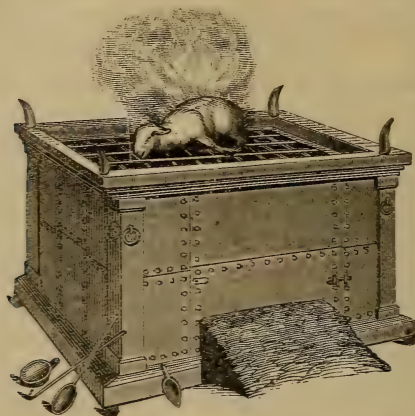
RAM'S HORN TRUMPET.

At the present day one such trumpet, at least, is found in every Jewish community, and is kept by the man who has the privilege of blowing it.

WE now come to the important subject, the use of the Sheep in sacrifice.

No animal was used so frequently for this purpose as the Sheep, and in many passages of the Mosaic law are specified the precise age as well as the sex of the Sheep which was to be sacrificed in certain circumstances. Sometimes the Sheep was sacrificed as an offering of thanksgiving, sometimes as an expiation for sin, and sometimes as a redemption for some more valuable animal. The young male lamb was the usual sacrifice;

and almost the only sacrifice for which a Sheep might not be offered was that of the two goats on the great Day of Atonement.



A LAMB UPON THE ALTAR OF BURNT OFFERING.

To mention all the passages in which the Sheep is ordered for sacrifice would occupy too much of our space, and we will therefore restrict ourselves to the one central rite of the Jewish nation, the sacrifice of the Paschal lamb, the precursor of the Lamb of God, who taketh away the sins of the world.

Without examining in full the various ceremonies of the Paschal sacrifice, we will glance over the salient points which distinguish it from any other sacrifice.

The lamb must be a male, which is selected and examined with the minutest care, that it may be free from all blemish, and must be of the first year. It must be killed on the fourteenth of the month Abib as the sun is setting, and the blood must be sprinkled with hyssop. In the first or Egyptian Passover the blood was sprinkled on the lintels and doorposts of the houses, but afterwards on the altar. It must be roasted with fire, and not boiled, after the usual custom in the East; not a bone must be broken. It must be eaten by the household in haste, as if they were just starting on a journey, and if any of it should be left, it must be consumed in the fire, and not eaten on the following day.

Such are the chief points in connexion with the Paschal rite,

at once a sacrifice and a feast. The original directions not being sufficiently minute to meet all the practical difficulties which might hinder the correct performance of the rite, a vast number of directions are given by the Rabbinical writers. In order, for example, to guard against the destruction of any part of the animal by careless cooking over a fire, or the possible fracture of a bone by a sudden jet of flame, the Paschal lamb was rather baked than roasted, being placed in an earthen oven from which the ashes had been removed. In order to prevent it from being burned or blackened against the sides of the oven, (in which case it would be cooked with earthenware and not with fire), it was transfixed with a wooden stake, made from the pomegranate-tree, and a transverse spit was thrust through the shoulders. These spits were made of wood, because a metal spit would become heated in the oven, and would cause all the flesh which it touched to be roasted with metal, and not with fire; and the wood of the pomegranate was chosen, because that wood was supposed not to emit any sap when heated. If a drop of water had fallen on the flesh, the law would have been broken, as that part of the flesh would be considered as boiled, and not roasted.

As to the eating of unleavened bread and bitter herbs with the lamb, the custom does not bear on the present subject. In shape the oven seems to have resembled a straw beehive, having an opening at the side by which the fuel could be removed and the lamb inserted.

The ceremony of the Passover has been described by several persons, such as the late Consul Rogers and the Dean of Westminster, the latter of whom has given a most striking and vivid account of the rite in his "Lectures on the Jewish Church."

The place which is now employed in the celebration of this rite is a level spot about two hundred yards from the summit of the mountain, a place which is apparently selected on account of its comparative quiet and seclusion. Dean Stanley thinks that in former times, when the Samaritans were the masters of the country, they celebrated the sacrifice on the sacred plateau on the very summit of the mountain, so that the rite could be seen for a vast distance on every side. Now, however, the less conspicuous place is preferred. By the kindness of the Palestine Exploration Society, I am enabled to present the reader

with a view of this sacred spot, taken from a photograph made an hour or two before the time of sacrifice. The rough, rugged character of the mountain is shown by this illustration, though not so well as in several other photographs of Gerizim, in which the entire surface seems to be loosely covered with stones like those of which the low wall is built. Near the centre of the illustration may be seen a pile of sticks and the tops of two



THE PLACE OF SACRIFICE.

caldrons, on each of which a stone is laid to keep the cover from being blown off by the wind. These sticks nearly fill a trench in which the caldrons are sunk, and their use will be presently seen on reading Dean Stanley's narrative. In the far distance are the plains of Samaria, and the long-drawn shadows of the priest and his nephew, and probable successor, show that the time of sacrifice is rapidly approaching.

On the previous day the whole of the community had pitched their tents on the mountain, and as the time of sunset approached the women retired to the tents, and all the males, except those who were unclean according to the provisions of the Mosaic law, assembled near a long deep trench that had been dug in the ground. The men are clothed in long white garments, and the six young men who are selected as the actual sacrificers are dressed in white drawers and shirts. These youths are trained to the duty, but whether they hold any sacred office could not be ascertained.

Then, according to the narrative of Dean Stanley, "the priest, ascending a large rough stone in front of the congregation, recited in a loud chant or scream, in which the others joined, prayers or praises chiefly turning on the glories of Abraham and Isaac. Their attitude was that of all Orientals in prayer; standing, occasionally diversified by the stretching out of the hands, and more rarely by kneeling or crouching, with their knees wrapped in their clothes and bent to the ground, towards the Holy Place on the summit of Gerizim. The priest recited his prayers by heart; the others had mostly books in Hebrew and Arabic.

"Presently, suddenly there appeared amongst the worshippers six sheep, driven up by the side of the youths before mentioned. The unconscious innocence with which they wandered to and fro amongst the bystanders, and the simplicity in aspect and manner of the young men who tended them, more recalled a pastoral scene in Arcadia, or one of those inimitable patriarchal *tableaux* represented in the Ammergau Mystery, than a religious ceremonial.

"The sun, meanwhile, which had hitherto burnished up the Mediterranean in the distance, now sank very nearly to the farthest western ridge overhanging the plain of Sharon. The recitation became more vehement. The priest turned about, facing his brethren, and the whole history of the Exodus from the beginning of the plagues of Egypt was rapidly, almost furiously, chanted. The sheep, still innocently playful, were driven more closely together.

"The setting sun now touched the ridge. The youths burst into a wild murmur of their own, drew forth their long bright knives, and brandished them aloft. In a moment the sheep

were thrown on their backs, and the flashing knives rapidly drawn across their throats. Then a few convulsive but silent struggles—‘as a sheep . . . dumb . . . that openeth not his mouth,’—and the six forms lay lifeless on the ground, the blood streaming from them; the one only Jewish sacrifice lingering in the world. In the blood the young men dipped their fingers, and a small spot was marked on the foreheads and noses of the children. A few years ago the red stain was placed on all. But this had now dwindled away into the present practice, preserved, we were told, as a relic or emblem of the whole. Then, as if in congratulation at the completion of the ceremony, they all kissed each other, in the Oriental fashion, on each side of the head.

“The next process was that of the fleecing and roasting of the slaughtered animals, for which the ancient temple furnished such ample provisions. Two holes on the mountain side had been dug; one at some distance, of considerable depth, the other, close to the scene of the sacrifice, comparatively shallow. In this latter cavity, after a short prayer, a fire was kindled, out of the mass of dry heath, juniper, and briers, such as furnished the materials for the conflagration in Jotham’s parable, delivered not far from this spot.

“Over the fire were placed two caldrons full of water. Whilst the water boiled, the congregation again stood around, and (as if for economy of time) continued the recitation of the Book of Exodus, and bitter herbs were handed round wrapped in a strip of unleavened bread—‘with unleavened bread and bitter herbs shall they eat it.’ Then was chanted another short prayer; after which the six youths again appeared, poured the boiling water over the sheep, and plucked off their fleeces. The right forelegs of the sheep, with the entrails, were thrown aside and burnt. The liver was carefully put back. Long poles were brought, on which the animals were spitted; near the bottom of each pole was a transverse peg or stick, to prevent the body from slipping off.”

This cross-piece does not, however, penetrate the body, which in most cases scarcely touches it, so that there is little or no resemblance to a crucifixion. The writer lays especial stress on this point, because the early Christians saw in the transverse spit an emblem of the cross. In the Jewish Passover this emblem would have been more appropriate, as in that ceremony the

cross-piece was passed through the shoulders, and the forefeet tied to it.

The Sheep being now prepared, they were carried to the oven, which on this occasion was a deep, circular pit, in which a fire had been previously kindled. Into this the victims were carefully lowered, the stakes on which they were impaled guarding their bodies from touching the sides of the oven, and the cross-piece at the end preventing them from slipping off the stake to the bottom of the pit among the ashes. A hurdle was then laid on the mouth of the pit, and wet earth was heaped upon it so as to close it completely. The greater part of the community then retired to rest. In about five hours, the Paschal moon being high in the heavens, announcement was made that the feast was about to begin. Then, to resume Dean Stanley's narrative,

"Suddenly the covering of the hole was torn off, and up rose into the still moonlit sky a vast column of smoke and steam; recalling, with a shock of surprise, that, even by an accidental coincidence, Reginald Heber should have so well caught this striking feature of so remote and unknown a ritual :

Smokes on Gerizim's mount Samaria's sacrifice.'

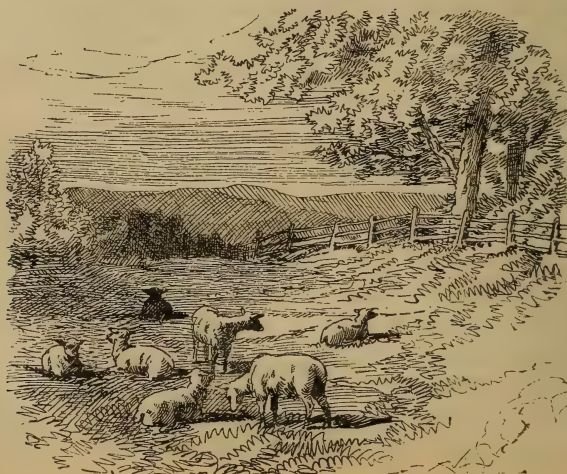
"Out of the pit were dragged successively the six sheep, on their long spits, black from the oven. The outlines of their heads, their ears, their legs, were still visible—'his head, with his legs, and with the inward parts thereof.' They were hoisted aloft, and then thrown on large square brown mats, previously prepared for their reception, on which we were carefully prevented from treading, as also from touching even the extremities of the spit.

"The bodies thus wrapped in the mats were hurried down to the trench where the sacrifice had taken place, and laid out upon them in a line between two files of the Samaritans. Those who had before been dressed in white robes still retained them, with the addition now of shoes on their feet and staves in their hands, and ropes round their waists—'thus shall ye eat it; with your loins girded, your shoes on your feet, your staff in your hand.' The recitation of prayers or of the Pentateuch recommenced, and continued till it suddenly terminated in their all sitting down on their haunches, after the Arab fashion at meals, and beginning to eat. This, too, is a deviation from the practice of only a few

years since, when they retained the Mosaic ritual of standing whilst they ate. The actual feast was conducted in rapid silence, as of men in hunger, as no doubt most of them were, and so as soon to consume every portion of the blackened masses, which they tore away piecemeal with their fingers—‘ye shall eat in haste.’ There was a general merriment, as of a hearty and welcome meal.

“In ten minutes all was gone but a few remnants. To the priest and to the women, who, all but two (probably his two wives), remained in the tents, separate morsels were carried round. The remnants were gathered into the mats, and put on a wooden grate, or hurdle, over the hole where the water had been originally boiled; the fire was again lit, and a huge bonfire was kindled. By its blaze, and by candles lighted for the purpose, the ground was searched in every direction, as for the consecrated particles of sacramental elements; and these fragments of flesh and bone were thrown upon the burning mass—‘ye shall let nothing remain until the morning; and that which remaineth until the morning ye shall burn with fire;’ ‘there shall not anything of the flesh which thou sacrificest the first day at even remain all night until the morning;’ ‘thou shalt not carry forth aught of the flesh abroad out of the house.’ The flames blazed up once more, and then gradually sank away.

“Perhaps in another century the fire on Mount Gerizim will be the only relic left of this most interesting and ancient rite.”





THE CHAMOIS.

The Zemer or Chamois only once mentioned in the Bible—Signification of the word Zemer—Probability that the Zemer is the Aoudad—Its strength and activity—The Mouflon probably classed with the Aoudad under the name of Zemer.

AMONG the animals which may be used for food is mentioned one which in our version is rendered Chamois. See Deut. xiv. 5, a passage which has several times been quoted.

It is evident to any one acquainted with zoology that, whatever may be the Hebrew word, "Chamois" cannot be the correct rendering, inasmuch as this animal does not inhabit Palestine, nor are there any proofs that it ever did so. The Chamois frequents the lofty inaccessible crags of the highest mountains, finding its food in the scanty herbage which grows in such regions, appearing on the brink of awful precipices, and leaping from ledge to ledge with ease and safety. We must, therefore, look for some other animal.

The Chamois is one of the most wary of Antelopes, and possesses the power of scenting mankind at what would seem to be an impossible distance.

Its ears are as acute as its nostrils, so that there are few animals which are so difficult to approach.

Only those who have been trained to climb the giddy heights of the Alpine Mountains, to traverse the most fearful precipices with a quiet pulse and steady head, to exist for days amid the terrible solitudes of ice, rock, and snow,—only these, can hope to come within sight of the Chamois, when the animal is at large upon its native cliffs.

The Hebrew word, which has been rendered Chamois, is Zamar, or Zemer, *i.e.* the leaper, and therefore an animal which is conspicuous for its agility. Zoologists have now agreed in the opinion that the Zamer of Deuteronomy is the handsome wild sheep which we know under the name of Aoudad (*Ammotragus Tragelaphus*). This splendid sheep is known by various names. It is the Jaela of some authors, and the Bearded Sheep of others. It is also called the Fichtall, or Lerwea; and the French zoologists describe it under the name of *Mouflon à manchettes*, in allusion to the fringe of long hair that ornaments the fore limbs.

The Aoudad is a large and powerful animal, exceedingly active, and has the habits of the goat rather than of the sheep, on which account it is reckoned among the goats by the Arabs of the present day, and doubtless was similarly classed by the ancient inhabitants of Palestine. The height of the adult Aoudad is about three feet, and its general colour is pale dun, relieved by the dark masses of long hair that fall from the neck and the tufts of similar hair which decorate the knees of the male. The female is also bearded and tufted, but the hair, which in the male looks like the mane of the lion, in the female is but slightly developed.

It is so powerful and active an animal, that an adult male which lived for some time in the Zoological Gardens was much dreaded by the keepers, not even the man who fed it liking to enter the enclosure if he could help himself. The animal was given to making unexpected charges, and would do so with astonishing quickness, springing round and leaping at the object of his hate with tremendous force, and with such rapidity that



CHAMOIS DEFENDING ITS YOUNG.

even the experienced keeper, who knew all the ways of the animals under his charge, had often some difficulty in slipping behind the door, against which the horns of the Aoudad would clatter as if they would break the door to pieces. So fond was he of attacking something that he would often butt repeatedly



CHASING THE AOUADAD.

at the wooden side of the shed, hurling himself against it with eager fury.

The horns of the Aoudad are about two feet in length, and are of considerable diameter. They curve boldly and gracefully backwards, their points diverging considerably from each other, so that when the animal throws its head up, the points of the horns come on either side of the back. This divergence of the horns has another object. They cover a considerable space, so

that when the animal makes its charge the object of its anger has much more difficulty in escaping the blow than if the horns were closer together.

Whether these horns were used as musical instruments is doubtful, simply because we are not absolutely sure that the Zamar and the Aoudad are identical, however great may be the probability. But inasmuch as the horn-trumpets were evidently of various sizes, it is certain that the Jewish musicians would never have neglected to take advantage of such magnificent materials as they would obtain from the horns of this animal. Perhaps the Chaldaic "keren" may have been the horn of the Aoudad, or of the animal which will next be mentioned.

The Aoudad is wonderfully active, and even the young ones bound to an astonishing height. I have seen the marks of their hoofs eight feet from the ground.

In its wild state the Aoudad lives in little flocks or herds, and prefers the high and rocky ground, over which it leaps with a sure-footed agility equal to that of the Chamois itself. These flocks are chased by hunters, who try to get it upon the lowest and least broken ground, where it is at a disadvantage, and then run it down with their horses, as seen in the illustration on page 214.

The Aoudad was formerly plentiful in Egypt, and even now is found along the Atlas mountain-range. It is seen on the Egyptian monuments, and, owing to its evident profusion, we have every reason to conjecture that it was one of those animals which were specially indicated as chewing the cud and cleaving the hoof.

PERHAPS the MOUFLO (*Caprovis Musimon*) may be the animal which is meant by the Hebrew word Zamar, and it is not unlikely that both animals may have been included in one name.

This animal, which is nearly allied to the Aoudad, is also very goatlike in general aspect. It is indeed to this resemblance that the name Caprovis, or goat-sheep, has been given to it. The name Ammotragus, which, as mentioned above, belongs to the Aoudad, has a similar signification.

The horns of the Mouflon belong only to the male animal,

and are of enormous size, so that if trumpets of deep tone and great power were needed, they could be obtained from the horns of this animal. Those of the Aoudad are very large, and would be well adapted for the same purpose, but they would not furnish



THE MOUFLON.

such instruments as the horns of the Mouflon, which are so large that they seem almost unwieldy for an animal of twice the Mouflon's size, and give visible proofs of the strength and agility of an animal which can carry them so lightly and leap about under their weight so easily as does the Mouflon.

At the present time the Mouflon is only to be found in Crete, Sardinia, and Corsica, but formerly it was known to inhabit many other parts of the earth, and was almost certainly one of the many animals which then haunted the Lebanon, but which have in later days been extirpated.

THE GOAT.

Value of the Goat—Its use in furnishing food—The male kid the usual animal of slaughter—Excellence of the flesh and deception of Isaac—Milk of the Goat—An Oriental milking scene—The hair of the goat, and the uses to which it is put—The Goat's skin used for leather—The "bottle" of Scripture—Mode of making and repairing the bottles—Ruse of the Gibeonites—The "bottle in the smoke"—The sacks and the kneading troughs—The Goat as used for sacrifice—General habits of the Goat—Separation of the Goats from the sheep—Performing Goats—Different breeds of Goats in Palestine.

WHETHER considered in reference to food, to clothing, or to sacrifice, the GOAT was scarcely a less important animal than the sheep. It was especially valuable in such a country as Palestine, in which the soil and the climate vary so much according to the locality. Upon the large fertile plains the sheep are bred in vast flocks, the rich and succulent grass being exactly to their taste; while in the hilly and craggy districts the Goats abound, and delight in browsing upon the scanty herbage that grows upon the mountain-side.

For food the Goat was even more extensively used than the sheep. The adult male was, of course, not eaten, being very tough, and having an odour which would repel any but an actually starving man. Neither were the females generally eaten, as they were needed for the future increase of the flocks. The young male kid formed the principal material of a feast, and as soon as a stranger claimed the hospitality of a man in good circumstances, the first thing that was done was to take a young male kid and dress it for him.

For example, when the angel visited Gideon in the guise of a stranger, Gideon "went in and made ready a kid, and unleavened cakes of an ephah of flour," and brought them to his guest (Judges vi. 19). And when Isaac was on his death-bed

and asked Esau to take his bow and arrows and hunt for "venison," which was probably the flesh of one of the antelopes which have already been mentioned, a ready substitute was found in the two kids, from whose flesh Rebekah made the dish for which he longed. The imposition might easily pass without



JACOB DECEIVES HIS FATHER AND TAKES ESAU'S BLESSING.

detection, because the flesh of the kid is peculiarly tender, and can scarcely be distinguished from lamb, even when simply roasted. Isaac, therefore, with his senses dulled by his great age, was the less likely to discover the imposture, when the flesh of the kids was stewed into "savoury meat such as he loved."

A curious illustration of the prevalence of kid's flesh as food is given in the parable of the prodigal son, for whom his father had killed the fatted calf. "And he answering said to his father, Lo, these many years do I serve thee, neither transgressed I at any time thy commandment: and yet thou never gavest me a kid, that I might make merry with my friends" (Luke xv. 29). The force of the reproof cannot be properly understood unless we are acquainted with the customs of the East. The kid was the least valuable animal that could have been given, less valuable

than a lamb, and infinitely inferior to the fatted calf, which was kept in wealthy households for some feast of more than ordinary magnificence.

The kid was cooked exactly in the same manner as the sheep, namely, by cutting to pieces and stewing in a caldron, the meat and broth being served separately. See, for example, the case of Gideon, to whom a reference has already been made. When he brought the banquet to his guest, "the flesh he put in a basket, and he put the broth in a pot, and brought it out unto him under the oak, and presented it. And the angel of God said unto him, Take the flesh and the unleavened cakes, and lay them upon this rock, and pour out the broth."



THE ANGEL APPEARS TO GIDEON.

Gideon did so, and the angel reached forth the staff that was in his hand, and touched the flesh, and there rose up fire out of the rock and burnt up the offering.

The same custom exists at the present day. When an Arab chief receives a guest, a kid is immediately killed and given to the women to be cooked, and the guest is pressed to stay until it is ready, in the very words used by Gideon three thousand years ago. "Depart not hence, I pray thee, until I come unto thee, and bring forth my present, and set it before thee." The refusal of proffered hospitality would be,

and still is considered to be, either a studied insult, or a proof of bad manners, and no one with any claims to breeding would commit such an action without urgent cause and much apology.

Like the sheep, the Goat is extremely valuable as a milk-producer, and at the present day the milk of the Goat is used as largely as that of the sheep. "At Rasheiya, under Mount Hermon," writes Mr. Tristram, "we saw some hundreds of goats gathering for the night in the wide open market-place beneath the castle. It was no easy matter to thread our way among them, as they had no idea of moving for such belated intruders on their rest. All the she-goats of the neighbouring hills are driven in every evening, and remain for their morning's milking, after which they set forth on their day's excursion.

"Each house possesses several, and all know their owners. The evening milking is a picturesque scene. Every street and open space is filled with the goats; and women, boys, and girls are everywhere milking with their small pewter pots, while the goats are anxiously awaiting their turn, or lying down to chew the cud as soon as it is over. As no kids or he-goats are admitted, the scene is very orderly, and there is none of the deafening bleating which usually characterises large flocks.

"These mountain goats are a solemn set, and by the gravity of their demeanour excite a suspicion that they have had no youth, and never were kids. They need no herdsman to bring them home in the evening, for, fully sensible of the danger of remaining unprotected, they hurry homewards of their own accord as soon as the sun begins to decline."

LIKE the wool of the sheep, the hair of the Goat is used for the manufacture of clothing; and, as is the case with wool, its quality differs according to the particular breed of the animal, which assumes almost as many varieties as the sheep or the dog. The hair of some varieties is thick and rough, and can only be made into coarse cloths, while others, of which the mohair Goat and Cashmere Goat are familiar examples, furnish a staple of surpassing delicacy and fineness. It is most likely that the covering and curtains of the Tabernacle mentioned in *Exod. xxvi. 7* were of the latter kind, as otherwise they would have been out of character with the fine linen, and blue and scarlet, their golden clasps, and the profuse magnificence which distin-

guished every part of the sacred building. Moreover, the hair of the Goat is classed among the costly offerings which were made when the Tabernacle was built. "And they came forth, men and women, as many as were willing hearted, and brought bracelets, and earrings, and rings, and tablets, all jewels of gold: and every man that offered offered an offering of gold unto the Lord. And every man, with whom was found blue, and purple, and scarlet, and fine linen, and goats' hair, and red skins of rams, and badgers' skins, brought them" to be used in the structure of that wonderful building, in which nothing might be used except the finest and costliest that could be procured.

One of the principal uses to which the goat-skin was applied was the manufacture of leather, for which purpose it is still used, and is considered far better than that of the sheep. Perhaps the most common form in which this leather is used is the well-known water-vessel, or "bottle" of the Bible.

These so-called bottles are made from the entire skin of the animal, which is prepared in slightly different methods according to the locality in which the manufacture is carried on. In Palestine they are soaked for some little time in the tanning mixture, and are then filled with water, after the seams have been pitched. In this state they are kept for some time, and are kept exposed to the sun, covered entirely with the tanning fluid, and filled up with water to supply the loss caused by evaporation and leakage.

The hair is allowed to remain on the skins, because it acts as a preservative against the rough usage to which they are subject at the hard hands of the water-carriers. By degrees the hairy covering wears off, first in patches, and then over the entire surface, so that a new bottle can be recognised at a glance, and any one who wished to sell an old bottle at the price of a new one would be at once detected.

Vessels made in this rude manner are absolutely necessary in the countries wherein they are used. Wooden or metal vessels would be too heavy, and, besides, the slight though constant evaporation that always takes place through the pores of the leather keeps down the temperature of the water, even under a burning sun, the slight loss which is caused by the porousness of the skin being more than counterbalanced by the coolness of the

water. It is true that the goat-skin communicates to the liquid a flavour far from pleasant, but in those countries the quality of the water is of little consequence, provided that it is plentiful in quantity, and tolerably cool.

In all parts of the world where the skin is used for this purpose the mode of manufacture is practically identical. An account of the art of preparing the goat-skin as practised in Abyssinia is given by Mr. C. Johnston, in his "Travels in Southern Abyssinia :"—

"To be of any value it must be taken off uncut, except around the neck, and in those situations necessary to enable the butchers to draw the legs out of the skin ; also, of course, where the first incision is made to commence the process, and which is a circular cut carried around both haunches, not many inches from and having the tail for a centre. The hide is then stripped over the thighs, and two smaller incisions being made round the middle joint of the hind-legs enable them to be drawn out.

"A stick is now placed to extend these extremities, and by this, for the convenience of the operators, the whole carcase is suspended from the branch of a tree, and, by some easy pulls around the body, the skin is gradually withdrawn over the fore-legs, which are incised around the knees, to admit of their being taken out ; after which, the head being removed, the whole business concludes by the skin being pulled inside out over the decollated neck. One of the parties now takes a rough stone and well rubs the inside surface, to divest it of a few fibres of the subcutaneous muscle which are inserted into the skin, and after this operation it is laid aside until the next day ; the more interesting business of attending to the meat calling for immediate attention.

"These entire skins are afterwards made into sacks by the apertures around the neck and legs being secured by a double fold of the skin being sewed upon each other, by means of a slender but very tough thong. These small seams are rendered quite air-tight, and the larger orifice around the haunches being gathered together by the hands, the yet raw skin is distended with air ; and the orifice being then tied up, the swollen bag is left in that state for a few days, until slight putrefaction has commenced, when the application of the rough stone soon divests its surface of the hair. After this has been effected, a deal of

labour, during at least one day, is required to soften the distended skin by beating it with heavy sticks, or trampling upon it for hours together, the labourer supporting himself by clinging to the bough of a tree overhead, or holding on by the wall of the house.

“ In this manner, whilst the skin is drying, it is prevented from getting stiff, and, still further to secure it from this evil condition, it is frequently rubbed with small quantities of butter. When it is supposed that there is no chance of the skin becoming hard and easily broken, the orifice is opened, the air escapes, and a very soft, flaccid leather bag is produced, but which, for several days after, affords an amusement to the owner, when otherwise unemployed, by well rubbing it all over with his hands.”

The reader will see that the two processes are practically identical, the chief difference being that in one country the skins are distended with water and in the other with air.

As these bottles are rather apt to be damaged by the thorns, branches, rocks, and similar objects with which they come in contact, and are much too valuable to be thrown away as useless, their owners have discovered methods of patching and repairing them, which enable them to be used for some time longer. Patches of considerable size are sometimes inserted, if the rent should be of importance, while the wound caused by a thorn is mended by a simple and efficacious expedient. The skin is first emptied, and a round flat piece of wood, or even a stone of suitable shape, is put into it. The skin is then held with the wounded part downwards, and the stone shaken about until it comes exactly upon the hole. It is then grasped, the still wet hide gathered tightly under it, so as to pucker up the skin, and a ligature is tied firmly round it. Perhaps some of my readers may have practised the same method of mending a punctured football.

Allusion to this mode of mending the skin bottles is made in Josh. ix. 4, 13. The Gibeonites “ did work wilily, and went and made as if they had been ambassadors, and took old sacks upon their asses, and wine bottles, old, and rent, and bound up . . . and said . . . these bottles of wine, which we filled, were new; and, behold, they be rent.”

If these skin bottles be allowed to become dry, as is sometimes the case when they are hung up in the smoky tents, they

shrivel up, and become rotten and weak, and are no longer enabled to bear the pressure caused by the fermentation of new



EASTERN WATER-CARRIERS WITH BOTTLES MADE OF GOAT-SKIN.

wine. So, in Ps. cxix. 81—83: "My soul fainteth for Thy salvation: but I hope in Thy word,

" Mine eyes fail for Thy word, saying, When wilt Thou comfort me ?

" For I am become like a bottle in the smoke ; yet do I not forget Thy statutes."

How forcible does not this image become, when we realize the early life of the shepherd poet, his dwelling in tents wherein are no windows nor chimneys, and in which the smoke rolls to and fro until it settles in the form of soot upon the leathern bottles and other rude articles of furniture that are hung from the poles !

In the New Testament there is a well-known allusion to the weakness of old bottles : " Neither do men put new wine into old bottles, or the bottles break and the wine runneth out, and the bottles perish ; but they put new wine into new bottles, and both are preserved." It would be impossible to understand the meaning of this passage unless we knew that the " bottles " in question were not vessels of glass or earthenware, but merely the partly-tanned skins of goats.

Another allusion to the use of the goat-skin is made in that part of the Book of Joshua which has already been mentioned. If the reader will refer to Josh. ix. 4, he will see that the Gibeonites took with them not only old bottles, but old sacks. Now, these sacks bore no resemblance to the hempen bags with which we are so familiar, but were nothing more than the same goat-skins that were employed in the manufacture of bottles, but with the opening at the neck left open. They were, in fact, skin-bottles for holding solids instead of liquids. The sacks which Joseph's brethren took with them, and in the mouths of which they found their money, were simply goat-skin bags, made as described.

Yet another use for the goat-skin. It is almost certain that the " kneading-troughs " of the ancient Israelites were simply circular pieces of goat-skin, which could be laid on the ground when wanted, and rolled up and carried away when out of use. Thus, the fact that " the people took their dough before it was leavened, their kneading-troughs being bound up in their clothing upon their shoulders," need cause no surprise.

Nothing could be more in accordance with probability. The women were all hard at work, preparing the bread for the expected journey, when the terrified Pharaoh " called for Moses and Aaron

by night, and said, Rise up, and get you forth from among my people, both ye and the children of Israel, and go, serve the Lord. as ye have said. . . . And the Egyptians were urgent upon the people that they might send them out of the land in haste; for they said, We be all dead men."

So the women, being disturbed at their work, and being driven out of the country before they had leavened, much less baked, their bread, had no alternative but to roll up the dough in the leathern "kneading-troughs," tie them up in a bundle with their spare clothing, and carry them on their shoulders; whereas, if we connect the kneading-troughs with the large heavy wooden implements used in this country, we shall form an entirely erroneous idea of the proceeding. As soon as they came to their first halting-place at Succoth, they took the leathern kneading-troughs out of their clothes, unrolled them, took the dough which had not even been leavened, so unexpectedly had the order for marching arrived, made it into flat cakes, and baked them as they best could. The same kind of "kneading-trough" is still in use in many parts of the world.

Stone as well as earthenware jars were also used by the inhabitants of ancient Palestine; but they were only employed for the storage of wine in houses, whereas the bottles that were used in carrying wine from one place to another were invariably made of leather. Water also was stored in stone or earthenware jars. See, for example, John ii. 6: "And there were set there six waterpots of stone, after the manner of the purifying of the Jews, containing two or three firkins apiece." Whereas, when it was carried about, it was poured into bottles made of skin. Such was probably the "bottle of water" that Abraham put on Hagar's shoulder, when she was driven away by the jealousy of Sarah, and such was the "bottle of wine" that Hannah brought as her offering when she dedicated Samuel to the service of God.

IN sacrifices the Goat was in nearly as much requisition as the lamb, and in one—namely, that which was celebrated on the Great Day of Atonement—the Goat was specially mentioned as the only animal which could be sacrificed. The reader will, perhaps, remember that for this peculiar sacrifice two Goats were required, on which two lots were cast, one for the Lord, *i. e.* with the word "Jehovah" upon it, and the other for the scapegoat,

i.e. inscribed with the word "Azazel." The latter term is derived from two Hebrew words, the former being "Az," which is the general name for the Goat, and the second "azel," signifying "he departed." The former, which belonged to Jehovah, was sacrificed, and its blood sprinkled upon the mercy-seat and the altar of incense; and the Goat Azazel was led away into the wilderness, bearing upon its head the sins of the people, and there let loose.

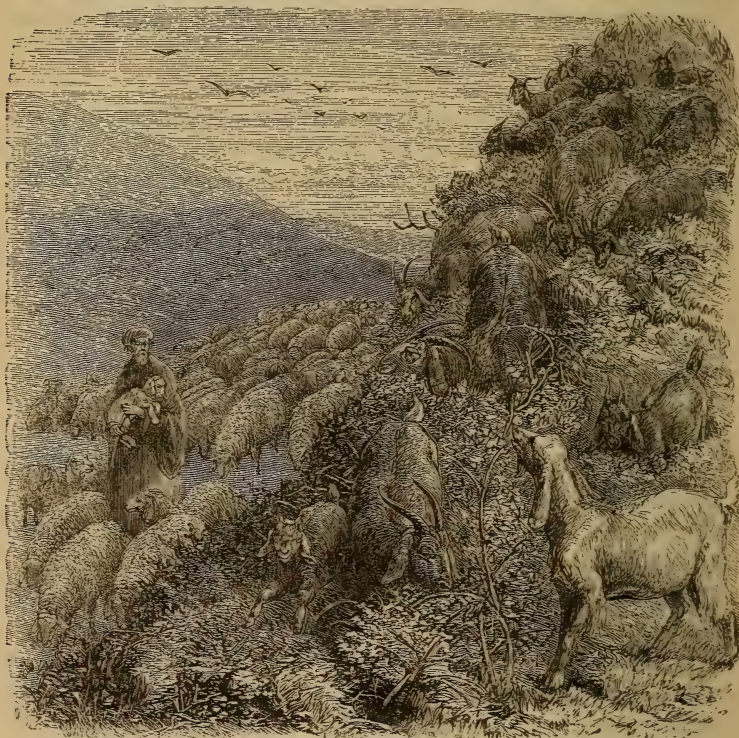
THESE being the uses of the Goat, it may naturally be imagined that the animal is one of extreme importance, and that it is watched as carefully by its owners as the sheep. Indeed, both sheep and Goats belong to the same master, and are tended by the same shepherd, who exercises the same sway over them that he does over the sheep.

They are, however, erratic animals, and, although they will follow the shepherd wherever he may lead them, they will not mix with the sheep. The latter will walk in a compact flock along the valley, the shepherd leading the way, and the sheep following him, led in their turn by the sound of the bell tied round the neck of the master-ram of the flock. The Goats, however, will not submit to walk in so quiet a manner, but prefer to climb along the sides of the rocks that skirt the valleys, skipping and jumping as they go, and seeming to take delight in getting themselves into dangerous places, where a man could not venture to set his foot.

In the evening, when the shepherds call their flocks to repose, they often make use of the caverns which exist at some height in the precipitous side of the hills, as being safe strongholds, where the jackal and the hyæna will not venture to attack them. When such is the case, the shepherds take their station by the mouth of the cave, and assist the sheep as they come sedately up the narrow path that leads to the cavern. The Goats, however, need no assistance, but come scrambling along by paths where no foot but a Goat's could tread, mostly descending from a considerable height above the cave, and, as if in exultation at their superior agility, jumping over the backs of the sheep as they slowly file into the accustomed fold.

Friendly as they are, the Goats and sheep never mingle together. There may be large flocks of them feeding in the same

pasturage, but the Goats always take the highest spots on which verdure grows, while the sheep graze quietly below. Goats are specially fond of the tender shoots of trees, which they find in plenty upon the mountain side; and, according to Mr. Tristram,



GOATS ON THE MARCH.

by their continual browsing, they have extirpated many species of trees which were once common on the hills of Palestine, and which now can only be found in Lebanon on the east of the Jordan.

Even when folded together in the same enclosure, the Goats never mix with the sheep, but gather together by themselves, and they instinctively take the same order when assembled round the wells at mid-day.

This instinctive separation of the sheep and the goats naturally recalls to our minds the well-known saying of our Lord that "before Him shall be gathered all nations, and He shall separate them one from another, as a shepherd divideth his sheep from the goats : and He shall set the sheep on His right hand, and the goats on His left."

The image thus used was one that was familiar to all the hearers, who were accustomed daily to see the herds of sheep and Goats under one shepherd, yet totally distinct from each other. At feeding-time the Goats will be browsing in long lines on the mountain sides, while the sheep are grazing in the plain or valley ; at mid-day, when the flocks are gathered round the wells to await the rolling away of the stone that guards the water, the Goats assemble on one side and the sheep on the other. And at night, when they are all gathered into one fold by one shepherd, they are still separated from each other. The same image is employed by the prophet Ezekiel : "As for you, O my flock, thus said the Lord God, Behold I judge between cattle and cattle, between rams and the he-goats."

Generally, the leading Goat was distinguished by a bell as well as the leading sheep, and in reference to this custom there was an old proverb, "If the shepherd takes the lead, he blinds the bell-goat," while another proverb is based upon the inferior docility of the animal—"If the shepherd be lame, the Goats will run away."

Yet the Goat can be tamed very effectively, and can even be taught to perform many tricks. "We saw just below us, on the rudely-constructed 'parade,' a crowd of men and children, surrounding a fantastically-dressed man exhibiting a Goat, which had been tutored to perform some cunning trick. It stood with its four feet close together on the top of a very long pole, and allowed the man to lift it up and carry it round and round within the circle ; then the Goat was perched on four sticks, and again carried about. A little band of music—pipes, drums, and tambourines—called together the people from all parts of the town to witness this performance.

"The Goat danced and balanced himself obediently and perfectly, in very unnatural-looking positions, as if thoroughly understanding the words and commands of his master. The men who watched the actions of the Goat looked as grave and

serious as if they were attending a philosophical or scientific lecture." ("Domestic Life in Palestine," by Miss Rogers.)

Another feat is a favourite with the proprietors of trained Goats. The man takes a stool and plants it carefully on the ground, so as to be perfectly level, and then orders the Goat to stand upon it. A piece of wood about six inches in length, and shaped something like a dice-box, is then placed on the stool, and the Goat manages to stand on it, all his sharp, hard hoofs being pressed closely together on the tiny surface. The man then takes another piece of wood and holds it to the Goat's feet. The animal gently removes first one foot and then another, and, by careful shifting of the feet, enables its master to place the second piece of wood on the first. Successive additions are made, until at the last the Goat is perched on the topmost of some nine or ten pieces of wood balanced on each other, the whole looking like a stout reed marked off with joints.

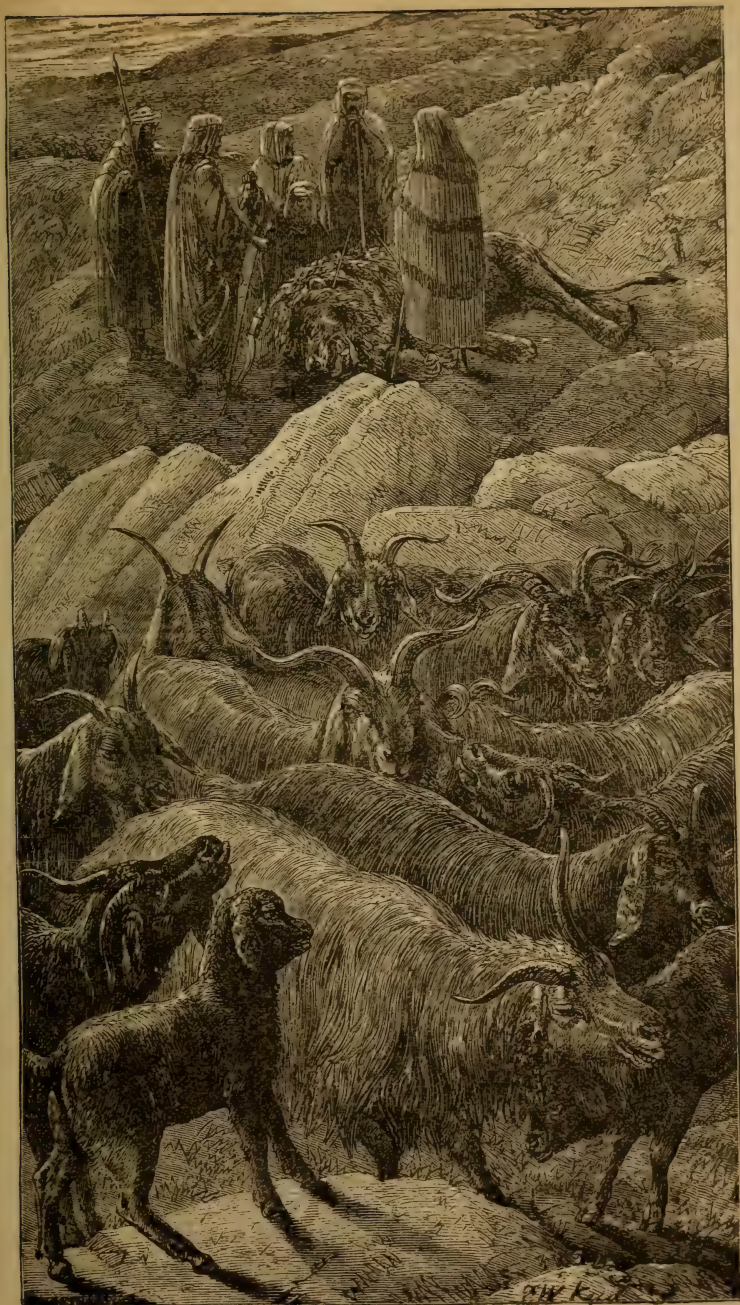
The stately steps and bold bearing of the old he-goat is mentioned in the Proverbs: "There be three things which go well, yea, four are comely in going:

"A lion, which is strongest among beasts, and turneth not away for any;

"A greyhound; an he-goat also; and a king, against whom there is no rising up." (Prov. xxx. 29-31.) The word which is here rendered as he-goat signifies literally the "Butter," and is given to the animal on account of the mode in which it uses its formidable horns. The word is not common in the Bible, but it is used even at the present day among the Arabs.

Several herds of goats exist in Palestine, the most valuable of which is the Mobair Goat, and the most common the Syrian Goat. These, however dissimilar they may be in appearance, are only varieties of the ordinary domestic animal, the former being produced artificially by carefully selecting those specimens for breeding which have the longest and finest hair. It was from the hair of this breed that the costly fabrics used in the Tabernacle were woven, and it is probably to this breed that reference is made in Solomon's Song, iv. 1, 2: "Behold, thou art fair, my love; behold, thou art fair; thou hast doves' eyes within thy locks: thy hair is as a flock of goats, that appear from Mount Gilead.

"Thy teeth are like a flock of sheep that are even shorn, which



HERD OF GOATS ATTACKED BY A LION.

came up from the washing." In this passage the careful reader will also note another reference to the habits of the Goats and sheep, the hair being compared to the dark-haired Goats that wander on the tops of the hills, while the teeth are compared to sheep that are ranged in regular order below. The Mohair Goat is known scientifically as *Capra Angorensis*. The same image is used again in chap. vi. 5.

The second breed is that which is commonest throughout the country. It is known by the name of the Syrian Goat, and is remarkable for the enormous length of its ears, which sometimes exceed a foot from root to tip. This variety has been described as a separate species under the name of *Capra Mambrica*, or *C. Syriaca*, but, like the Mohair Goat, and twenty-three other so-called species, is simply a variety of the common Goat, *Hircus ægragus*.

Reference is made to the long ears of the Syrian Goat in Amos iii. 12: "Thus saith the Lord: As the shepherd taketh out of the mouth of the lion two legs, or a piece of an ear; so shall the children of Israel be taken out that dwell in Samaria." Such a scene, which was familiar to Amos, the shepherd as well as the prophet, is represented in the illustration. In the foreground is the goat on which the lion has sprung, and from which one of the long ears has been torn away. Its companions are gathering round it in sympathy, while its kid is trying to discover the cause of its mother's uneasiness. In the background is a group of armed shepherds, standing round the lion which they have just killed, while one of them is holding up the torn ear which he has taken out of the lion's mouth.

THE WILD GOAT.

The Azelim or Wild Goats of Scripture identical with the Beden or Arabian Ibex—Different names of the Beden—Its appearance and general habits—En-gedi, or Goats' Fountain—The Beden formerly very plentiful in Palestine, and now tolerably common—Its agility—Difficulty of catching or killing it—How the young are captured—Flesh of the Beden—Use of the horns at the present day—The Ako of Deuteronomy.

IN three passages of the Old Testament occurs a word, "Azelim," which is variously translated in our Authorized Version.

It is first seen in 1 Sam. xxiv. 2, in which it is rendered as "Wild Goats." "It was told Saul, saying, Behold, David is in the wilderness of En-gedi [*i.e.* the Fountain of the Goat]. Then Saul took three thousand chosen men out of all Israel, and went to seek David and his men upon the rocks of the wild goats (*azelim*)."

The same word occurs in Job xxxix. 1: "Knowest thou the time when the wild goats of the rock bring forth?" It is also found in Ps. civ. 18: "The high hills are a refuge for the wild goats." In all these passages it is rendered as "wild goats." But, in Prov. v. 19, it is translated as roe: "Rejoice with the wife of thy youth. Let her be as the loving hind and pleasant roe (*azelah*)."

The Jewish Bible follows the same diverse renderings.

We now have to discover the animal which was signified by the word Azel. According to its etymology, it is the Climber, just as the adult he-goat is called the Butter.

That it was a climbing animal is evident from its name, and that it loved to clamber among precipices is equally evident from the repeated connexion of the word rock with the name of the animal. We also see, from the passage in Job, that it is a wild animal whose habits were not known. There is scarcely any doubt that the Azel of the Old Testament is the ARABIAN IBEX or BEDEN (*Capra Nubiana*). This animal is very closely allied to the well-known Ibex of the Alps, or Steinbock, but may be distinguished from it by one or two slight differences,

such as the black beard and the slighter make of the horns, which moreover have three angles instead of four, as is the case with the Alpine Ibex.

The Beden is known by several names. It is sometimes called the Jaela, sometimes the Nubian Wild Goat, and is also known as the Wild Goat of Sinai. The general colour of the Beden is grey, becoming brownish in winter, and being whitish grey beneath. The feet are spotted with black and white, and the beard of the male is black, differing from that of the Alpine Ibex, which is brown. The female is beardless. The lines along the back and the sides of the tail are black, and there are three streaks on each ear.

The Beden generally lives in little herds of eight or ten, and is even now to be found in Palestine. At the strange, wild, weird-looking En-gedi (Ain Jiddy), or Fountain of the Goats, the Beden is still to be seen. Mr. Tristram suggests that David and his followers took up their residence at En-gedi for the sake of the Wild Goats that were plentiful upon the spot, and which would furnish food for himself and his hardy band of outlaws. "In the neighbourhood of En-gedi," remarks this traveller, "while encamped by the Dead Sea shore, we obtained several fine specimens, and very interesting it was to find the graceful creature by the very fountain to which it gave name.

"When clambering over the heights above En-gedi, I often, by the help of my glass, saw the Ibex from a distance, and once, when near Mar-saba, only a few miles from Jerusalem, started one at a distance of four hundred yards. At the south end of the Dead Sea they were common, and I have picked up a horn both near Jericho on the hills and also on the hills of Moab on the eastern side. At Jericho, too, I obtained a young one which I hoped to rear, but which died after I had had it for ten days, owing, I believe, to the milk with which it was fed being sour. Further north and west we did not find it, though I have reason to believe that a few linger on the mountains between Samaria and the Jordan, and perhaps also on some of the spurs of Lebanon. We found its teeth in the breccia of bone occurring in the Lebanon, proving its former abundance there."

As the Beden was found so plentifully even in these days when fire-arms have rendered many wild animals scarce and wary, so that they will not show themselves within range of a

bullet, it is evident that in the time when David lived at En-gedi and drank of the Goats' Fountain they were far more numerous, and could afford nourishment to him and his soldiers. Travellers, moreover, who do not happen to be experienced hunters, will often fail in seeing the Beden, even in places where it is tolerably plentiful. The colour of its coat resembles so nearly that of the rocks, that an inexperienced eye would see nothing but bare stones and sticks where a practised hunter would see numbers of Beden, conspicuous by their beautifully curved horns.

The agility of the Beden is extraordinary. Loving the highest and most craggy parts of the mountain ridge, it flings itself from spot to spot with a recklessness that startles one who has not been accustomed to the animal, and the wonderful certainty of its foot. It will, for example, dash at the face of a perpendicular precipice that looks as smooth as a brick wall, for the purpose of reaching a tiny ledge which is hardly perceptible, and which is some fifteen feet or so above the spot whence the animal sprang. Its eye, however, has marked certain little cracks and projections on the face of the rock, and as the animal makes its leap, it takes these little points of vantage in rapid succession, just touching them as it passes upwards, and by the slight stroke of its foot keeping up the original impulse of its leap. Similarly, the Ibex comes sliding and leaping down precipitous sides of the mountains, sometimes halting with all the four feet drawn together, on a little projection scarcely larger than a penny, and sometimes springing boldly over a wide crevasse, and alighting with exact precision upon a projecting piece of rock that seems scarcely large enough to sustain a rat comfortably.

The young of the Ibex are sometimes captured and tamed. They are, however, difficult to rear, and give much more trouble than the young gazelles when taken in a similar manner. The natives can generally procure the kids at the proper time of year, and sell them at a very cheap rate. They seldom, however, can be reared, and even those who live in the country experience the greatest difficulty in keeping the young Beden alive until it attains maturity.

Were it not for the curious habits of the Beden, the young could scarcely ever be obtained alive, as they are so agile that they could easily leap away from their slow two-legged pursuers. But the mother Ibex has a habit of leading a very independent

life, wandering to considerable distances, and leaving her kid snugly hidden in some rock-cleft. The hunters watch the mother as she starts off in the morning, clamber up to the spot where the kid is concealed, and secure it without difficulty. The Arabs say that there are always two kids at a birth, but



ARABIAN IBEX, OR BEDEN ; THE WILD GOAT OF SCRIPTURE.

there is considerable discrepancy of evidence on this point, which, after all, is of very little importance.

The flesh of the Beden is really excellent. It is far superior to that of the gazelle, which is comparatively dry and hard, and it has been happily suggested that the Beden was the animal in search of which Esau was sent to hunt with his quiver and his bow, and which furnished the "savoury meat" which Isaac

loved. None but a true hunter can hope to secure the Beden, and even all the knowledge, patience, and energy of the best hunters are tried before they can kill their prey. It was therefore no matter of wonder that Isaac should be surprised when he thought that he heard Esau return so soon from the hunting-grounds. "How is it that thou hast found it so quickly, my son?"

There are few animals more wary than the Beden, and even the chamois of the Alps does not exercise the finest qualities of a hunter more than does the Beden of Palestine. It is gifted with very keen eyes, which can discern the approach of an enemy long before its grey coat and curved horns can be distinguished from the stones and gnarled boughs of the mountain side. And, even if the enemy be not within range of the animal's sight, its nostrils are so keen that it can detect a man by scent alone at a considerable distance. Like all gregarious animals, the Beden insures the safety of the flock by stationing sentries, which are posted on places that command the whole surrounding country, and to deceive the watchful senses of these wary guardians tests all the qualities of the hunter.

The dawn of day is the time that is generally chosen for approaching a herd, because the animals are then feeding, and if the hunter can manage to approach them against the wind, he may chance to come within range. Should however the wind change its direction, he may quietly walk home again, for at the first breath of the tainted gale the sentinels utter their shrill whistle of alarm, and the whole party dash off with a speed that renders pursuit useless.

The horns of the Beden are of very great size, and from their bold curves, with the large rings and ridges which cover their front, are remarkably handsome objects. In their own country they are in great request as handles to knives, and even in England they may be occasionally seen serving as handles to carving-knives and forks.

As to the word *Ako*, which occurs in Deut. xiv. 5, together with other animals, and is rendered as "Wild Goat," there is so much doubt about the correct translation that I can do no more than mention that the Jewish Bible follows our authorized edition in translating *Ako* as Wild Goat, but adds the doubtful mark to the word.

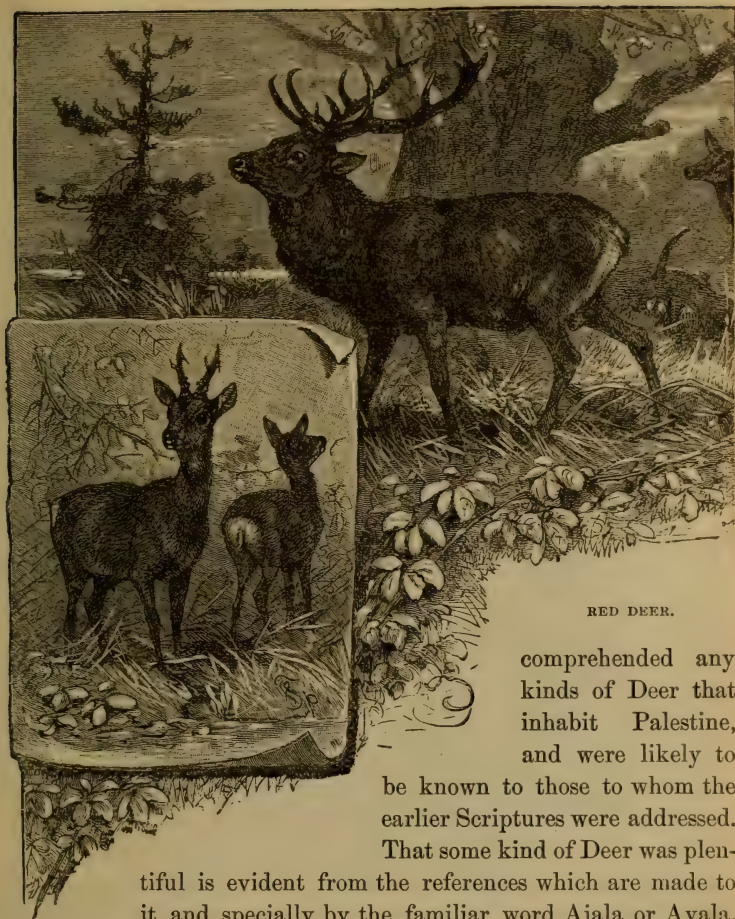


THE DEER.

The Hart and Hind of Scripture—Species of Deer existing in Palestine—Earliest mention of the Hind—The Hart classed among the clean animals—Passages alluding to its speed—Care of the mother for her young, and her custom of secreting it—Tameable character of the Deer—

WE now come to the DEER which are mentioned in Scripture. There are not many passages in which they are mentioned, and one of them is rather doubtful, as we shall see when we come to it.

There is no doubt that the two words HART and HIND (in the Hebrew *Ayzal* and *Ayzalah*) represent Deer of some kind, and the question is to find out what kind of Deer is signified by these words. I think that we may safely determine that no particular species is meant, but that under the word *Ayzal* are



RED DEER.

comprehended any kinds of Deer that inhabit Palestine, and were likely to be known to those to whom the earlier Scriptures were addressed. That some kind of Deer was plentiful is evident from the references which are made to it, and specially by the familiar word *Ajala* or *Ayala*, as it is pronounced, which signifies the Deer-ground or pasture. But the attempt to discriminate between one species and another is simply impossible, and the more careful the search the more impracticable the task appears.

As far as can be ascertained, at least two kinds of Deer inhabited Palestine in the earlier days of the Jewish history, one belonging to the division which is known by its branched horns, and the other to that in which the horns are flat or palmated over the tips. Examples of both kinds are familiar to us under the titles of the RED DEER and the FALLOW DEER, and it is tolerably certain that both these animals were formerly found

in Palestine, or that at all events the Deer which did exist there were so closely allied to them as to be mere varieties occasioned by the different conditions in which they were placed.

WE will now proceed to the various passages in which the Hart and Hind are mentioned in the Bible.



FALLOW-DEER, OR HIND OF SCRIPTURE.

As might be expected, we come upon it among the number of the beasts which divided the hoof and chewed the cud, and were specially indicated as fit for food; see Deut. xii. 15: "Notwithstanding thou mayest kill and eat flesh in all thy gates, . . . the unclean and the clean may eat thereof, as of the roebuck, and as of the hart."

There is, however, an earlier mention of the word in Gen. xlix. 21. It occurs in that splendid series of imagery in which



A QUIET SPOT.

Jacob blesses his sons, and prophesies their future, each image serving ever afterwards as the emblem of the tribe: "Naphtali is a hind let loose: he giveth goodly words;"—or, according to the Jewish Bible, "Naphtali is a hind sent forth: he giveth sayings of pleasantness." Now, such an image as this would never have been used, had not the spectacle of the "hind let loose" been perfectly familiar to the eyes both of the dying patriarch and his hearers, and equally so with the lion, the ass, the vine, the serpent, and other objects used emblematically in the same prophetic poem.

The excellence of the Hart's flesh is shown by its occurrence among the animals used for King Solomon's table; see 1 Kings iv. 23, a passage which has been quoted several times, and therefore need only be mentioned.

Allusion is made to the speed and agility of the Deer in several passages. See, for example, Isa. xxxv. 6: "Then shall the lame man leap as an hart, and the tongue of the dumb sing." Again, in 2 Sam. xxii. 33, 34: "God is my strength and power: and He maketh my way perfect.

"He maketh my feet like hinds' feet: and setteth me upon my high places."

Nearly four hundred years afterwards we find Habakkuk using precisely the same image, evidently quoting David's Psalm of Thanksgiving:—"Yet I will rejoice in the Lord, I will joy in the God of my salvation.

"The Lord God is my strength, and He will make my feet like hinds' feet, and He will make me to walk upon mine high places." (iii. 18, 19.)

A passage of a similar character may be found in Solomon's Song, ii. 8, 9: "The voice of my beloved! behold, he cometh leaping upon the mountains, skipping upon the hills.

"My beloved is like a roe or a young hart."

There is one passage in the Psalms which is familiar to us in many ways, and not the least in that it has been chosen as the text for so many well-known anthems. "As the hart panteth after the water-brooks, so panteth my soul after Thee, O God.

"My soul thirsteth for God, for the living God: when shall I come and appear before God?" (Ps. xlii. 1, 2.)

Beautiful as this passage is, it cannot be fully understood without the context.



RED DEER AND FAWN.

David wrote this psalm before he had risen to royal power, and while he was fleeing from his enemies from place to place, and seeking an uncertain shelter in the rock-caves. In verse 6 he enumerates some of the spots in which he has been forced to reside, far away from the altar, the priests, and the sacrifice. He has been hunted about from place to place by his enemies as a stag is hunted by the hounds, and his very soul thirsted for the distant Tabernacle, in which the Shekinah, the visible presence of God, rested on the mercy-seat between the golden cherubim.

Wild and unsettled as was the early life of David, this was ever the reigning thought in his mind, and there is scarcely a psalm that he wrote in which we do not find some allusion to the visible presence of God among men. No matter what might be the troubles through which he had to pass, even though he trod the valley of the shadow of death, the thought of his God was soothing as water to the hunted stag, and in that thought he ever found repose. Through all his many trials and adversities, through his deep remorse for his sins, through his wounded paternal affections, through his success and prosperity, that one thought is the ruling power. He begins his career with it when he opposed Goliath: "Thou comest to me with a sword, and with a spear, and with a shield: but I come to thee in the name of the Lord of hosts, the God of the armies of Israel." He closes his career with the same thought, and, in the "last words" that are recorded, he charged his son to keep the commandments of the Lord, that he might do wisely all that he did.

We now come to another point in the Deer's character; namely, the watchful care of the mother over her young. She always retires to some secret place when she instinctively knows that the birth is at hand, and she hides it from all eyes until it is able to take care of itself. By some strange instinct, the little one, almost as soon as it is born, is able to comprehend the signals of its mother, and there is an instance, well known to naturalists, where a newly-born Deer, hardly an hour old, crouched low to the earth in obedience to a light tap on its shoulder from its mother's hoof. She, with the intense watchfulness of her kind, had seen a possible danger, and so warned her young one to hide itself.

There is scarcely any animal so watchful as the female Deer, as all hunters know by practical experience. It is comparatively



THE LEADER OF THE HERD.

easy to deceive the stag who leads the herd, but to evade the eyes and ears of the hinds is a very different business, and

taxes all the resources of a practised hunter. If they take such care of the herd in general, it may be imagined that their watchfulness would be multiplied tenfold when the object of their anxiety is their own young.

It is in allusion to this well-known characteristic that a passage in the Book of Job refers: "Knowest thou the time when the wild goats of the rock bring forth? or canst thou mark when the hinds do calve?" (xxxix. 1.) A similar image is used in Psa. xxix. 9. After enumerating the wonders that are done by the voice of the Lord, the thunders and rain torrents, the devastating tempests, the forked lightning, and the earthquake "that shaketh the wilderness of Kadesh," the Psalmist proceeds: "The voice of the Lord maketh the hinds to calve, and discovereth the forests,"—this being as mysterious to the writer as the more conspicuous wonders which he had previously mentioned.

So familiar to the Hebrews was the watchful care which the female Deer exercised over her young, that it forms the subject of a powerful image in one of Jeremiah's mournful prophecies: "Yea, the hind also calved in the field, and forsook it, because there was no grass." (xiv. 5.) To those who understand the habits of the animal, this is a most telling and picturesque image. In the first place, the Hind, a wild animal that could find food where less active creatures would starve, was reduced to such straits that she was obliged to remain in the fields at the time when her young was born, instead of retiring to some sheltered spot, according to her custom. And when it was born, instead of nurturing it carefully, according to the natural maternal instinct, she was forced from sheer hunger to abandon it in order to find a sufficiency of food for herself.

That the Deer could be tamed, and its naturally affectionate disposition cultivated, is evident from a passage in the Proverbs (v. 18, 19): "Let thy fountain be blessed: and rejoice with the wife of thy youth. Let her be as the loving hind and pleasant roe."

We might naturally expect that the Rabbinical writers would have much to say on the subject of the Hart and Hind. Among much that is irrelevant to the object of the present work there are a few passages that deserve mention. Alluding to the annual shedding of the Deer's horns, there is a proverb respect-

ing one who ventures his money too freely in trade, that "he has hung it on the stag's horns," meaning thereby that he will never



THE WATCHFUL DOE.

see it again. It is remarkable that in Western Africa there is a proverb of a similar character, the imprudent merchant being told to look for his money in the place where Deer shed their horns.



A KNEELING CAMEL.

THE CAMEL.

CHAPTER I.

The two species of Camel, and the mode of distinguishing them—Value of the Camel in the East—Thirst-enduring capability—The hump, and its use to the animal—The Camel as a beast of draught and burden—How the Camel is laden—Camels for riding—Difficulty of sitting a Camel—A rough-paced steed—Method of guiding the Camel—The swift dromedary—Young Camels and their appearance—The deserted Camel.

BEFORE treating of the Scriptural references to the Camel, it will be as well to clear the ground by noticing that two distinct species of Camel are known to zoologists; namely, the common Camel (*Camelus dromedarius*), which has one hump, and the Bactrian Camel (*Camelus Bactrianus*), which has two of these curious projections. There is a popular but erroneous idea that the dromedary and the Camel are two distinct animals, the latter being distinguished by its huge hump, whereas the fact is, that the dromedary is simply a lighter and more valuable breed of the one-humped Camel of Arabia, the two-humped Bactrian Camel being altogether a different animal, inhabiting Central Asia, Thibet, and China.

THE Camel is still one of the most valued animals that inhabit Palestine, and in former times it played a part in Jewish history scarcely inferior to that of the ox or sheep. We shall, therefore, devote some space to it.

In some parts of the land it even exceeded in value the sheep, and was infinitely more useful than the goat. At the very beginning of Jewish history we read of this animal, and it is mentioned in the New Testament nearly two thousand years



JACOB LEAVES LABAN AND RETURNS TO CANAAN WITH HIS CAMELS, SHEEP, AND CATTLE

after we meet with it in the Book of Genesis. The earliest mention of the Camel occurs in Gen. xii. 16, where is related the journey of Abram: "He had sheep, and oxen, and he-asses, and men-servants, and maid-servants, and she-asses, and camels."

Belonging, as he did, to the nomad race which lives almost wholly on the produce of their herds, Abram needed Camels, not only for their milk, and, for all we know, for their flesh, but for their extreme use as beasts of burden, without which he could never have travelled over that wild and pathless land. The whole of Abram's outer life was exactly that of a Bedouin sheikh of the present day, in whom we find reproduced the

habits, the tone of thought, and the very verbiage of the ancient Scriptures.

Many years afterwards, when the son of his old age was desirous of marrying a wife of his own kindred, we find that he sent his trusted servants with ten of his Camels to Mesopotamia, and it was by the offering of water to these Camels, that Rebekah was selected as Isaac's wife (see Gen. xxiv. 10, 19). In after days, when Jacob was about to leave Laban, these animals are mentioned as an important part of his wealth: "And the man increased exceedingly, and had much cattle, and maid-servants, and men-servants, and camels, and asses" (Gen. xxx. 43).

It is thought worthy of mention in the sacred narrative that Job had three thousand, and afterwards six thousand Camels (Job i. 3, and xlii. 12); that the Midianites and Amalekites possessed camels without number, as the sand by the seaside.



A CAMP IN THE DESERT.

They were valuable enough to be sent as presents from one potentate to another. For example, when Jacob went to meet Esau, he gave as his present two hundred and twenty sheep, the same number of goats, fifty oxen, thirty asses, and sixty camels, *i.e.* thirty mothers, each with her calf. They were important enough to be guarded by men of position. In 1 Chron. xxvii. 30, we find that the charge of David's Camels was confided to one

of his officers, Obil the Ishmaelite, who, from his origin, might be supposed to be skilful in the management of these animals. Bochart, however, conjectures that the word Obil ought to be read as *Abal*, *i.e.* the camel-keeper, and that the passage would therefore read as follows: "Over the camels was an Ishmaelitish camel-keeper."

WE will now proceed to the uses of the Camel, and first take it in the light of food.

By the Mosaic law, the Camel was a forbidden animal, because it did not divide the hoof, although it chewed the cud. Yet, although the Jews might not eat its flesh, they probably used the milk for food, as they do at the present day. No distinct Scriptural reference is made to the milk of the Camel; but, as the Jews of the present day are quite as fastidious as their ancestors in keeping the Mosaic law, we are justified in concluding that, although they would not eat the flesh of the animal, they drank its milk. At the present time, the milk is used, like that of the sheep, goat, and cow, both in a fresh and curdled state, the latter being generally preferred to the former. A kind of cheese is made from it, but is not much to the taste of the European traveller, on account of the quantity of salt which is put in it. Butter is churned in a very simple manner, the fresh milk being poured into a skin bag, and the bag beaten with a stick until the butter makes its appearance.

That it was really used in the patriarchal times is evident by the passage which has already been mentioned, where Jacob is related to have brought as a present to his brother Esau thirty milch Camels, together with their young. So decided a stress would certainly not have been laid upon the fact that the animals were milch Camels unless the milk were intended for use.

Perhaps the use of the Camel's milk might be justified by saying that the prohibition extended only to eating and not to drinking, and that therefore the milk might be used though the flesh was prohibited.

There was another mode in which the Camel might be used by travellers to sustain life.

The reader is probably aware that, even in the burning climate in which it dwells, the Camel is able to go for a long time without drinking,—not that it requires less liquid nourishment than

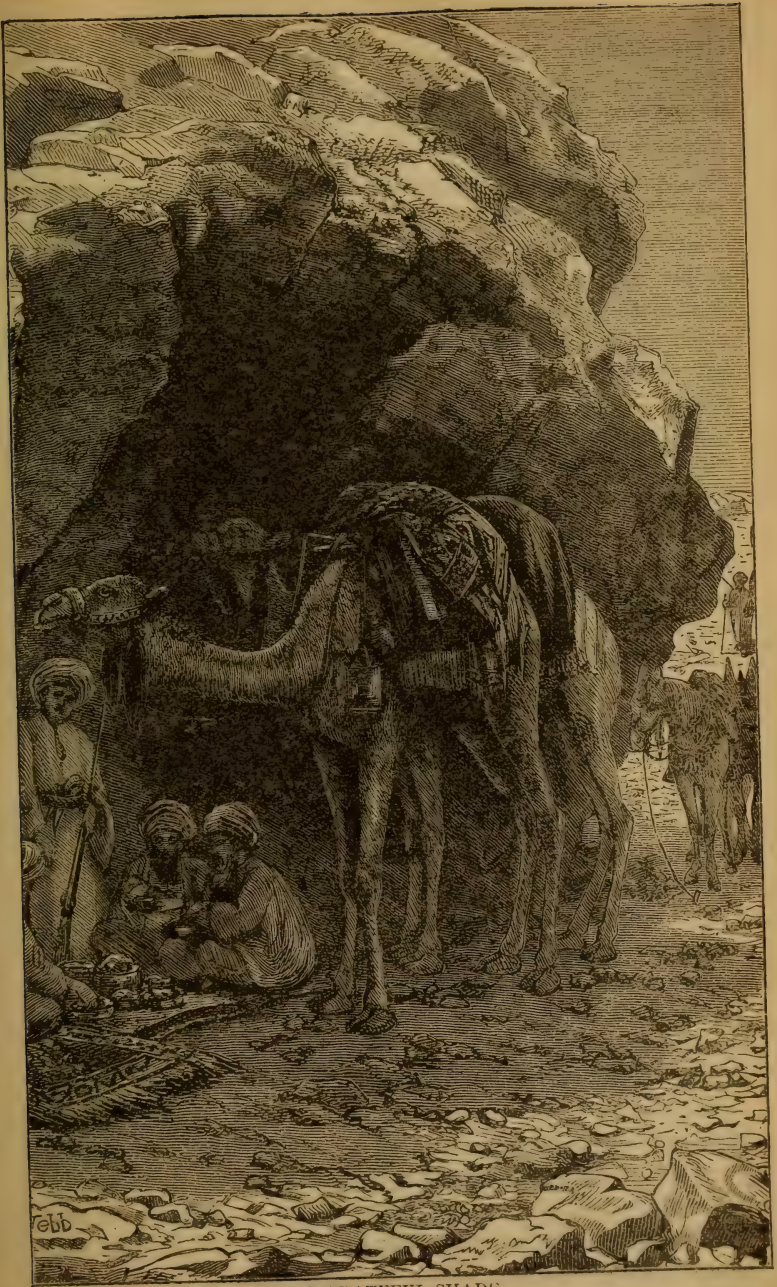
other animals, but that it is able, by means of its internal construction, to imbibe at one draught a quantity of water which will last for a considerable time. It is furnished with a series of cells, into which the water runs as fast as it is drunk, and in which it can be kept for some time without losing its life-preserving qualities. As much as twenty gallons have been imbibed by a Camel at one draught, and this amount will serve it for several days, as it has the power of consuming by degrees the water which it has drunk in a few minutes.

This curious power of the Camel has often proved to be the salvation of its owner. It has often happened that, when travellers have been passing over the desert, their supply of water has been exhausted, partly by the travellers and partly by the burning heat which causes it to evaporate through the pores of the goat-skin bottle in which it was carried. Then the next well, where they had intended to refill their skins and refresh themselves, has proved dry, and the whole party seemed doomed to die of thirst.

Under these circumstances, only one chance of escape is left them. They kill a Camel, and from its stomach they procure water enough to sustain life for a little longer, and perhaps to enable them to reach a well or fountain in which water still remains. The water which is thus obtained is unaltered, except by a greenish hue, the result of mixing with the remains of herbage in the cells. It is, of course, very disagreeable, but those who are dying from thirst cannot afford to be fastidious, and to them the water is a most delicious draught.

It is rather curious that, if any of the water which is taken out of a dead Camel can be kept for a few days, both the green hue and the unpleasant flavour disappear, and the water becomes fresh, clear, and limpid. So wonderfully well do the internal cells preserve the water, that after a Camel has been dead for ten days—and in that hot climate ten days after death are equal to a month here—the water within it has been quite pure and drinkable.

Many persons believe in the popular though erroneous idea that the Camel does not require as much water as ordinary animals. He will see, however, from the foregoing account that it needs quite as much water as the horse or the ox, but that it possesses the capability of taking in at one time as much as



A GRATEFUL SHADE.

either of these animals would drink in several days. So far from being independent of water, there is no animal that requires it more, or displays a stronger desire for it. A thirsty Camel possesses the power of scenting water at a very great distance, and, when it does so, its instincts conquer its education, and it goes off at full speed towards the spot, wholly ignoring its rider or driver. Many a desert spring has been discovered, and many a life saved, by this wonderful instinct, the animal having scented the distant water when its rider had lost all hope, and was resigning himself to that terrible end, the death by thirst. The sacred Zemzem fountain at Mecca was discovered by two thirsty Camels.

Except by the Jews, the flesh of the Camel is eaten throughout Palestine and the neighbouring countries, and is looked upon as a great luxury. The Arab, for example, can scarcely have a greater treat than a Camel-feast, and looks forward to it in a state of wonderful excitement. He is so impatient, that scarcely is the animal dead before it is skinned, cut up, and the various parts prepared for cooking.

To European palates the flesh of the Camel is rather unpleasant, being tough, stringy, and without much flavour. The fatty hump is universally considered as the best part of the animal, and is always offered to the chief among the guests, just as the North American Indian offers the hump of the bison to the most important man in the assembly. The heart and the tongue, however, are always eatable, and, however old a Camel may be, these parts can be cooked and eaten without fear.

The hump, or "bunch" as it is called in the Bible, has no connexion with the spine, and is a supplementary growth, which varies in size, not only in the species, but in the individual. It is analogous to the hump upon the shoulders of the American bison and the Indian zebra, and in the best-bred Camels it is the smallest though the finest and most elastic.

This hump, by the way, affords one of the points by which the value of the Camel is decided. When it is well fed and properly cared for, the hump projects boldly, and is firm and elastic to the touch. But if the Camel be ill, or if it be badly fed or overworked, the hump becomes soft and flaccid, and in bad cases hangs down on one side like a thick flap of skin. Consequently, the dealers in Camels always try to produce their animals in the

market with their humps well developed ; and, if they find that this important part does not look satisfactory, they use various means to give it the required fulness, inflating it with air being the most common. In fact, there is as much deception among Camel-dealers in Palestine as with dog or pigeon fanciers in England.

Here perhaps I may remark that the hump has given rise to some strange but prevalent views respecting the Camel. Many persons think that the dromedary has one hump and the Camel two—in fact, that they are two totally distinct animals. Now the fact is that the Camel of Palestine is of one species only, the dromedary being a lighter and swifter breed, and differing from the ordinary Camel just as a hunter or racer differs from a cart-horse. The two-humped Camel is a different species altogether, which will be briefly described at the end of the present article.

THE Camel is also used as a beast of draught, and, as we find, not only from the Scriptures, but from ancient monuments, was employed to draw chariots and drag the plough. Thus in *Isa.* xxi. 7 : “And he saw a chariot with a couple of horsemen, a chariot of asses, and a chariot of camels.” It is evident that in this passage some chariots were drawn by Camels and some by asses. It is, however, remarkable that in Kennard’s “*Eastern Experiences*,” these two very useful animals are mentioned as being yoked together : “We passed through a fertile country, watching the fellaheen at their agricultural labours, and not a little amused at sometimes remarking a very tall camel and a very small donkey yoked together in double harness, dragging a plough through the rich brown soil.” Camels drawing chariots are still to be seen in the Assyrian sculptures. In Palestine—at all events at the present time—the Camel is seldom if ever used as a beast of draught, being exclusively employed for bearing burdens and carrying riders.

Taking it first as a beast of burden, we find several references in different parts of the Scriptures. For example, see *2 Kings* viii. 9 : “So Hazael went to meet him, and took a present with him, even of every good thing of Damascus, forty camels’ burden.” Again, in *1 Chron.* xii. 40 : “Moreover they that were with them, even unto Issachar and Zebulun and Naphtali,

brought bread on asses, and on camels, and on mules, and on oxen." Another allusion to the same custom is made in Isaiah : "They will carry their riches upon the shoulders of young asses, and their treasures upon the bunches (or humps) of camels."

The Camel can carry a considerable load, though not so much as is generally fancied. A sort of a pack-saddle of a very simple description is used, in order to keep the burden upon so strangely-shaped an animal. A narrow bag about eight feet long is made, and rather loosely stuffed with straw or similar material. It is then doubled, and the ends firmly sewn together, so as to form a great ring, which is placed over the hump, and forms a tolerably flat surface. A wooden framework is tied on the pack-saddle, and is kept in its place by a girth and a crupper. The packages which the Camel is to carry are fastened together by cords, and slung over the saddle. They are only connected by those semi-knots called "hitches," so that, when the Camel is to be unloaded, all that is needed is to pull the lower end of the rope, and the packages fall on either side of the animal. So quickly is the operation of loading performed, that a couple of experienced men can load a Camel in very little more than a minute.

As is the case with the horse in England, the Camels that are used as beasts of burden are of a heavier, slower, and altogether inferior breed to those which are employed to carry riders, and all their accoutrements are of a ruder and meaner order, devoid of the fantastic ornaments with which Oriental riders are fond of decorating their favourite animals.

In the large illustration are represented four of the ordinary Camels of burden, as they appear when laden with boughs for the Feast of Tabernacles. The branches are those of the Hebrew pine, and, as may be seen, the animals are so heavily laden with them that their forms are quite hidden under their leafy burdens. The weight which a Camel will carry varies much, according to the strength of the individual, which has given rise to the Oriental proverb, "As the camel, so the load." But an animal of ordinary strength is supposed to be able to carry from five to six hundred pounds for a short journey, and half as much for a long one,—a quantity which, as the reader will see, is not so very great when the bulk of the animal is taken into consideration. It is remarkable that the Camel knows its own



CAMELS LADEN WITH BOUGHS.

powers, and instinctively refuses to move if its correct load be exceeded. But, when it is properly loaded, it will carry its



MORNING IN THE DESERT: STARTING OF THE CARAVAN.

burden for hours together at exactly the same pace, and without seeming more fatigued than it was when it started.

The riding Camels are always of a better breed than those which are used for burden, and may be divided into two classes; namely, those which are meant for ordinary purposes, and those which are specially bred for speed and endurance. There is as much difference between the ordinary riding Camel and the swift Camel as there is between the road hack and the race-horse. We will first begin with the description of the common riding Camel and its accoutrements.

The saddle which is intended for a rider is very different from the pack-saddle on which burdens are carried, and has a long upright projection in front, to which the rider can hold if he wishes it.

The art of riding the Camel is far more difficult of accomplishment than that of riding the horse, and the preliminary operation of mounting is not the least difficult portion of it. Of

course, to mount a Camel while the animal is standing is impossible, and accordingly it is taught to kneel until the rider is seated. Kneeling is a natural position with the Camel, which is furnished with large callosities or warts on the legs and breast, which act as cushions on which it may rest its great weight without abrading the skin. These callosities are not formed, as some have imagined, by the constant kneeling to which the Camel is subjected, but are born with it, though of course less developed than they are after they have been hardened by frequent pressure against the hot sand.

When the Camel kneels, it first drops on its knees, and then on the joints of the hind legs. Next it drops on its breast, and then again on the bent hind legs. In rising it reverses the process, so that a novice is first pitched forward, then backward, then forward, and then backward again, to the very great disarrangement of his garments, and the probable loss of his seat altogether. Then when the animal kneels he is in danger of being thrown over its head by the first movement, and jerked over its tail by the second; but after a time he learns to keep his seat mechanically.

As to the movement of the animal, it is at first almost as unpleasant as can be conceived, and has been described by several travellers, some of whose accounts will be here given. One well-known traveller declares that any person desiring to practise Camel-riding can readily do so by taking a music-stool, screwing it up as high as possible, putting it into a cart without springs, sitting on the top of it cross-legged, and having the cart driven at full speed transversely over a newly-ploughed field.

There is, however, as great a difference in the gait of Camels as of horses, some animals having a quiet, regular, easy movement, while others are rough and high-stepping, harassing their riders grievously in the saddle. Even the smooth-going Camel is, however, very trying at first, on account of its long swinging strides, which are taken with the legs of each side alternately, causing the body of the rider to swing backwards and forwards as if he were rowing in a boat.

Those who suffer from sea-sickness are generally attacked with the same malady when they make their first attempts at Camel-riding, while even those who are proof against this particular

form of discomfort soon begin to find that their backs are aching, and that the pain becomes steadily worse. Change of attitude is but little use, and the wretched traveller derives but scant comfort from the advice of his guide, who tells him to allow his body to swing freely, and that in a short time he will become used to it. Some days, however, are generally consumed before he succeeds in training his spine to the continual unaccustomed movement, and he finds that, when he wakes on the morning that succeeds his first essay, his back is so stiff that he can scarcely move without screaming with pain, and that the prospect of mounting the Camel afresh is anything but a pleasant one.

"I tried to sit erect without moving," writes Mr. Kennard, when describing his experience of Camel-riding. "This proved a relief for a few minutes, but, finding the effort too great to continue long in this position, I attempted to recline with my head resting upon my hand. This last manœuvre I found would not do, for the motion of the camel's hind legs was so utterly at variance with the motion of his fore-legs that I was jerked upwards, and forwards, and sideways, and finally ended in nearly rolling off altogether.

"Without going into the details of all that I suffered for the next two or three days—how that on several occasions I slid from the camel's back to the ground, in despair of ever accustoming my half-dislocated joints to the ceaseless jerking and swaying to and fro, and how that I often determined to trudge on foot over the hot desert sand all the way to Jerusalem rather than endure it longer—I shall merely say that the day did at last arrive when I descended from my camel, after many hours' riding, in as happy and comfortable a state of mind as if I had been lolling in the easiest of arm-chairs."

A very similar description of the transition from acute and constant suffering to perfect ease is given by Albert Smith, who states that more than once he has dozed on the back of his Camel, in spite of the swaying backwards and forwards to which his body was subjected.

If such be the discomfort of riding a smooth-going and good-tempered Camel, it may be imagined that to ride a hard-going and cross-grained animal must be a very severe trial to an inexperienced rider. A very amusing account of a ride on such a



THE CAMEL POST.

Camel, and of a fall from its back, is given by Mr. Hamilton in his "Sinai, the Hedjaz, and Soudan :"—

"A dromedary I had obtained at Suk Abu Sin for my own riding did not answer my expectations, or rather the saddle was badly put on—not an easy thing to do well, by the way—and one of my servants, who saw how out of patience I was at the many times I had had to dismount to have it arranged, persuaded me to try the one he was riding, the Sheik's present. I had my large saddle transferred to his beast, and, nothing doubting, mounted it.

"He had not only no nose-string, but was besides a vicious brute, rising with a violent jerk before I was well in the saddle, and anxious to gain the caravan, which was a little way ahead, he set off at his roughest gallop. Carpets, kufieh, tarbush, all went off in the jolting ; at every step I was thrown a foot into the air, glad to come down again, bump, bump, on the saddle, by dint of holding on to the front pommel with the left hand, while the right was engaged with the bridle, which in the violence of the exercise it was impossible to change to its proper hand. I had almost reached the caravan, and had no doubt my hump-backed Pegasus would relax his exertions, when a camel-driver, one of the sons of iniquity, seeing me come up at full speed, and evidently quite run away with, took it into his head to come to my assistance.

"I saw what he was at, and called out to him to get out of the way, but instead of this he stuck himself straight before me, stretching himself out like a St. Andrew's cross, with one hand armed with a huge club, and making most diabolical grimaces. Of course the camel was frightened, it was enough to frighten a much more reasonable being ; so, wheeling quickly round, it upset my unstable equilibrium. Down I came head foremost to the ground, and when I looked up, my forehead streaming with blood, the first thing I saw was my Arab with the camel, which he seemed mightily pleased with himself for having so cleverly captured, while the servant who had suggested the unlucky experiment came ambling along on my easy-paced dromedary, and consoled me by saying that he knew it was a runaway beast, which there was no riding without a nose-string.

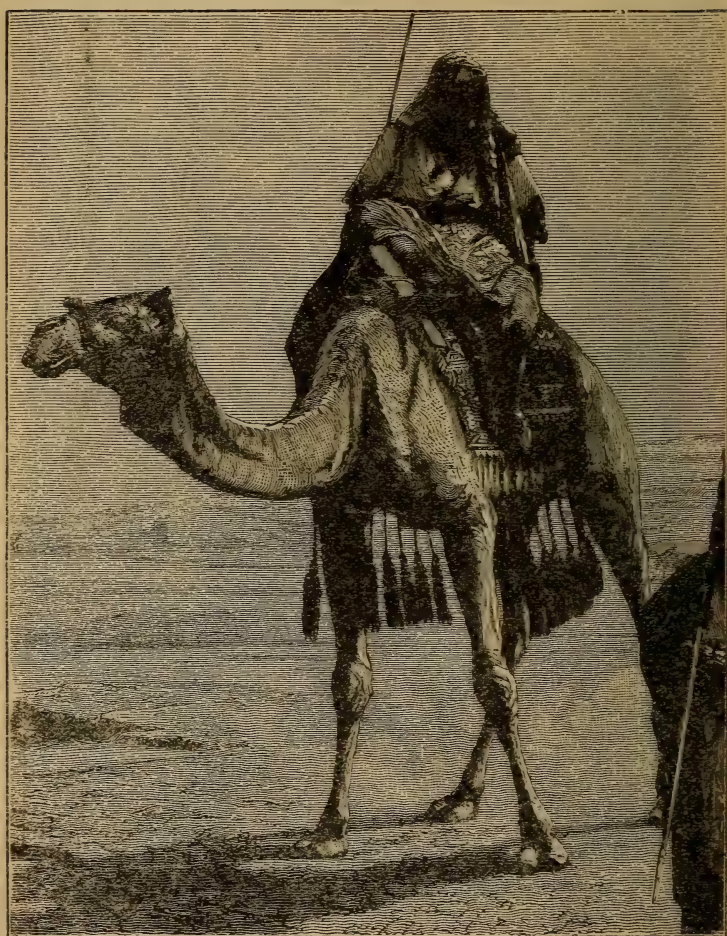
"I now began to study the way of keeping one's seat in such an emergency. An Arab, when he gallops his dromedary with

one of these saddles, holds hard on with the right hand to the back part of the seat, not to the pommel, and grasps the bridle tightly in the other. The movement of the camel in galloping



A RUNAWAY.

throws one violently forward, and without holding on, excepting on the naked back, when the rider sits behind the hump, it is impossible to retain one's seat. I afterwards thought myself lucky in not having studied this point sooner, as, from the greater resistance I should have offered, my tumble, since it was *fated* I should have one, would probably have been much more severe. It is true I might also have escaped it, but in the chapter of probabilities I always think a mishap the most probable."



AN ARAB SHEIK MOUNTED UPON HIS CAMEL.

It may be imagined that a fall from a Camel's back is not a trifle, and, even if the unskilful rider be fortunate enough to fall on soft sand instead of hard rock, he receives a tolerably severe shock, and runs no little risk of breaking a limb. For the average height of a Camel's back is rather more than six feet, while some animals measure seven feet from the ground to the top of the hump.

This height, however, is of material advantage to the traveller. In the first place it lifts him above the waves of heated air that are continually rolling over the sand on which the burning rays of the sun are poured throughout the day; and in the second place it brings him within reach of the slightest breeze that passes above the stratum of hot air, and which comes to the traveller like the breath of life. Moreover, his elevated position enables him to see for a very great distance, which is an invaluable advantage in a land where every stranger may be a robber, and is probably a murderer besides.

The best mode of avoiding a fall is to follow the Arab mode of riding,—namely, to pass one leg over the upright pommel, which, as has been mentioned, is a mere wooden peg or stake, and hitching the other leg over the dangling foot. Perhaps the safest, though not the most comfortable, mode of sitting is by crossing the legs in front, and merely grasping the pommel with the hands.

Yet, fatiguing as is the seat on the Camel's back to the beginner, it is less so than that on the horse's saddle, inasmuch as in the latter case one position is preserved, while in the former an infinite variety of seat is attainable when the rider has fairly mastered the art of riding.

The Camel is not held by the bit and bridle like the horse, but by a rope tied like a halter round the muzzle, and having a knot on the left or "near" side. This is held in the left hand, and is used chiefly for the purpose of stopping the animal. The Camel is guided partly by the voice of its rider, and partly by a driving-stick, with which the neck is lightly touched on the opposite side to that which its rider wishes it to take. A pressure of the heel on the shoulder-bone tells it to quicken its pace, and a little tap on the head followed by a touch on the short ears are the signals for full speed.

There are three different kinds of stick with which the Camel is driven; one of them, a mere almond branch with the bark, and an oblique head, is the sceptre or emblem of sovereignty of the Prince of Mecca. Mr. Hamilton suggests that this stick, called the "*mesh'ab*," is the original of the jackal-headed stick with which so many of the Egyptian deities are represented; and that Aaron's rod that "brought forth buds, and bloomed blossoms, and yielded almonds," was the *mesh'ab*, the almond-

branch sceptre, the emblem of his almost regal rank and authority.



AARON'S ROD BEARS ALMONDS.

The women mostly ride in a different manner from the men. Sometimes they are hardy enough to sit the animal in the same way as their husbands, but as a rule they are carried by the animal rather than ride it, sitting in great basket-like appendages which are slung on either side of the Camel. These constitute the "furniture" which is mentioned in Gen. xxxi. 34. When Jacob left the house of Laban, to lead an independent life, Rachel stole her father's images, or "teraphim," and carried them away with her, true to her affectionate though deceptive nature, which impelled her to incur the guilt of robbery for the sake of enriching her husband with the cherished teraphim of her father. From the most careful researches we learn that these teraphim were used for divining the future, and that they were made in the human form. That they were of considerable size is evident from the fact that, when Saul was hunting after David, his wife Michal contrived to convey him out of the house, and

for a time to conceal her fraud by putting an image (or teraph) into the bed as a representative of her husband. Had not, therefore, the camel-furniture been of considerable dimensions, images of such a size could not be hidden, but they could well be stowed away in the great panniers, as long as their



CAMEL-RIDING.

mistress sat upon them, after the custom of Oriental travellers and declined to rise on the ready plea of indisposition.

This sort of carriage is still used for the women and children. "The wife and child came by in the string of camels, the former reclining in an immense circular box, stuffed and padded, covered with red cotton, and dressed with yellow worsted ornaments. This family nest was mounted on a large camel. It seemed a most commodious and well-arranged travelling carriage, and very superior as a mode of camel-riding to that which our Sitteen rejoiced in (*i.e.* riding upon a saddle). The Arab wife could change her position at pleasure, and the child had room to walk about and could not fall out, the sides of the box just reaching to its shoulders. Various jugs and skins and articles of domestic use hung suspended about it, and trappings of fringe and finery ornamented it."

This last sentence brings us to another point which is several times mentioned in the Bible; namely, the ornaments with which the proprietors of Camels are fond of bedizening their favourite animals.

Their leathern collars are covered with cowrie shells sewn on them in various fantastic patterns. Crescent-shaped ornaments are made of shells sewn on red cloth, and hung so abundantly upon the harness of the animal that they jingle at every step which it takes. Sheiks and other men of rank often have these ornaments made of silver, so that the cost of the entire trappings is very great.



THE DELOUL, OR SWIFT CAMEL.

WE now come to the Swift Camel, or Deloul.

The limbs of the Deloul are long and wiry, having not an ounce of superfluous fat upon them, the shoulders are very broad, and the hump, though firm and hard, is very small.

A thoroughbred Deloul, in good travelling condition, is not

at all a pleasing animal to an ordinary eye, being a lank, gaunt, and ungainly-looking creature, the very conformation which insures its swiftness and endurance being that which detracts from its beauty. An Arab of the desert, however, thinks a good Deloul one of the finest sights in the world. As the talk of the pastoral tribes is of sheep and oxen, so is the talk of the nomads about Camels. It is a subject which is for ever on their lips, and a true Bedouin may be seen to contemplate the beauties of one of these favourite animals for hours at a time,—if his own, with the rapture of a possessor, or, if another's, with the determination of stealing it when he can find an opportunity.

Instead of plodding along at the rate of three miles an hour, which is the average speed of the common Camel, the Deloul can cover, if lightly loaded, nine or ten miles an hour, and go on at the same pace for a wonderful time, its long legs swinging, and its body swaying, as if it were but an animated machine. Delouls have been reported to have journeyed for nearly fifty hours without a single stop for rest, during which time the animals must have traversed nearly five hundred miles. Such examples must, however, be exceptional, implying, as they do, an amount of endurance on the part of the rider equal to that of the animal; and even a journey of half that distance is scarcely possible to ordinary men on Delouls.

For the movements of the Deloul are very rough, and the rider is obliged to prepare himself for a long journey by belting himself tightly with two leathern bands, one just under the arms, and the other round the pit of the stomach. Without these precautions, the rider would be likely to suffer serious injuries, and, even with them, the exercise is so severe, that an Arab makes it a matter of special boast that he can ride a Deloul for a whole day.

A courier belonging to the Sherif of Mecca told Mr. Hamilton that he often went on the same dromedary from Mecca to Medina in forty-eight hours, the distance being two hundred and forty miles. And a thoroughbred Deloul will travel for seven or eight weeks with only four or five days of rest.

Even at the present time, these Camels are used for the conveyance of special messages, and in the remarkable Bornu kingdom a regular service of these animals is established, two couriers always travelling in company, so that if one rider or Camel

should fail or be captured by the Arabs, who are always on the alert for so valuable a prey, the other may post on and carry the message to its destination.

The swift dromedary, or Deloul, is mentioned several times in the Old Testament. One of them occurs in Isa. lx. 6: "The multitude of camels shall cover thee, the dromedaries of Midian



ANOTHER MODE OF RIDING THE CAMEL.

and Ephah." In this passage a distinction is drawn between the ordinary Camel and the swift dromedary, the former being the word "gamel," and the latter the word "beker," which is again used in Jer. ii. 23: "See thy way in the valley, know what thou hast done: thou art a swift dromedary."

There is a passage in the Book of Esther which looks as if it referred to the ordinary Camel and the swift dromedary, but

there is considerable uncertainty about the proper rendering. It runs as follows: "And he wrote in king Ahasuerus' name, and sealed it with the king's ring, and sent letters and posts on horseback, and riders on mules, camels, and young dromedaries."

The Jewish Bible, however, translates this passage as follows: "And sent letters by the runners on the horses, and riders on the racers, mules, and young mares." Now, the word *rekesh*, which is translated as "racer," is rendered by Buxtorf as "a swift horse or mule," and the word *beni-rammachim*, which is translated as "young mares," literally signifies "those born of mares."

The Camel-drivers behave towards their animals with the curious inconsistency which forms so large a part of the Oriental character.

Prizing them above nearly all earthly things, proud of them, and loving them after their own fashion, the drivers will talk to them, cheer them, and sing interminable songs for their benefit. Towards the afternoon the singing generally begins, and it goes on without cessation in a sort of monotonous hum, as Dr. Bonar calls it. The same traveller calls attention to a passage in Caussin's "Polyhistor Symbolicus," in which the learned and didactic author symbolizes the maxim that more can be done by kindness than by blows. "The Camel is greatly taken with music and melody. So much so, indeed, that if it halts through weariness, the driver does not urge it with stripes and blows, but soothes it by his songs."

Several travellers have mentioned these songs. See, for example, Miss Rogers' account of some Bedouins: "Their songs were already subdued to harmonize with their monotonous swinging pace, and chimed softly and plaintively with the tinkling of camel-bells, thus—

" 'Dear unto me as the sight of mine eyes,
 Art thou, O my Camel!
 Precious to me as the health of my life,
 Art thou, O my Camel!
 Sweet to my ears is the sound
 Of thy tinkling bells, O my Camel!
 And sweet to thy listening ears
 Is the sound of my evening song.' "

And so on, *ad libitum*."

Sometimes a female Camel gives birth to a colt on the journey. In such a case, a brief pause is made, and then the train proceeds on its journey, the owner of the Camel carrying the young one in his arms until the evening halt. He then gives it to its mother, and on the following day it is able to follow her without further assistance. The young Camels are almost pretty, their hair being paler than that of the adult animal, and their limbs more slender.

Although the young Camel is better-looking than its parents, it is not one whit more playful. Unlike almost all other animals, the Camel seems to have no idea of play, and even the young Camel of a month or two old follows its mother with the same steady, regular pace which she herself maintains.

In spite of all the kindness with which a driver treats his Camels, he can at times be exceedingly cruel to them, persisting in over-loading and over-driving them, and then, if a Camel fall exhausted, removing its load, and distributing it among the other Camels. As soon as this is done, he gives the signal to proceed, and goes on his way, abandoning the wretched animal to its fate—*i.e.* to thirst and the vultures. He will not even have the humanity to kill it, but simply leaves it on the ground, muttering that it is "his fate!"

THE CAMEL.

CHAPTER II.

The Camel and its master—Occasional fury of the animal—A boy killed by a Camel—Another instance of an infuriated Camel—Theory respecting the Arab and his Camel—Apparent stupidity of the Camel—Its hatred of a load, and mode of expressing its disapprobation—Riding a Camel through the streets—A narrow escape—Ceremony of weaning a young Camel—The Camel's favourite food—Structure of the foot and adaptation to locality—Difficulty in provisioning—Camel's hair and skin—Sal-ammoniac and Desert fuel—The Camel and the needle's eye—Straining at a gnat and swallowing a Camel.

WE now come to the general characteristics of the Camel.

The Camels know their master well, some of them being much more affectionate than others. But they are liable to fits

of strange fury, in which case even their own masters are not safe from them. They are also of a revengeful nature, and have an unpleasant faculty of treasuring up an injury until they can find a time of repaying it. Signor Pierotti gives a curious example of this trait of character. As he was going to the Jordan, he found a dead Camel lying on the roadside, the head nearly separated from the body. On inquiry he found that the animal had a master who ill-treated it, and had several times tried to bite him. One evening, after the Camels had been unloaded, the drivers lay down to sleep as usual.

The Camel made its way to its master, and stamped on him as he slept. The man uttered one startled cry, but had no time for another. The infuriated Camel followed up its attack by grasping his throat in its powerful jaws, and shaking him to death. The whole scene passed so rapidly, that before the other drivers could come to the man's assistance he was hanging dead from the jaws of the Camel, who was shaking him as a dog shakes a rat, and would not release its victim until its head had been nearly severed from its body by sword-cuts.

A similar anecdote is told by Mr. Palgrave, in his "Central and Eastern Arabia :"—

"One passion alone he possesses, namely, revenge, of which he gives many a hideous example; while, in carrying it out, he shows an unexpected degree of forethoughted malice, united meanwhile with all the cold stupidity of his usual character. One instance of this I well remember—it occurred hard by a small town in the plain of Baalbec, where I was at the time residing.

"A lad of about fourteen had conducted a large camel, laden with wood, from that very village to another at half an hour's distance or so. As the animal loitered or turned out of the way, its conductor struck it repeatedly, and harder than it seems to have thought he had a right to do. But, not finding the occasion favourable for taking immediate quits, it 'bided its time,' nor was that time long in coming.

"A few days later, the same lad had to re-conduct the beast, but unladen, to his own village. When they were about half way on the road, and at some distance from any habitation, the camel suddenly stopped, looked deliberately round in every direction to assure itself that no one was in sight, and, finding the road clear of passers-by, made a step forward, seized the

unlucky boy's head in its monstrous mouth, and, lifting him up in the air, flung him down again on the earth, with the upper part of his head completely torn off, and his brains scattered on the ground. Having thus satisfied its revenge, the brute quietly resumed its pace towards the village, as though nothing were the matter, till some men, who had observed the whole, though unfortunately at too great a distance to be able to afford timely help, came up and killed it.

"Indeed, so marked is this unamiable propensity, that some philosophers have ascribed the revengeful character of the Arabs to the great share which the flesh and milk of the camel have in their sustenance, and which are supposed to communicate, to those who partake of them over-largely, the moral or immoral qualities of the animal to which they belonged. I do not feel myself capable of pronouncing an opinion on so intricate a question, but thus much I can say, that the camel and its Bedouin master do afford so many and such divers points of resemblance, that I do not think our Arab of Shomer far in the wrong, when I once on a time heard him say, 'God created the Bedouin for the camel, and the camel for the Bedouin.'"

The reader will observe that Mr. Palgrave in this anecdote makes reference to the stupidity of the Camel. There is no doubt that the Camel is by no means an intellectual animal; but it is very possible that its stupidity may in a great measure be owing to the fact that no one has tried to cultivate its intellectual powers. The preceding anecdotes show clearly that the Camel must possess a strong memory, and be capable of exercising considerable ingenuity.

Still it is not a clever animal. If its master should fall off its back, it never dreams of stopping, as a well-trained horse would do, but proceeds at the same plodding pace, leaving his master to catch it if he can. Should it turn out of the way to crop some green thorn-bush, it will go on in the same direction, never thinking of turning back into the right road unless directed by its rider. Should the Camel stray, "it is a thousand to one that he will never find his way back to his accustomed home or pasture, and the first man who picks him up will have no particular shyness to get over; . . . and the losing of his old master and of his former cameline companions gives him no regret, and occasions no endeavour to find them again."

He has the strongest objection to being laden at all, no matter how light may be the burden, and expresses his disapprobation by growling and groaning, and attempting to bite. So habitual is this conduct that if a kneeling Camel be only approached, and a stone as large as a walnut laid on its back, it begins to remonstrate in its usual manner, groaning as if it were crushed to the earth with its load.

The Camel never makes way for any one, its instinct leading it to plod onward in its direct course. What may have been its habits in a state of nature no one can tell, for such a phenomenon as a wild Camel has never been known in the memory of man. There are wild oxen, wild goats, wild sheep, wild horses, and wild asses, but there is no spot on the face of the earth where the Camel is found except as the servant of man. Through innate stupidity, according to Mr. Palgrave, it goes straight forwards in the direction to which its head happens to be pointed, and is too foolish even to think of stopping unless it hears the signal for halt.

As it passes through the narrow streets of an Oriental city, laden with goods that project on either side, and nearly fill up the thoroughfare, it causes singular inconvenience, forcing every one who is in front of it to press himself closely to the wall, and to make way for the enormous beast as it plods along. The driver or rider generally gives notice by continually calling to the pedestrians to get out of the way, but a laden Camel rarely passes through a long street without having knocked down a man or two, or driven before it a few riders on asses who cannot pass between the Camel and the wall.

One source of danger to its rider is to be found in the low archways which span so many of the streets. They are just high enough to permit a laden Camel to pass under them, but are so low that they leave no room for a rider. The natives, who are accustomed to this style of architecture, are always ready for an archway, and, when the rider sees an archway which will not allow him to retain his seat, he slips to the ground, and remounts on the other side of the obstacle.

Mr. Kennard had a very narrow escape with one of these archways. "I had passed beneath one or two in perfect safety, without being obliged to do more than just bend my head forward, and was in the act of conversing with one of my companions behind,

and was therefore in a happy state of ignorance as to what was immediately before me, when the shouting and running together of the people in the street on either side made me turn my head quickly, but only just in time to feel my breath thrown back on my face against the keystone of a gateway, beneath which my camel, with too much way on him to be stopped immediately, had already commenced to pass.

“With a sort of feeling that it was all over with me, I threw myself back as far as I could, and was carried through in an almost breathless state, my shirt-studs actually scraping along against the stonework. On emerging again into the open street, I could hardly realize my escape, for if there had been a single projecting stone to stop my progress, the camel would have struggled to get free, and my chest must have been crushed in.”

It will be seen from these instances that the charge of stupidity is not an undeserved one. Still the animal has enough intellect to receive all the education which it needs for the service of man, and which it receives at a very early age. The ordinary Camel of burden is merely taught to follow its conductor, to obey the various words and gestures of command, and to endure a load. The Deloul, however, is more carefully trained. It is allowed to follow its mother for a whole year in perfect liberty. Towards the expiration of that time the young animal is gradually stinted in its supply of milk, and forced to browse for its nourishment. On the anniversary of its birth, the young Deloul is turned with its head towards Canopus, and its ears solemnly boxed, its master saying at the same time, “Henceforth drinkest thou no drop of milk.” For this reason the newly-weaned Camel is called Lathim, or the “ear-boxed.” It is then prevented from sucking by a simple though cruel experiment. A wooden peg is sharpened at both ends, and one end thrust into the young animal’s nose. When it tries to suck, it pricks its mother with the projecting end, and at the same time forces the other end more deeply into the wound, so that the mother drives away her offspring, and the young soon ceases to make the attempt.

The food of the Camel is very simple, being, in fact, anything that it can get. As it proceeds on its journey, it manages to browse as it goes along, bending its long neck to the ground, and



PASSING A CAMEL IN A NARROW STREET OF AN EASTERN CITY.

cropping the scanty herbage without a pause. Camels have been known to travel for twenty successive days, passing over some eight hundred miles of ground, without receiving any food except that which they gathered for themselves by the way. The favourite food of the Camel is a shrub called the ghada, growing to six feet or so in height, and forming a feathery tuft of innumerable little green twigs, very slender and flexible. It is so fond of this shrub that a Camel can scarcely ever pass a bush without turning aside to crop it; and even though it be beaten severely for its misconduct, it will repeat the process at the next shrub that comes in sight.

It also feeds abundantly on the thorn-bushes which grow so plentifully in that part of the world; and though the thorns are an inch or two in length, very strong, and as sharp as needles, the hard, horny palate of the animal enables it to devour them with perfect ease.

There are several species of these thorn-shrubs, which are scattered profusely over the ground, and are, in fact, the commonest growth of the place. After they die, being under the fierce sun of that climate, they dry up so completely, that if a light be set to them they blaze up in a moment, with a sharp cracking sound and a roar of flame, and in a moment or two are nothing but a heap of light ashes. No wonder was it that when



MOSES AT THE BURNING BUSH.

Moses saw the thorn-bush burning without being consumed he was struck with awe at the miracle. These withered bushes

are the common fuel of the desert, giving out a fierce but brief heat, and then suddenly sinking into ashes. "For as the crackling of thorns under a pot, so is the laughter of the fool" (Eccl. vii. 6).

The dried and withered twigs of these bushes are also eaten by the Camel, which seems to have a power of extracting nutriment from every sort of vegetable substance. It has been fed



AN ARAB ENCAMPMENT.

on charcoal, and, as has been happily remarked, could thrive on the shavings of a carpenter's workshop.

Still, when food is plentiful, it is fed as regularly as can be managed, and generally after a rather peculiar manner. "Our guide," writes Mr. Hamilton, in the work which has already been mentioned, "is an elderly man, the least uncouth of our camel-drivers. He has three camels in the caravan, and it was amusing to see his preparations for their evening's entertainment. The

table-cloth, a circular piece of leather, was duly spread on the ground; on this he poured the quantity of dourrah destined for their meal, and calling his camels, they came and took each its place at the feast. It is quaint to see how each in his turn eats, so gravely and so quietly, stretching his long neck into the middle of the heap, then raising his head to masticate each mouthful; all so slowly and with such gusto, that we could swear it was a party of epicures sitting in judgment on one of Vachette's *chefs d'œuvre*."

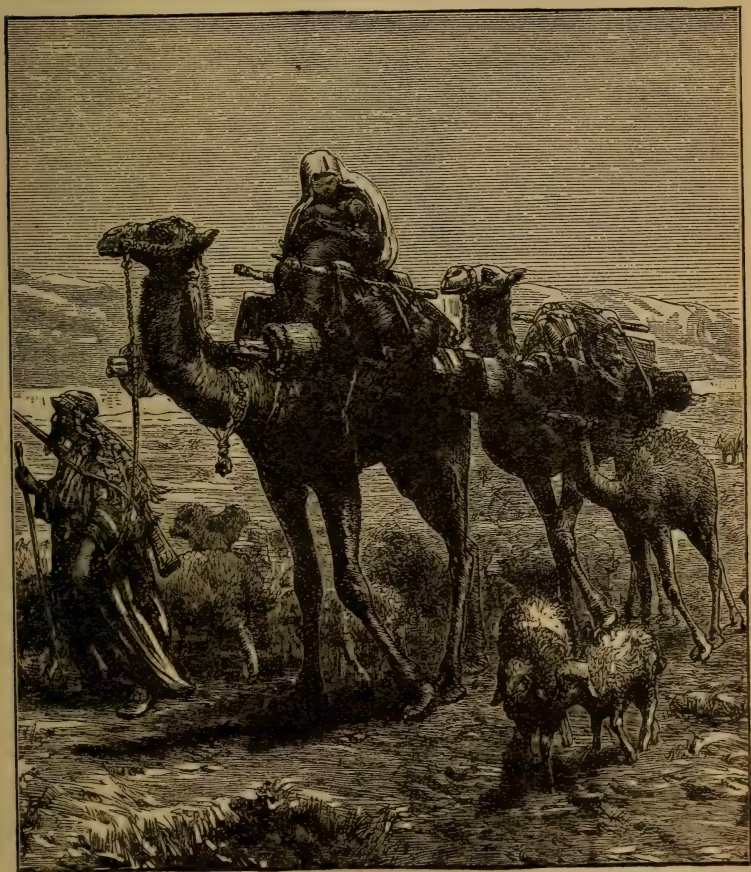
The foregoing passages will show the reader how wonderfully adapted is the constitution of the Camel for the country in which it lives, and how indispensable it is to the inhabitants. It has been called "the ship of the desert," for without the Camel the desert would be as impassable as the sea without ships. No water being found for several days' journey together, the animal is able to carry within itself a supply of water which will last it for several days, and, as no green thing grows far from the presence of water, the Camel is able to feed upon the brief-lived thorn-shrubs which have sprung up and died, and which, from their hard and sharp prickles, are safe from every animal except the hard-mouthed Camel.

But these advantages would be useless without another—*i.e.* the foot. The mixed stones and sand of the desert would ruin the feet of almost any animal, and it is necessary that the Camel should be furnished with a foot that cannot be split by heat like the hoof of a horse, that is broad enough to prevent the creature from sinking into the sand, and is tough enough to withstand the action of the rough and burning soil.

Such a foot does the Camel possess. It consists of two long toes resting upon a hard elastic cushion with a tough and horny sole. This cushion is so soft that the tread of the huge animal is as noiseless as that of a cat, and, owing to the division of the toes, it spreads as the weight comes upon it, and thus gives a firm footing on loose ground. The foot of the moose-deer has a similar property, in order to enable the animal to walk upon the snow.

In consequence of this structure, the Camel sinks less deeply into the ground than any other animal; but yet it does sink in it, and dislikes a deep and loose sand, groaning at every step, and being wearied by the exertion of dragging its hard foot out

of the holes into which they sink. It is popularly thought that hills are impracticable to the Camel; but it is able to climb even rocky ground from which a horse would recoil. Mr. Marsh, an American traveller, was much surprised by seeing a caravan of



ON THE MARCH.

fifty camels pass over a long ascent in Arabia Petrea. The rock was as smooth as polished marble, and the angle was on an average fifteen degrees; but the whole caravan passed over it without an accident.

The soil that a Camel most hates is a wet and muddy ground, on which it is nearly sure to slip. If the reader will look at a Camel from behind, he will see that the hinder legs are close together until the ankle-joint, when they separate so widely that the feet are set on the ground at a considerable distance from each other. On dry ground this structure increases the stability of the animal by increasing its base ; but on wet ground the effect is singularly unpleasant. The soft, padded feet have no hold, and slip sideways at every step, often with such violence as to dislocate a joint and cause the death of the animal. When such ground has to be traversed, the driver generally passes a bandage round the hind legs just below the ankle-joint, so as to prevent them from diverging too far.

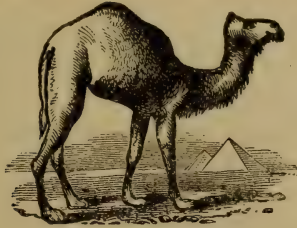
It must be remarked, however, that the country in which the animal lives is essentially a dry one, and that moist and muddy ground is so exceptional that the generality of Camels never see it in their lives. Camels do not object to mud an inch or two deep, provided that there is firm ground below ; and they have been seen to walk with confident safety over pavements covered with mud and half-frozen snow.

The animals can ford rivers well enough, provided that the bed be stony or gravelly ; but they are bad swimmers, their round bodies and long necks being scarcely balanced by their legs, so that they are apt to roll over on their sides, and in such a case they are sure to be drowned. When swimming is a necessity, the head is generally tied to the stern of a boat, or guided by the driver swimming in front, while another often clings to the tail, so as to depress the rump and elevate the head. It is rather curious that the Camels of the Sahara cannot be safely entrusted to the water. They will swim the river readily enough ; but they are apt to be seized with illness afterwards, and to die in a few hours.

WE now come to some other uses of the Camel.

Its hair is of the greatest importance, as it is used for many purposes. In this country, all that we know practically of the Camel's hair is that it is employed in making brushes for painters ; but in its own land the hair plays a really important part. At the proper season it is removed from the animal, usually by being pulled away in tufts, but sometimes by being shorn, and it is then spun by the women into strong thread.

From this thread are made sundry fabrics where strength is required and coarseness is not an objection. The "black tents" of the Bedouin Arabs, similar to those in which Abraham lived, are made of Camel's hair, and so are the rugs, carpets, and cordage used by the nomad tribes. Even mantles for rainy or cold weather are made of Camel's hair, and it was in a dress of this coarse and rough material that St. John the Baptist was clad.



HAIR OF THE CAMEL.

The best part of the Camel's hair is that which grows in tufts on the back and about the hump, the fibre being much longer than that which covers the body. There is also a little very fine under-wool which is carefully gathered, and, when a sufficient quantity is procured, it is spun and woven into garments. Shawls of this material are even now as valuable as those which are made from the Cachmire goat.

The skin of the Camel is made into a sort of leather. It is simply tanned by being pegged out in the sun and rubbed with salt.

Sandals and leggings are made of this leather, and in some places water-bottles are manufactured from it, the leather being thicker and less porous than that of the goat, and therefore wasting less of the water by evaporation. The bones are utilized, being made into various articles of commerce.

So universally valuable is the Camel that even its dung is important to its owners. Owing to the substances on which the animal feeds, it consists of little but macerated fragments of aromatic shrubs. It is much used as poultices in case of bruises or rheumatic pains, and is even applied with some success to simple fractures. It is largely employed for fuel, and the desert couriers use nothing else, their Camels being furnished with a net, so that none of this useful substance shall be lost. For this purpose it is carefully collected, mixed with bits of straw, and

made into little rolls, which are dried in the sun, and can then be laid by for any time until they are needed.

Mixed with clay and straw, it is most valuable as a kind of mortar or cement with which the walls of huts are rendered weather-proof, and the same material is used in the better-class houses to make a sort of terrace on the flat roof. This must be waterproof in order to withstand the wet of the rainy season, and no material answers the purpose so well as that which has been mentioned. So strangely hard and firm is this composition, that stoves are made of it. These stoves are made like jars, and have the faculty of resisting the power of the inclosed fire. Even after it is burned it has its uses, the ashes being employed in the manufacture of sal-ammoniac.

THERE are two passages in the New Testament which mention the Camel in an allegorical sense. The first of these is the proverbial saying of our Lord, "A rich man shall hardly enter into the kingdom of heaven. Again I say unto you, It is easier for a camel to go through the eye of a needle, than for a rich man to enter into the kingdom of God" (Matt. xix. 23, 24).

Now, this well-known but scarcely understood passage requires some little dissection. If the reader will refer to the context, he will see that this saying was spoken in allusion to the young and wealthy man who desired to be one of the disciples, but clung too tightly to his wealth to accept the only conditions on which he could be received. His possessions were a snare to him, as was proved by his refusal to part with them at Christ's command. On his retiring, the expression was used, "that a rich man shall hardly (or, with difficulty) enter the kingdom of heaven," followed by the simile of the Camel and the needle's eye.

Now, if we are to take this passage literally, we can but draw one conclusion from it, that a rich man can no more enter heaven than a camel pass through the eye of a needle, *i.e.* that it is impossible for him to do so. Whereas, in the previous sentence, Christ says not that it is impossible, but difficult (*δυσκόλως*) for him to do so. It is difficult for a man to use his money for the service of God, the only purpose for which it was given him, and the difficulty increases in proportion to its amount. But wealth in itself is no more a bar to heaven than

intellect, health, strength, or any other gift, and, if it be rightly used, is one of the most powerful tools that can be used in the service of God. Our Lord did not condemn all wealthy men alike. He knew many; but there was only one whom He advised to sell his possessions and give them to the poor as the condition of being admitted among the disciples.



CAMEL GOING THROUGH A "NEEDLE'S EYE."

We will now turn to the metaphor of the Camel and the needle's eye. Of course it can be taken merely as a very bold metaphor, but it may also be understood in a simpler sense, the sense in which it was probably understood by those who heard it. In Oriental cities, there are in the large gates small and very low apertures called metaphorically "needle's-eyes," just as we talk of certain windows as "bull's-eyes." These entrances are too narrow for a Camel to pass through them in the ordinary manner, especially if loaded. When a laden Camel has to pass through one of these entrances, it kneels down, its load is removed, and then it shuffles through on its knees. "Yesterday," writes Lady Duff-Gordon from Cairo, "I saw a camel go through

the eye of a needle, *i.e.* the low-arched door of an enclosure. He must kneel, and bow his head to creep through; and thus the rich man must humble himself."

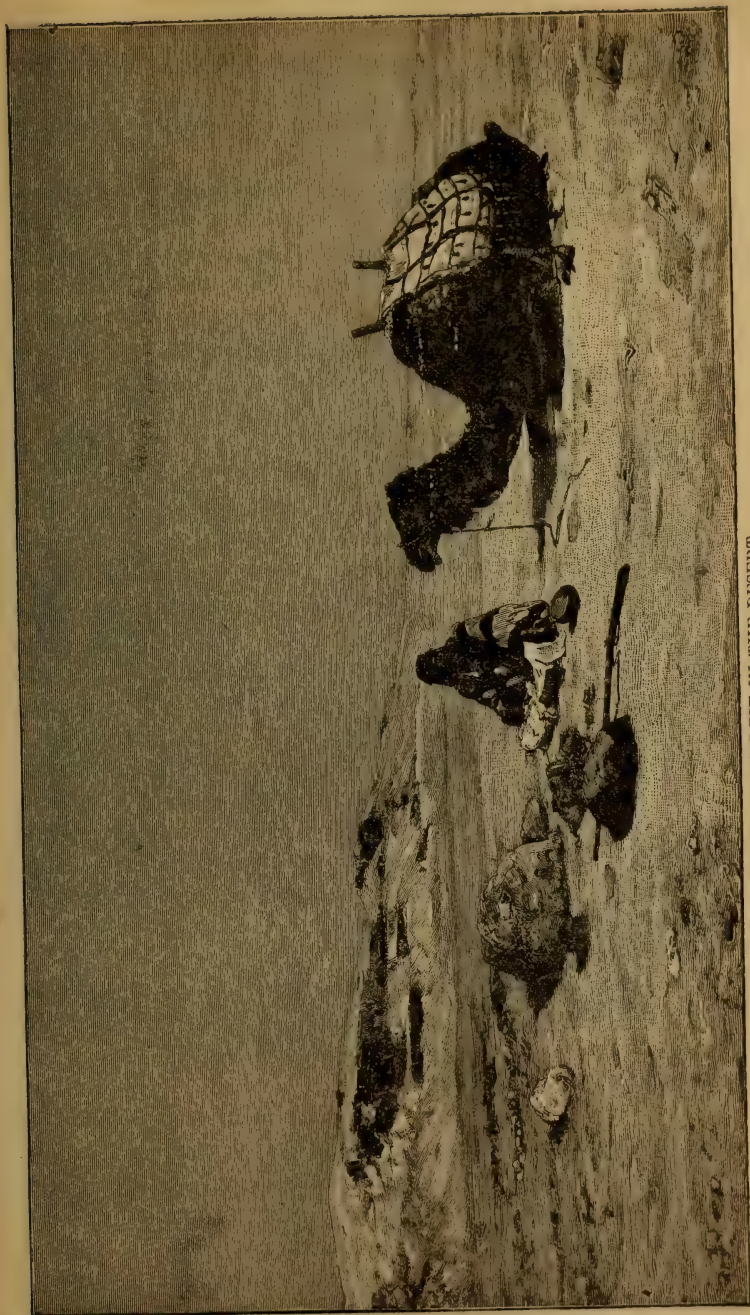
There is another passage in which the Camel is used by our Lord in a metaphorical sense. This is the well-known sentence: "Ye blind guides, which strain at a gnat, and swallow a camel" (Matt. xxiii. 24). It is remarkable that an accidental misprint has robbed this passage of its true force. The real translation is: "which strain *out* the gnat, and swallow the camel" The Greek word is *δωλίζω*, which signifies to filter thoroughly; and the allusion is made to the pharisaical custom of filtering liquids before drinking them, lest by chance a gnat or some such insect which was forbidden as food might be accidentally swallowed.

THE BACTRIAN CAMEL.

General description of the animal—Its use in mountain roads—Peculiar formation of the foot—Uses of a mixed breed—Its power of enduring cold—Used chiefly as a beast of draught—Unfitness for the plough—The cart and mode of harnessing—The load which it can draw—Camel-skin ropes—A Rabbinical legend.

THE second kind of Camel—namely, the Bactrian species—was probably unknown to the Jews until a comparatively late portion of their history. This species was employed by the Assyrians, as we find by the sculptures upon the ruins, and if in no other way the Jews would become acquainted with them through the nation by whom they were conquered, and in whose land they abode for so long.

The Bactrian Camel is at once to be distinguished from that which has already been described by the two humps and the clumsier and sturdier form. Still the skeletons of the Bactrian and Arabian species are so similar that none but a very skilful anatomist can distinguish between them, and several learned



A REST IN THE DESERT.

zoologists have expressed an opinion, in which I entirely coincide, that the Bactrian and Arabian Camels are but simple varieties of one and the same species, not nearly so dissimilar as the greyhound and the bulldog.

Unlike the one-humped Camel, the Bactrian species is quite at home in a cold climate, and walks over ice as easily as its congener does over smooth stone. It is an admirable rock-climber, and is said even to surpass the mule in the sureness of its tread. This quality is probably occasioned by the peculiar structure of the foot, which has an elongated toe projecting beyond the soft pad, and forming a sort of claw. In the winter time the riders much prefer them to horses, because their long legs enable them to walk easily through snow, in which a horse could only plunge helplessly, and would in all probability sink and perish.

A mixed breed of the one-humped and the Bactrian animals is thought to be the best for hill work in winter time, and General Harlan actually took two thousand of these animals in winter time for a distance of three hundred and sixty miles over the snowy tops of the Indian Caucasus; and though the campaign lasted for seven months, he only lost one Camel, and that was accidentally killed. Owing to its use among the hills, the Bactrian species is sometimes called the Mountain Camel.

It very much dislikes the commencement of spring, because the warm mid-day sun slightly melts the surface of the snow, and the frost of night converts it into a thin plate of ice. When the Camel walks upon this semi-frozen snow, its feet plunge into the soft substratum through the icy crust, against which its legs are severely cut. The beginning of the winter is liable to the same objection.

The mixed breed which has just been mentioned must be procured from a male Bactrian and a female Arabian Camel. If the parentage be reversed, the offspring is useless, being weak, ill-tempered, and disobedient.

The Bactrian Camel is, as has been mentioned, tolerant of cold, and is indeed so hardy an animal that it bears the severest winters without seeming to suffer distress, and has been seen quietly feeding when the thermometer has reached a temperature several degrees below zero. Sometimes, when the cold is more than usually sharp, the owners sew a thick cloth round its body, but even in such extreme cases the animal is left to find

its own food as it best can. And, however severe the weather may be, the Bactrian Camel never sleeps under a roof.

This Camel is sometimes employed as a beast of burden, but its general use is for draught. It is not often used alone for the plough, because it has an uncertain and jerking mode of pulling, and does not possess the steady dragging movement which is obtained by the use of the horse or ox.



BACTRIAN CAMELS DRAWING CART.

It is almost invariably harnessed to carts, and always in pairs. The mode of yoking the animals is as simple as can well be conceived. A pole runs between them from the front of the vehicle, and the Camels are attached to it by means of a pole which passes over their necks. Oxen were harnessed in a similar manner. It was probably one of these cars or chariots

that was mentioned by Isaiah in his prophecy respecting Assyria:—"And he saw a chariot with a couple of horsemen, a chariot of asses, and a chariot of camels" (Isa. xxi. 7). The cars themselves are as simple as the mode of harnessing them, being almost exactly like the ox carts which have already been described.

The weight which can be drawn by a pair of these Camels is really considerable. On a tolerably made road a good pair of Camels are expected to draw from twenty-six to twenty-eight hundred weight, and to continue their labours for twenty or thirty successive days, traversing each day an average of thirty miles. It is much slower than the Arabian Camel, seldom going at more than two and a half miles per hour. If, however, the vehicle to which a pair of Bactrians are harnessed were well made, the wheels truly circular, and the axles kept greased so as to diminish the friction, there is no doubt that the animals could draw a still greater load to longer distances, and with less trouble to themselves. As it is, the wheels are wretchedly fitted, and their ungreased axles keep up a continual creaking that is most painful to an unaccustomed ear, and totally unheeded by the drivers.

The hair of the Bactrian Camel is long, coarse, and strong; and, like that of the Arabian animal, is made into rough cloth. It is plucked off by hand in the summer time, when it naturally becomes loose in readiness for its annual renewal, and the weight of the entire crop of hair ought to be about ten pounds. The skin is not much valued, and is seldom used for any purpose except for making ropes, straps, and thongs, and is not thought worth the trouble of tanning. The milk, like that of the Arabian animal, is much used for food, but the quantity is very trifling, barely two quarts per diem being procured from each Camel.

There is but little that is generally interesting in the Rabbinical writers on the Camel. They have one proverbial saying upon the shortness of its ears. When any one makes a request that is likely to be refused, they quote the instance of the Camel, who, it seems, was dissatisfied with its appearance, and asked for horns to match its long ears. The result of the request was, that it was deprived of its ears, and got no horns.

THE HORSE.

The Hebrew words which signify the Horse—The Horse introduced into Palestine from Egypt—Similarity of the war-horse of Scripture and the Arab horse of the present day—Characteristics of the Horse—Courage and endurance of the Horse—Hardness of its unshod hoofs—Love of the Arab for his Horse—Difficulty of purchasing the animal—The Horse prohibited to the Israelites—Solomon's disregard of the edict—The war-chariot, its form and use—Probable construction of the iron chariot—The cavalry Horse—Lack of personal interest in the animal.

SEVERAL Hebrew words are used by the various Scriptural writers to signify the Horse, and, like our own terms of horse, mare, pony, charger, &c., are used to express the different qualities of the animal. The chief distinction of the Horse seemed to lie in its use for riding or driving, the larger and heavier animals being naturally required for drawing the weighty springless chariots. The chariot horse was represented by the word *Sus*, and the cavalry horse by the word *Parash*, and in several passages both these words occur in bold contrast to each other. See, for example, 1 Kings iv. 26, &c.

AMONG the many passages of Scripture in which the Horse is mentioned, there are few which do not treat of it as an adjunct of war, and therefore it is chiefly in that light that we must regard it.

The Horse of the Scriptures was evidently a similar animal to the Arab Horse of the present day, as we find not only from internal evidence, but from the sculptures and paintings which still remain to tell us of the vanished glories of Egypt and Assyria. It is remarkable, by the way, that the first mention of the Horse in the Scriptures alludes to it as an Egyptian animal. During the terrible famine which Joseph had foretold, the Egyptians and the inhabitants of neighbouring countries were unable to find food for themselves or fodder for their cattle, and, accordingly, they sold all their beasts for bread. "And they

brought their cattle unto Joseph, and Joseph gave them bread in exchange for horses and the flocks, and for the cattle of herds, and for the asses, and he fed them with bread for all their cattle for that year."

This particular breed of Horses is peculiarly fitted for the purposes of war, and is much less apt for peaceful duties than the heavier and more powerful breeds, which are found in different parts of the world. It is remarkable for the flexible agility of its movements, which enable it to adapt itself to every movement of the rider, whose intentions it seems to divine



TRIAL OF ARAB HORSES.

by a sort of instinct, and who guides it not so much by the bridle as by the pressure of the knees and the voice. Examples of a similar mode of guidance may be seen on the well-known frieze of the Parthenon, where, in the Procession of Horsemen, the riders may be seen directing their steeds by touching the side of the neck with one finger, thus showing their own skill and the well-trained quality of the animals which they ride.

Its endurance is really wonderful, and a horse of the Kochlani breed will go through an amount of work which is almost incredible. Even the trial by which a Horse is tested is so



AN ARAB HORSE OF THE KOCILANI BREED.

severe, that any other animal would be either killed on the spot or ruined for life. When a young mare is tried for the first time, her owner rides her for some fifty or sixty miles at full speed, always finishing by swimming her through a river. After this trial she is expected to feed freely; and should she refuse her food, she is rejected as an animal unworthy of the name of Kochlani.

Partly from native qualities, and partly from constant association with mankind, the Arab Horse is a singularly intelligent animal. In Europe we scarcely give the Horse credit for the sensitive intelligence with which it is endowed, and look upon it rather as a machine for draught and carriage than a companion to man. The Arab, however, lives with his horse, and finds in it the docility and intelligence which we are accustomed to associate with the dog rather than the Horse. It will follow him about and come at his call. It will stand for any length of time and await its rider without moving. Should he fall from its back, it will stop and stand patiently by him until he can remount; and there is a well-authenticated instance of an Arab Horse whose master had been wounded in battle, taking him up by his clothes and carrying him away to a place of safety.

Even in the very heat and turmoil of the combat, the true Arab Horse seems to be in his true element, and fully deserves the splendid eulogium in the Book of Job (xxxix. 19—25): “Hast thou given the horse strength? hast thou clothed his neck with thunder?

“Canst thou make him afraid as a grasshopper? the glory of his nostrils is terror.

“He paweth in the valley, and rejoiceth in his strength: he goeth on to meet the armed men.

“He mocketh at fear, and is not affrighted; neither turneth he back from the sword.

“The quiver rattleth against him, the glittering spear and the shield.

“He walketh the ground with fierceness and rage: neither believeth he that it is the sound of the trumpet.

“He saith among the trumpets, Ha, ha; and he smelleth the battle afar off, the thunder of the captains, and the shouting.”

In another passage an allusion is made to the courage of the

Horse, and its love for the battle. "I hearkened and heard, but they spake not aright : no man repented him of his wickedness, saying, What have I done ? Every one turned to his course, as



THE WAR HORSE.

the horse rusheth into the battle." (Jer. viii. 6.) Even in the mimic battle of the djereed the Horse seems to exult in the conflict as much as his rider, and wheels or halts almost without the slightest intimation.

The hoofs of the Arab Horses are never shod, their owners thinking that that act is not likely to improve nature, and even among the burning sands and hard rocks the Horse treads with unbroken hoof. In such a climate, indeed, an iron shoe would be worse than useless, as it would only scorch the hoof by day, and in consequence of the rapid change of temperature by day or night, the continual expansion and contraction of the metal would soon work the nails loose, and cause the shoe to fall off.

A tender-footed Horse would be of little value, and so we often find in the Scriptures that the hardness of the hoof is

reckoned among one of the best qualities of a Horse. See, for example, Isa. v. 28 : " Whose arrows are sharp, and all their bows bent, their horses' hoofs shall be counted like flint, and their wheels like a whirlwind." Again, in Micah iv. 13 : " Arise and thresh, O daughter of Zion : for I will make thine horn iron, and I will make thy hoofs brass : and thou shalt beat in pieces many people." Allusion is here made to one mode of threshing, in which a number of Horses were turned into the threshing-floor, and driven about at random among the wheat, instead of walking steadily like the oxen.

In Judges v. 22 there is a curious allusion to the hoofs of the Horse. It occurs in the Psalm of Thanksgiving sung by Deborah and Barak after the death of Sisera : " Then were the horse-hoofs broken by the means of the prancings, the prancings of their mighty ones."

Horses possessed of the qualities of courage, endurance, and sureness of foot are naturally invaluable ; and even at the present day the Arab warrior esteems above all things a Horse of the purest breed, and, whether he buys or sells one, takes care to have its genealogy made out and hung on the animal's neck.

As to the mare, scarcely any inducement is strong enough to make an Arab part with it, even to a countryman, and the sale of the animal is hindered by a number of impediments which in point of fact are almost prohibitory. Signor Pierotti, whose long residence in Palestine has given him a deep insight into the character of the people, speaks in the most glowing terms of the pure Arab Horse, and of its inestimable value to its owner. Of the difficulties with which the sale of the animal is surrounded, he gives a very amusing account :—

" After this enumeration of the merits of the horse, I will describe the manner in which a sale is conducted, choosing the case of the mare, as that is the more valuable animal. The price varies with the purity of blood of the steed, and the fortunes of its owner. When he is requested to fix a value, his first reply is, ' It is yours, and belongs to you, I am your servant ; ' because, perhaps, he does not think that the question is asked with any real design of purchasing ; when the demand is repeated, he either makes no answer or puts the question by ; at the third demand he generally responds rudely with a sardonic smile, which is not a pleasant thing to see, as it is a sign of anger ; and



then says that he would sooner sell his family than his mare. This remark is not meant as a mere jest ; for it is no uncommon thing for a Bedawy to give his parents as hostages rather than separate himself from his friend.

"If, however, owing to some misfortune, he determines on selling his mare, it is very doubtful whether he or his parents will allow her to leave their country without taking the precaution to render her unfit for breeding.

"There are many methods of arranging the sale, all of which I should like to describe particularly ; however, I will confine myself to a general statement. Before the purchaser enters upon the question of the price to be paid, he must ascertain that the parents, friends, and allies of the owners give their consent to the sale, without which some difficulty or other may arise, or perhaps the mare may be stolen from her new master. He must also obtain an unquestionable warranty that she is fit for breeding purposes, and that no other has a prior claim to any part of her body. This last precaution may seem rather strange, but it arises from the following custom. It sometimes happens that, when a Bedawy is greatly in want of money, he raises it most easily by selling a member of his horse ; so that very frequently a horse belongs to a number of owners, one of whom has purchased the right fore-leg, another the left, another the hind-leg, or the tail, or an ear, or the like ; and the proprietors have each a proportionate interest in the profits of its labour or sale.

"So also the offspring are sold in a similar manner ; sometimes only the first-born, sometimes the first three ; and then it occasionally happens that two or three members of the foal are, as it were, mortgaged. Consequently, any one who is ignorant of this custom may find that, after he has paid the price of the mare to her supposed owner, a third person arises who demands to be paid the value of his part ; and, if the purchaser refuse to comply, he may find himself in a very unpleasant situation, without any possibility of obtaining help from the local government. Whoever sells his mare entirely, without reserving to himself one or two parts, must be on good terms with the confederate chiefs in the neighbourhood, and must have obtained their formal sanction, otherwise they would universally despise him, and perhaps lie in wait to kill him, so that his only hope of escape would be a disgraceful flight, just as if he had committed



BUYING AN ARAB HORSE.

some great crime. It is an easier matter to purchase a stallion ; but even in this case the above formalities must be observed.

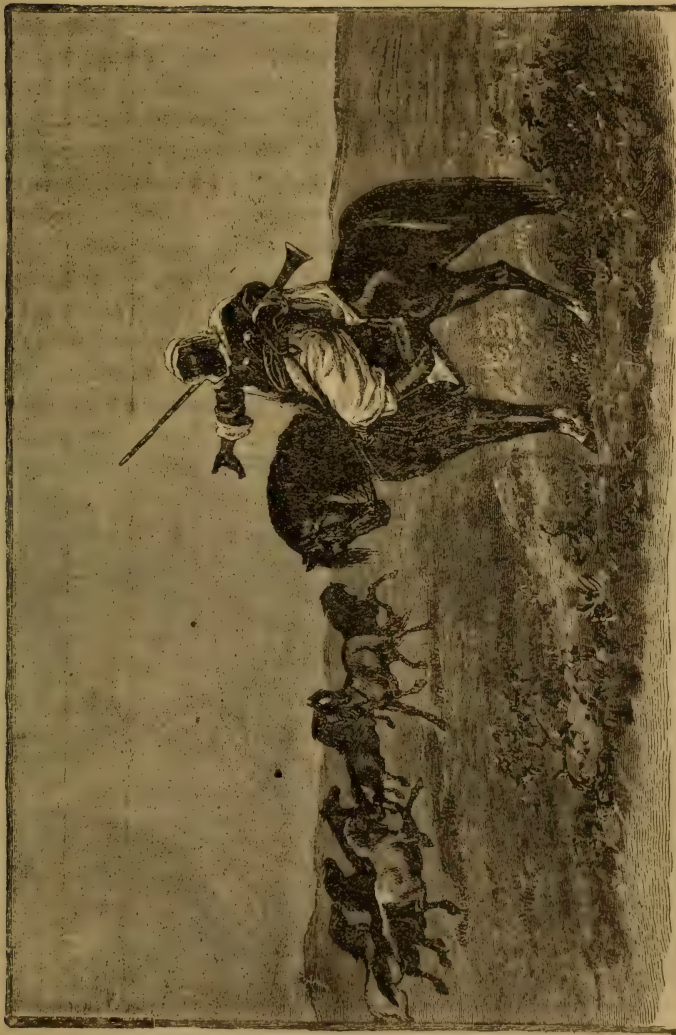
“These remarks only apply to buying horses of the purest blood ; those of inferior race are obtained without difficulty, and at fair prices.”

For some reason, perhaps the total severance of the Israelites from the people among whom they had lived so long in captivity, the use of the Horse, or, at all events, the breeding of it, was forbidden to the Israelites ; see Deut. xvi. 16. After prophesying that the Israelites, when they had settled themselves in the Promised Land, would want a king, the inspired writer next ordains that the new king must be chosen by Divine command, and must belong to one of the twelve tribes. He then proceeds as follows :—“But he shall not multiply horses to himself, nor cause the people to return to Egypt, to the end that he should multiply horses : forasmuch as the Lord hath said unto you, Ye shall henceforth return no more that way.”

The foresight of this prophetic writer was afterwards shown by the fact that many kings of Israel did send to Egypt for Horses, Egypt being the chief source from which these animals were obtained. And, judging from the monuments to which reference has been made, the Horse of Egypt was precisely the same animal as the Arab Horse of the present day, and was probably obtained from nomad breeders.

In spite of the prohibitory edict, both David and Solomon used Horses in battle, and the latter supplied himself largely from Egypt, disregarding as utterly the interdict against plurality of Horses as that against plurality of wives, which immediately follows.

David seems to have been the first king who established a force of chariots, and this he evidently did for the purpose of action on the flat grounds of Palestine, where infantry were at a great disadvantage when attacked by the dreaded chariots ; yet he did not controvert the law by multiplying to himself Horses, or even by importing them from Egypt ; and when he had an opportunity of adding to his army an enormous force of chariots, he only employed as many as he thought were sufficient for his purpose. After he defeated Hadadezer, and had taken from him a thousand chariots with their Horses, together with seven



THE ARAB'S FAVOURITE STEEDS.

hundred cavalry, he houghed all the Horses except those which were needed for one hundred chariots.

Solomon, however, was more lax, and systematically broke the ancient law by multiplying Horses exceedingly, and sending to Egypt for them. We learn from 1 Kings iv. 26 of the enormous establishment which he kept up both for chariots and cavalry. Besides those which were given to him as tribute, he purchased both chariots and their Horses from Egypt and Syria.

Chariots were far more valued in battle than horsemen, probably because their weight made their onset irresistible against infantry, who had no better weapons than bows and spears. The slingers themselves could make little impression on the chariots; and even if the driver, or the warrior who fought in the chariot, or his attendant, happened to be killed, the weighty machine, with its two Horses, still went on its destructive way.

Of their use in battle we find very early mention. For example, in Exod. xiv. 6 it is mentioned that Pharaoh made ready



PHARAOH PURSUES THE ISRAELITES WITH CHARIOTS AND HORSES, AND THE SEA COVERS THEM.

his chariot to pursue the Israelites; and in a subsequent part of the same chapter we find that six hundred of the Egyptian

chariot force accompanied their master in the pursuit, and that the whole army was delayed because the loss of the chariot wheels made them drive heavily.

Then in the familiar story of Sisera and Jael the vanquished general is mentioned as alighting from his chariot, in which he would be conspicuous, and taking flight on foot; and, after his death, his mother is represented as awaiting his arrival, and saying to the women of the household, "Why is his chariot so long in coming? Why tarry the wheels of his chariot?"

During the war of conquest which Joshua led, the chariot plays a somewhat important part. As long as the war was carried on in the rugged mountainous parts of the land, no mention of the chariot is made; but when the battles had to be fought on level ground, the enemy brought the dreaded chariots to bear upon the Israelites. In spite of these adjuncts, Joshua won the battles, and, unlike David, destroyed the whole of the Horses and burned the chariots.

Many years afterwards, a still more dreadful weapon, the iron chariot, was used against the Israelites by Jabin. This new instrument of war seems to have cowed the people completely; for we find that by means of his nine hundred chariots of iron Jabin "mightily oppressed the children of Israel" for twenty years. It has been well suggested that the possession of the war chariot gave rise to the saying of Benhadad's councillors, that the gods of Israel were gods of the hills, and so their army had been defeated; but that if the battle were fought in the plain, where the chariots and Horses could act, they would be victorious.

So dreaded were these weapons, even by those who were familiar with them and were accustomed to use them, that when the Syrians had besieged Samaria, and had nearly reduced it by starvation, the fancied sound of a host of chariots and Horses that they heard in the night caused them all to flee and evacuate the camp, leaving their booty and all their property in the hands of the Israelites.

Whether the Jews ever employed the terrible scythe chariots is not quite certain, though it is probable that they may have done so; and this conjecture is strengthened by the fact that they were employed against the Jews by Antiochus, who had "footmen an hundred and ten thousand, and horsemen five

thousand and three hundred, and elephants two and twenty, and three hundred chariots armed with hooks" (2 Macc. xiii. 2). Some commentators think that by the iron chariots mentioned above were signified ordinary chariots armed with iron scythes projecting from the sides.

By degrees the chariot came to be one of the recognised forces in war, and we find it mentioned throughout the books of the Scriptures, not only in its literal sense, but as a metaphor which every one could understand. In the Psalms, for example, are



ELIJAH IS CARRIED UP.

several allusions to the war-chariot. "He maketh wars to cease unto the end of the earth; He breaketh the bow, and cutteth the spear in sunder; He burneth the chariot in the fire" (Ps. xlvi. 9). Again: "At Thy rebuke, O God of Jacob, both the chariot and horse are cast into a dead sleep" (Ps. lxxvi. 6). And: "Some trust in chariots, and some in horses: but we will remember the name of the Lord our God" (Ps. xx. 7). Now, the force of these passages cannot be properly appreciated unless we realize to ourselves the dread in which the war-chariot was held by the foot-soldiers. Even cavalry were much feared; but the chariots

were objects of almost superstitious fear, and the rushing sound of their wheels, the noise of the Horses' hoofs, and the shaking of the ground as the "prancing horses and jumping chariots" (Nah. iii. 2) thundered along, are repeatedly mentioned.

See, for example, Ezek. xxvi. 10 : "By reason of the abundance of his horses their dust shall cover thee : thy walls shall shake at the noise of the horsemen, and of the wheels, and of the chariots." Also, Jer. xlvii. 3 : "At the noise of the stamping of the hoofs of his strong horses, at the rushing of his chariots, and at the rumbling of his wheels, the fathers shall not look back to their children for feebleness of hands." See also Joel ii. 4, 5 : "The appearance of them is as the appearance of horses ; and as horsemen, so shall they run.

"Like the noise of chariots on the tops of mountains shall they leap, like the noise of a flame of fire that devoureth the stubble, as a strong people set in battle array."

In several passages the chariot and Horse are used in bold imagery as expressions of Divine power : "The chariots of God are twenty thousand, even thousands of angels : the Lord is among them, as in Sinai, in the holy place" (Ps. lxxviii. 17). A similar image is employed in Ps. civ. 3 : "Who maketh the clouds His chariot : who walketh upon the wings of the wind." In connexion with these passages, we cannot but call to mind that wonderful day when the unseen power of the Almighty was made manifest to the servant of Elisha, whose eyes were suddenly opened, and he saw that the mountain was full of Horses and chariots of fire round about Elisha.

The chariot and horses of fire by which Elijah was taken from earth are also familiar to us, and in connexion with the passage which describes that wonderful event, we may mention one which occurs in the splendid prayer of Habakkuk (iii. 8) : "Was the Lord displeased against the rivers ? was Thine anger against the rivers ? was Thy wrath against the sea, that Thou didst ride upon Thine horses and Thy chariots of salvation ?"

By degrees the chariot came to be used for peaceful purposes, and was employed as our carriages of the present day, in carrying persons of wealth. That this was the case in Egypt from very early times is evident from Gen. xli. 43, in which we are told that after Pharaoh had taken Joseph out of prison and raised him to be next in rank to himself, the king caused him to

ride in the second chariot which he had, and so to be proclaimed ruler over Egypt. Many years afterwards we find him travelling in his chariot to the land of Goshen, whither he went to meet Jacob and to conduct him to the presence of Pharaoh.

At first the chariot seems to have been too valuable to the Israelites to have been used for any purpose except war, and it is not until a comparatively late time that we find it employed as a carriage, and even then it is only used by the noble and wealthy. Absalom had such chariots, but it is evident that he used them for purposes of state, and as appendages of his regal rank. Chariots or carriages were, however, afterwards employed by the Israelites as freely as by the Egyptians, from whom they were originally procured; and accordingly we find Rehoboam mounting his chariot and fleeing to Jerusalem, Ahab riding in his chariot from Samaria to Jezreel, with Elijah running before him; and in the New Testament we read of the chariot in which sat the chief eunuch of Ethiopia whom Philip baptized (Acts viii. 28).

As to the precise form and character of these chariots, they are made familiar to us by the sculptures and paintings of Egypt and Assyria, from both of which countries the Jews procured the vehicles. Differing very slightly in shape, the principle of the chariot was the same; and it strikes us with some surprise that the Assyrians, the Egyptians, and the Jews, the three wealthiest and most powerful nations of the world, should not have invented a better carriage. They lavished the costliest materials and the most artistic skill in decorating the chariots, but had no idea of making them comfortable for the occupants.

They were nothing but semicircular boxes on wheels, and of very small size. They were hung very low, so that the occupants could step in and out without trouble, though they do not seem to have had the sloping floor of the Greek or Roman chariot. They had no springs, but, in order to render the jolting of the carriage less disagreeable, the floor was made of a sort of network of leathern ropes, very tightly stretched so as to be elastic. The wheels were always two in number, and generally had six spokes.

To the side of the chariot was attached the case which contained the bow and quiver of arrows, and in the case of a rich

man these bow-cases were covered with gold and silver, and adorned with figures of lions and other animals. Should the chariot be intended for two persons, two bow-cases were fastened to it, the one crossing the other. The spear had also its tubular case, in which it was kept upright, like the whip of a modern carriage.

Two Horses were generally used with each chariot, though three were sometimes employed. They were harnessed very simply, having no traces, and being attached to the central pole by a breast-band, a very slight saddle, and a loose girth. On their heads were generally fixed ornaments, such as tufts of feathers, and similar decorations, and tassels hung to the harness served to drive away the flies. Round the neck of each Horse passed a strap, to the end of which was attached a bell. This ornament is mentioned in Zech. xiv. 20: "In that day shall there be upon the bells of the horses, Holiness unto the Lord" —*i.e.* the greeting of peace shall be on the bells of the animals once used in war.

Sometimes the owner drove his own chariot, even when going into battle, but the usual plan was to have a driver, who managed the Horses while the owner or occupant could fight with both his hands at liberty. In case he drove his own Horse, the reins passed round his waist, and the whip was fastened to the wrist by a thong, so that when the charioteer used the bow, his principal weapon, he could do so without danger of losing his whip.

Thus much for the use of the chariot in war; we have now the Horse as the animal ridden by the cavalry.

As was the case with the chariot, the war-horse was not employed by the Jews until a comparatively late period of their history. They had been familiarized with cavalry during their long sojourn in Egypt, and in the course of their war of conquest had often suffered defeat from the horsemen of the enemy. But we do not find any mention of a mounted force as forming part of the Jewish army until the days of David, although after that time the successive kings possessed large forces of cavalry.

Many references to mounted soldiers are made by the prophets, sometimes allegorically, sometimes metaphorically. See, for example, Jer. vi. 23: "They shall lay hold on bow and spear; they are cruel, and have no mercy; their voice roareth like the

sea ; and they ride upon horses, set in array as men for war against thee, O daughter of Zion." The same prophet has a similar passage in chap. l. 42, couched in almost precisely the same words. And in chap. xlvi. 4, there is a further reference to the cavalry, which is specially valuable as mentioning the weapons used by them. The first call of the prophet is to the infantry : " Order ye the buckler and shield, and draw near to battle " (verse 3) ; and then follows the command to the cavalry,



THE ISRAELITES, LED BY JOSHUA, TAKE JERICHO.

" Harness the horses ; and get up, ye horsemen, and stand forth with your helmets ; furbish the spears, and put on the brigandines." The chief arms of the Jewish soldier were therefore the cuirass, the helmet, and the lance, the weapons which in all ages, and in all countries, have been found to be peculiarly suitable to the horse-soldier.

BEING desirous of affording the reader a pictorial representation of the war and state chariots, I have selected Egypt as the typical country of the former, and Assyria of the latter. Both

drawings have been executed with the greatest care in details, every one of which, even to the harness of the Horses, the mode of holding the reins, the form of the whip, and the offensive and defensive armour, has been copied from the ancient records of Egypt and Nineveh.

We will first take the war-chariot of Egypt.



ANCIENT BATTLE-FIELD.

This form has been selected as the type of the war-chariot because the earliest account of such a force mentions the war-chariots of Egypt, and because, after the Israelites had adopted chariots as an acknowledged part of their army, the vehicles, as well as the trained Horses, and probably their occupants, were procured from Egypt.

The scene represents a battle between the imperial forces and a revolted province, so that the reader may have the oppor-

tunity of seeing the various kinds of weapons and armour which were in use in Egypt at the time of Joseph. In the foreground is the chariot of the general, driven at headlong speed, the Horses at full gallop, and the springless chariot leaping off the ground as the Horses bound along. The royal rank of the general in question is shown by the feather fan which denotes his high birth, and which is fixed in a socket at the back of his chariot, much as a coachman fixes his whip. The rank of the rider is further shown by the feather plumes on the heads of his Horses.

By the side of the chariot are seen the quiver and bow-case, the former being covered with decorations, and having the figure of a recumbent lion along its sides. The simple but effective harness of the Horses is especially worthy of notice, as showing how the ancients knew, better than the moderns, that to cover a Horse with a complicated apparatus of straps and metal only deteriorates from the powers of the animal, and that a Horse is more likely to behave well if he can see freely on all sides, than if all lateral vision be cut off by the use of blinkers.

Just behind the general is the chariot of another officer, one of whose Horses has been struck, and is lying struggling on the ground. The general is hastily giving his orders as he dashes past the fallen animal. On the ground are lying the bodies of some slain enemies, and the Horses are snorting and shaking their heads, significative of their unwillingness to trample on a human being. By the side of the dead man are his shield, bow, and quiver, and it is worthy of notice that the form of these weapons, as depicted upon the ancient Egyptian monuments, is identical with that which is still found among several half-savage tribes of Africa.

In the background is seen the fight raging round the standards. One chief has been killed, and while the infantry are pressing round the body of the rebel leader and his banner on one side, on the other the imperial chariots are thundering along to support the attack, and are driving their enemies before them. In the distance are seen the clouds of dust whirled into the air by the hoofs and wheels, and circling in clouds by the eddies caused by the fierce rush of the vehicles, thus illustrating the passage in Jer. iv. 13: "Behold, he shall come up as clouds, and

his chariots shall be as a whirlwind: his horses are swifter than eagles. Woe unto us! for we are spoiled." The reader will see, by reference to the illustration, how wonderfully true and forcible is this statement, the writer evidently having been an eye-witness of the scene which he so powerfully depicts.



CHARIOT OF STATE.

THE second scene is intentionally chosen as affording a strong contrast to the former. Here, instead of the furious rush, the galloping horses, the chariots leaping off the ground, the archers bending their bows, and all imbued with the fierce ardour of battle, we have a scene of quiet grandeur, the Assyrian king making a solemn progress in his chariot after a victory, accompanied by his attendants, and surrounded by his troops, in all the placid splendour of Eastern state.

Chief object in the illustration stands the great king in his chariot, wearing the regal crown, or mitre, and sheltered from

the sun by the umbrella, which in ancient Nineveh, as in more modern times, was the emblem of royalty. By his side is his charioteer, evidently a man of high rank, holding the reins in a business-like manner; and in front marches the shield-bearer. In one of the sculptures from which this illustration was composed, the shield-bearer was clearly a man of rank, fat, fussy, full of importance, and evidently a portrait of some well-known individual.

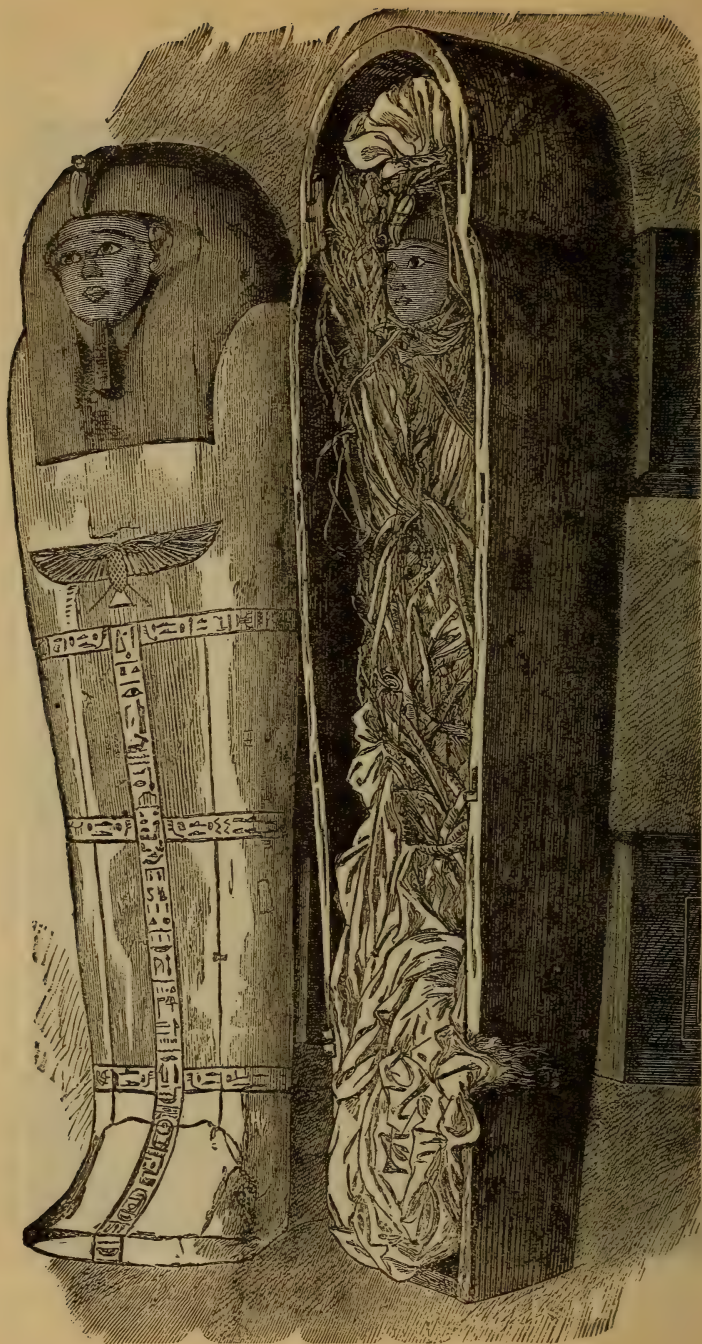
The Horses are harnessed with remarkable lightness, but they bear the gorgeous trappings which befit the rank of the rider, their heads being decorated with the curious successive plumes with which the Assyrian princes distinguished their chariot Horses, and the breast-straps being adorned with tassels, repeated in successive rows like the plumes of the head.

The reader will probably notice the peculiar high action of the Horses. This accomplishment seems to have been even more valued among the ancients than by ourselves, and some of the sculptures show the Horses with their knees almost touching their noses. Of course the artist exaggerated the effect that he wanted to produce; but the very fact of the exaggeration shows the value that was set on a high and showy action in a Horse that was attached to a chariot of state. The old Assyrian sculptors knew the Horse well, and delineated it in a most spirited and graphic style, though they treated it rather conventionally. The variety of attitude is really wonderful, considering that all the figures are profile views, as indeed seemed to have been a law of the historical sculptures.

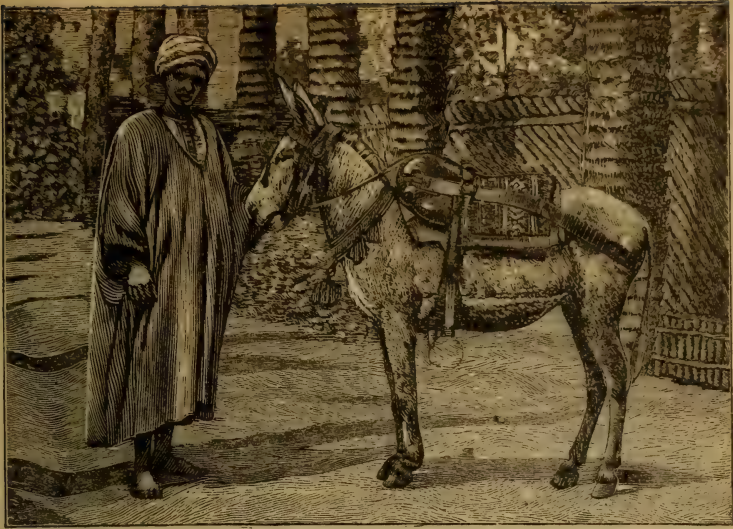
BEFORE closing this account of the Horse, it may be as well to remark the singular absence of detail in the Scriptural accounts. Of the other domesticated animals many such details are given, but of the Horse we hear but little, except in connexion with war. There are few exceptions to this rule, and even the oft-quoted passage in Job, which goes deeper into the character of the Horse than any other portion of the Scriptures, only considers the Horse as an auxiliary in battle. We miss the personal interest in the animal which distinguishes the many references to the ox, the sheep, and the goat; and it is remarkable that even in the Book of Proverbs, which is so rich in references to various animals, very little is said of the Horse.



ANCIENT EGYPTIAN SCULPTURE REPRESENTING A VICTORIOUS KING IN HIS CHARIOT SLAYING HIS ENEMIES.



MUMMY OF AN EGYPTIAN KING (OVER THREE THOUSAND YEARS OLD).



THE ASS.

Importance of the Ass in the East—Its general use for the saddle—Riding the Ass not a mark of humility—The triumphal entry—White Asses—Character of the Scriptural Ass—Saddling the Ass—Samson and Balaam.

IN the Scriptures we read of two breeds of Ass, namely, the Domesticated and the Wild Ass. As the former is the more important of the two, we will give it precedence.

IN the East, the Ass has always played a much more important part than among us Westerns, and on that account we find it so frequently mentioned in the Bible. In the first place, it is the universal saddle-animal of the East. Among us the Ass has ceased to be regularly used for the purposes of the saddle, and is only casually employed by holiday-makers and the like. Some persons certainly ride it habitually, but they almost invariably belong to the lower orders, and are content to ride without a saddle, balancing themselves in some extraordinary manner just over the animal's tail. In the East, however, it is ridden by persons of the highest rank, and is decorated with saddle and harness as rich as those of the horse.

So far from the use of the Ass as a saddle-animal being a mark of humility, it ought to be viewed in precisely the opposite light. In consequence of the very natural habit of reading, according to Western ideas, the Scriptures, which are books essentially Oriental in all their allusions and tone of thought, many persons have entirely perverted the sense of one very familiar passage, the prophecy of Zechariah concerning the future Messiah. "Rejoice greatly, O daughter of Zion; shout, O daughter of Jerusalem: behold, thy King cometh unto thee: He is just, and having salvation; lowly, and riding upon an ass, and upon a colt the foal of an ass" (Zech. ix. 9).

Now this passage, as well as the one which describes its fulfilment so many years afterwards, has often been seized upon as a proof of the meekness and lowliness of our Saviour, in riding upon so humble an animal when He made His entry into Jerusalem. The fact is, that there was no humility in the case, neither was the act so understood by the people. He rode upon an Ass as any prince or ruler would have done who was engaged on a peaceful journey, the horse being reserved for war purposes. He rode on the Ass, and not on the horse, because He was the Prince of Peace and not of war, as indeed is shown very clearly in the context. For, after writing the words which have just been quoted, Zechariah proceeds as follows (ver. 10): "And I will cut off the chariot from Ephraim, and the horse from Jerusalem, and the battle bow shall be cut off: and He shall speak peace unto the heathen: and His dominion shall be from sea even to sea, and from the river even to the ends of the earth."

Meek and lowly was He, as became the new character, hitherto unknown to the warlike and restless Jews, a Prince, not of war, as had been all other celebrated kings, but of peace. Had He come as the Jews expected—despite so many prophecies—their Messiah to come, as a great king and conqueror, He might have ridden the war-horse, and been surrounded with countless legions of armed men. But He came as the herald of peace, and not of war; and, though meek and lowly, yet a Prince, riding as became a prince, on an Ass colt which had borne no inferior burden.

That the act was not considered as one of lowliness is evident from the manner in which it was received by the people, accepting Him as the Son of David, coming in the name of the

Highest, and greeting Him with the cry of "Hosanna!" ("Save us now,") quoted from verses 25, 26 of Ps. cxviii.: "Save now, I beseech Thee, O Lord: O Lord, I beseech Thee, send now prosperity."

"Blessed be He that cometh in the name of the Lord."



ENTERING JERUSALEM.

The palm-branches which they strewed upon the road were not chosen by the attendant crowd merely as a means of doing honour to Him whom they acknowledged as the Son of David. They were necessarily connected with the cry of "Hosanna!" At the Feast of Tabernacles, it was customary for the people to assemble with branches of palms and willows in their hands, and for one of the priests to recite the Great Hallel, *i.e.* Ps. cxiii. and cxviii. At certain intervals, the people responded with the cry of "Hosanna!" waving at the same time their palm-branches. For the whole of the seven days through which the

feast lasted they repeated their Hosannas, always accompanying the shout with the waving of palm-branches, and setting them towards the altar as they went in procession round it.

Every child who could hold a palm-branch was expected to take part in the solemnity, just as did the children on the occasion of the triumphal entry. By degrees, the name of Hosanna was transferred to the palm-branches themselves, as well as to the feast, the last day being called the Great Hosanna.

The reader will now see the importance of this carrying of palm-branches, accompanied with Hosannas, and that those who used them in honour of Him whom they followed into Jerusalem had no idea that He was acting any lowly part.

Again, the woman of Shunem, who rode on an Ass to meet Elisha, a mission in which the life of her only child was involved, was a woman of great wealth (2 Kings iv. 8), who was able not only to receive the prophet, but to build a chamber, and furnish it for him.

Not to multiply examples, we see from these passages that the Ass of the East was held in comparatively high estimation, being used for the purposes of the saddle, just as would a high-bred horse among ourselves.

Consequently, the Ass is really a different animal. In this country he is repressed, and seldom has an opportunity for displaying the intellectual powers which he possesses, and which are of a much higher order than is generally imagined. It is rather remarkable, that when we wish to speak slightly of intellect we liken the individual to an Ass or a goose, not knowing that we have selected just the quadruped and the bird which are least worthy of such a distinction.

Putting aside the bird, as being at present out of place, we shall find that the Ass is one of the cleverest of our domesticated animals. We are apt to speak of the horse with a sort of reverence, and of the Ass with contemptuous pity, not knowing that, of the two animals, the Ass is by far the superior in point of intellect. It has been well remarked by a keen observer of nature, that if four or five horses are in a field, together with one Ass, and there be an assailable point in the fence, the Ass is sure to be the animal that discovers it, and leads the way through it.

Take even one of our own toil-worn animals, turned out in a common to graze, and see the ingenuity which it displays when persecuted by the idle boys who generally frequent such places, and who try to ride every beast that is within their reach. It seems to divine at once the object of the boy as he steals up to it, and he takes a pleasure in baffling him just as he fancies that he has succeeded in his attempt.



SYRIAN ASSES.

Should the Ass be kindly treated, there is not an animal that proves more docile, or even affectionate. Stripes and kicks it resents, and sets itself distinctly against them; and, being nothing but a slave, it follows the slavish principle of doing no work that it can possibly avoid.

Now, in the East the Ass takes so much higher rank than our own animal, that its whole demeanour and gait are different

from those displayed by the generality of its brethren. "Why, the very slave of slaves," writes Mr. Lowth, in his "Wanderer in Arabia," "the crushed and grief-stricken, is so no more in Egypt: the battered drudge has become the willing servant. Is that active little fellow, who, with race-horse coat and full flanks, moves under his rider with the light step and the action of a pony—is he the same animal as that starved and head-bowed object of the North, subject for all pity and cruelty, and clothed with rags and insult?

"Look at him now. On he goes, rapid and free, with his small head well up, and as gay as a crimson saddle and a bridle of light chains and red leather can make him. It was a gladdening sight to see the unfortunate as a new animal in Egypt."

Hardy animal as is the Ass, it is not well adapted for tolerance of cold, and seems to degenerate in size, strength, speed, and spirit in proportion as the climate becomes colder. Whether it might equal the horse in its endurance of cold provided that it were as carefully treated, is perhaps a doubtful point; but it is a well-known fact that the horse does not necessarily degenerate by moving towards a colder climate, though the Ass has always been found to do so.

There is, of course, a variety in the treatment which the Ass receives even in the East. Signor Pierotti, whose work on the customs and traditions of Palestine has already been mentioned, writes in very glowing terms of the animal. He states that he formed a very high opinion of the Ass while he was in Egypt, not only from its spirited aspect and its speed, but because it was employed even by the Viceroy and the great Court officers, who may be said to use Asses of more or less intelligence for every occasion. He even goes so far as to say that, if all the Asses were taken away from Egypt, travel would be impossible.

The same traveller gives an admirable summary of the character of the Ass, as it exists in Egypt and Palestine. "What, then, are the characteristics of the ass? Much the same as those which adorn it in other parts of the East—namely, it is useful for riding and for carrying burdens; it is sensible of kindness, and shows gratitude; it is very steady, and is larger, stronger, and more tractable than its European congener; its pace is easy and pleasant; and it will shrink from no labour, if only its poor daily feed of straw and barley is fairly given,

“ If well and liberally supplied, it is capable of any enterprise, and wears an altered and dignified mien, apparently forgetful of its extraction, except when undeservedly beaten by its masters, who, however, are not so much to be blamed, because, having learned to live among sticks, thongs, and rods, they follow the same system of education with their miserable dependants.

“ The wealthy feed him well, deck him with fine harness and silver trappings, and cover him, when his work is done, with rich Persian carpets. The poor do the best they can for him, steal for his benefit, give him a corner at their fireside, and in cold weather sleep with him for more warmth. In Palestine, all the rich men, whether monarchs or chiefs of villages, possess a number of asses, keeping them with their flocks, like the patriarchs of old. No one can travel in that country, and observe how the ass is employed for all purposes, without being struck with the exactness with which the Arabs retain the Hebrew customs.”

The result of this treatment is, that the Eastern Ass is an enduring and tolerably swift animal, vying with the camel itself in its powers of long-continued travel, its usual pace being a sort of easy canter. On rough ground, or up an ascent, it is said even to gain on the horse, probably because its little sharp hoofs give it a firm footing where the larger hoof of the horse is liable to slip.

The familiar term “saddling the Ass” requires some little explanation.

The saddle is not in the least like the article which we know by that name, but is very large and complicated in structure. Over the animal's back is first spread a cloth, made of thick woollen stuff, and folded several times. The saddle itself is a very thick pad of straw, covered with carpet, and flat at the top, instead of being rounded as is the case with our saddles. The pommel is very high, and when the rider is seated on it, he is perched high above the back of the animal. Over the saddle is thrown a cloth or carpet, always of bright colours, and varying in costliness of material and ornament according to the wealth of the possessor. It is mostly edged with a fringe and tassels.

The bridle is decorated, like that of the horse, with bells, embroidery, tassels, shells, and other ornaments.

As we may see from 2 Kings iv. 24, the Ass was generally

guided by a driver who ran behind it, just as is done with donkeys hired to children here. Owing to the unchanging character of the East, there is no doubt that the “riders on asses” of the Scriptures



A STREET IN CAIRO, EGYPT.

rode exactly after the mode which is adopted at the present day. What that mode is, we may learn from Mr. Bayard Taylor's amusing and vivid description of a ride through the streets of Cairo:—

"To see Cairo thoroughly, one must first accustom himself to the ways of these long-eared cabs, without the use of which I would advise no one to trust himself in the bazaars. Donkey-riding is universal, and no one thinks of going beyond the Frank quarters on foot. If he does, he must submit to be followed by not less than six donkeys with their drivers. A friend of mine who was attended by such a cavalcade for two hours, was obliged to yield at last, and made no second attempt. When we first appeared in the gateway of an hotel, equipped for an excursion, the rush of men and animals was so great that we were forced to retreat until our servant and the porter whipped us a path through the yelling and braying mob. After one or two trials I found an intelligent Arab boy named Kish, who for five piastres a day furnished strong and ambitious donkeys, which he kept ready at the door from morning till night. The other drivers respected Kish's privilege, and henceforth I had no trouble.

"The donkeys are so small that my feet nearly touched the ground, but there is no end to their strength and endurance. Their gait, whether in pace or in gallop, is so easy and light that fatigue is impossible. The drivers take great pride in having high-cushioned red saddles, and in hanging bits of jingling brass to the bridles. They keep their donkeys close shorn, and frequently beautify them by painting them various colours. The first animal I rode had legs barred like a zebra's, and my friend's rejoiced in purple flanks and a yellow belly. The drivers ran behind them with a short stick, punching them from time to time, or giving them a sharp pinch on the rump. Very few of them own their donkeys, and I understood their pertinacity when I learned that they frequently received a beating on returning home empty-handed.

"The passage of the bazaars seems at first quite as hazardous on donkey-back as on foot; but it is the difference between knocking somebody down and being knocked down yourself, and one certainly prefers the former alternative. There is no use in attempting to guide the donkey, for he won't be guided. The driver shouts behind, and you are dashed at full speed into a confusion of other donkeys, camels, horses, carts, water-carriers, and footmen. In vain you cry out '*Bess*' (enough), '*Piaccio*,' and other desperate adjurations; the driver's only reply is: 'Let

the bridle hang loose! You dodge your head under a camel-load of planks; your leg brushes the wheel of a dust-cart; you strike a fat Turk plump in the back; you miraculously escape up-



BEGGAR IN THE STREETS OF CAIRO.

setting a fruit-stand; you scatter a company of spectral, white-masked women; and at last reach some more quiet street, with the sensations of a man who has stormed a battery.

“At first this sort of riding made me very nervous, but pres-

ently I let the donkey go his own way, and took a curious interest in seeing how near a chance I ran of striking or being struck. Sometimes there seemed no hope of avoiding a violent collision; but, by a series of the most remarkable dodges, he



NIGHT-WATCH IN CAIRO.

generally carried you through in safety. The cries of the driver running behind gave me no little amusement. 'The hawadji comes! Take care on the right hand! Take care on the left hand! O man, take care! O maiden, take care! O boy, get out of

the way ! The hawadji comes !' Kish had strong lungs, and his donkey would let nothing pass him; and so wherever we went we contributed our full share to the universal noise and confusion."

This description explains several allusions which are made in the Scriptures to treading down the enemies in the streets, and to the chariots raging and jostling against each other in the ways.

The Ass was used in the olden time for carrying burdens, as it is at present, and, in all probability, carried them in the same way. Sacks and bundles are tied firmly to the pack-saddle; but poles, planks, and objects of similar shape are tied in a sloping direction on the side of the saddle, the longer ends trailing on the ground, and the shorter projecting at either side of the animal's head. The North American Indians carry the poles of their huts, or wigwams, in precisely the same way, tying them on either side of their horses, and making them into rude sledges, upon which are fastened the skins that form the walls of their huts. The same system of carriage is also found among the Esquimaux, and the hunters of the extreme North, who harness their dogs in precisely the same manner. The Ass, thus laden, becomes a very unpleasant passenger through the narrow and crowded streets of an Oriental city; and many an unwary traveller has found reason to remember the description of Issachar as the strong Ass between two burdens.

The Ass was also used for agriculture, and was employed in the plough, as we find from many passages. See for example, "Blessed are ye that sow beside all waters, that send forth thither the feet of the ox and the ass" (Isa. xxxii. 20). Sowing beside the waters is a custom that still prevails in all hot countries, the margins of rivers being tilled, while outside this cultivated belt there is nothing but desert ground.

The ox and the Ass were used in the first place for irrigation, turning the machines by which water was lifted from the river, and poured into the trenches which conveyed it to all parts of the tilled land. If, as is nearly certain, the rude machinery of the East is at the present day identical with those which were used in the old Scriptural times, they were yoked to the machine in rather an ingenious manner. The machine consists of an upright pivot, and to it is attached the horizontal pole to which the ox or Ass is harnessed. A machine exactly similar in prin-

ciple may be seen in almost any brick-field in England; but the ingenious part of the Eastern water-machine is the mode in which the animal is made to believe that it is being driven by its keeper, whereas the man in question might be at a distance, or fast asleep.

The animal is first blindfolded, and then yoked to the end of the horizontal bar. Fixed to the pivot, and rather in front of the bar, is one end of a slight and elastic strip of wood. The projecting end, being drawn forward and tied to the bridle of the animal, keeps up a continual pull, and makes the blinded animal believe that it is being drawn forward by the hand of a driver. Some ingenious but lazy attendants have even invented a sort of self-acting whip, *i.e.* a stick which is lifted and allowed to fall on the animal's back by the action of the wheel once every round.

The field being properly supplied with water, the Ass is used for ploughing it. It is worthy of mention that at the present day the prohibition against yoking an ox and an Ass together is often disregarded. The practice, however, is not a judicious one, as the slow and heavy ox does not act well with the lighter and more active animal, and, moreover, is apt to butt at its companion with its horns in order to stimulate it to do more than its fair proportion of the work.

There is a custom now in Palestine which probably existed in the days of the Scriptures, though I have not been able to find any reference to it. Whenever an Ass is disobedient and strays from its master, the man who captures the trespasser on his grounds clips a piece out of its ear before he returns it to its owner. Each time that the animal is caught on forbidden grounds it receives a fresh clip of the ear. By looking at the ears of an Ass, therefore, any one can tell whether it has ever been a straggler; and if so, he knows the number of times that it has strayed, by merely counting the clip-marks, which always begin at the tip of the ear, and extend along the edges. Any Ass, no matter how handsome it may be, that has many of those clips, is always rejected by experienced travellers, as it is sure to be a dull as well as a disobedient beast.

There are recorded in the Scriptures two remarkable circumstances connected with the Ass, which, however, need but a few words. The first is the journey of Balaam from Pethor to Moab,

in the course of which there occurred that singular incident of the Ass speaking in human language (see Numb. xxii. 21, 35). The second is the well-known episode in the story of Samson, where he is recorded as breaking the cords with which his enemies had bound him, and killing a thousand Philistines with the fresh jaw-bone of an Ass.

THE WILD ASS.

Various allusions to the Wild Ass—Its swiftness and wildness—The Wild Ass of Asia and Africa—How the Wild Ass is hunted—Excellence of its flesh—Meeting a Wild Ass—Origin of the domestic Ass—The Wild Asses of Quito.

THERE are several passages of Scripture in which the Wild Ass is distinguished from the domesticated animal, and in all of them there is some reference made to its swiftness, its intractable nature, and love of freedom. It is an astonishingly swift animal, so that on the level ground even the best horse has scarcely a chance of overtaking it. It is exceedingly wary, its sight, hearing, and sense of scent being equally keen, so that to approach it by craft is a most difficult task.

Like many other wild animals, it **has** a custom of ascending hills or rising grounds, and thence surveying the country, and even in the plains it will generally contrive to discover some earth-mound or heap of sand from which it may act as sentinel and give the alarm in case of danger. It is a gregarious animal, always assembling in herds, varying from two or three to several hundred in number, and has a habit of partial migration in search of green food, traversing large tracts of country in its passage.

It has a curiously intractable disposition, and, even when captured very young, can scarcely ever be brought to bear a burden or draw a vehicle.

Attempts have been often made to domesticate the young that have been born in captivity, but with very slight success, the wild nature of the animal constantly breaking out, even when it appears to have become moderately tractable.

Although the Wild Ass does not seem to have lived within the limits of the Holy Land, it was common enough in the surrounding country, and, from the frequent references made to it in Scriptures, was well known to the ancient Jews.

We will now look at the various passages in which the Wild Ass is mentioned, and begin with the splendid description in Job xxxix. 5-8:

“Who hath sent out the wild ass free? or who hath loosed the bands of the wild ass?

“Whose house I have made the wilderness, and the barren lands (or salt places) his dwellings.

“He scorneth the multitude of the city, neither regardeth he the crying of the driver.

“The range of the mountains is his pasture, and he searcheth after every green thing.”

Here we have the animal described with the minuteness and truth of detail that can only be found in personal knowledge; its love of freedom, its avoidance of mankind, and its migration in search of pasture.

Another allusion to the pasture-seeking habits of the animal is to be found in chapter vi. of the same book, verse 5: “Doth the wild ass bray when he hath grass?” or, according to the version of the Jewish Bible, “over tender grass?”

A very vivid account of the appearance of the animal in its wild state is given by Sir R. Kerr Porter, who was allowed by a Wild Ass to approach within a moderate distance, the animal evidently seeing that he was not one of the people to whom it was accustomed, and being curious enough to allow the stranger to approach him.

“The sun was just rising over the summit of the eastern mountains, when my greyhound started off in pursuit of an

animal which, my Persians said, from the glimpse they had of it, was an antelope. I instantly put spurs to my horse, and with my attendants gave chase. After an unrelaxed gallop of three miles, we came up with the dog, who was then within a short stretch of the creature he pursued; and to my surprise, and at first vexation, I saw it to be an ass.

"Upon reflection, however, judging from its fleetness that it must be a wild one, a creature little known in Europe, but which the Persians prize above all other animals as an object of chase, I determined to approach as near to it as the very swift Arab I was on could carry me. But the single instant of checking my horse to consider had given our game such a head of us that, notwithstanding our speed, we could not recover our ground on him.

"I, however, happened to be considerably before my companions, when, at a certain distance, the animal in its turn made a pause, and allowed me to approach within pistol-shot of him. He then darted off again with the quickness of thought, capering, kicking, and sporting in his flight, as if he were not blown in the least, and the chase was his pastime. When my followers of the country came up, they regretted that I had not shot the creature when he was within my aim, telling me that his flesh is one of the greatest delicacies in Persia.

"The prodigious swiftness and the peculiar manner in which he fled across the plain coincided exactly with the description that Xenophon gives of the same animal in Arabia. But above all, it reminded me of the striking portrait drawn by the author of the Book of Job. I was informed by the Mehnander, who had been in the desert when making a pilgrimage to the shrine of Ali, that the wild ass of Irak Arabi differs in nothing from the one I had just seen. He had observed them often for a short time in the possession of the Arabs, who told him the creature was perfectly untameable.

"A few days after this discussion, we saw another of these animals, and, pursuing it determinately, had the good fortune to kill it."

It has been suggested by many zoologists that the Wild Ass is the progenitor of the domesticated species. The origin of the domesticated animal, however, is so very ancient, that we have



HUNTING WILD ASSES.

no data whereon even a theory can be built. It is true that the Wild and the Domesticated Ass are exactly similar in appearance, and that an *Asinus hemippus*, or Wild Ass, looks so like an Asiatic *Asinus vulgaris*, or Domesticated Ass, that by the eye alone the two are hardly distinguishable from each other. But with their appearance the resemblance ends, the domestic animal being quiet, docile, and fond of man, while the wild animal is savage, intractable, and has an invincible repugnance to human beings.

This diversity of spirit in similar forms is very curious, and is strongly exemplified by the semi-wild Asses of Quito. They are the descendants of the animals that were imported by the Spaniards, and live in herds, just as do the horses. They combine the habits of the Wild Ass with the disposition of the tame animal. They are as swift of foot as the Wild Ass of Syria or Africa, and have the same habit of frequenting lofty situations, leaping about among rocks and ravines, which seem only fitted for the wild goat, and into which no horse can follow them.

Nominally, they are private property, but practically they may be taken by any one who chooses to capture them. The lasso is employed for the purpose, and when the animals are caught they bite, and kick, and plunge, and behave exactly like their wild relations of the Old World, giving their captors infinite trouble in avoiding the teeth and hoofs which they wield so skilfully. But, as soon as a load has once been bound on the back of one of these furious creatures, the wild spirit dies out of it, the head droops, the gait becomes steady, and the animal behaves as if it had led a domesticated life all its days.

THE MULE.

Ancient use of the Mule—Various breeds of Mule—Supposed date of its introduction into Palestine—Mule-breeding forbidden to the Jews—The Mule as a saddle-animal—Its use on occasions of state—The king's Mule—Obstinacy of the Mule.

THERE are several references to the MULE in the Holy Scriptures, but it is remarkable that the animal is not mentioned at all until the time of David, and that in the New Testament the name does not occur at all.

The origin of the Mule is unknown, but that the mixed breed between the horse and the ass has been employed in many countries from very ancient times is a familiar fact. It is a very strange circumstance that the offspring of these two animals should be, for some purposes, far superior to either of the parents, a well-bred Mule having the lightness, surefootedness, and hardy endurance of the ass, together with the increased size and muscular development of the horse. Thus it is peculiarly adapted either for the saddle or for the conveyance of burdens over a rough or desert country.

The Mules that are most generally serviceable are bred from the male ass and the mare, those which have the horse as the father and the ass as the mother being small, and comparatively valueless. At the present day, Mules are largely employed in Spain and the Spanish dependencies, and there are some breeds which are of very great size and singular beauty, those of Andalusia being especially celebrated. In the Andes, the Mule has actually superseded the llama as a beast of burden.

Its appearance in the sacred narrative is quite sudden. In Gen. xxxvi. 24, there is a passage which seems as if it referred to the Mule: "This was that Anah that found the mules in the wilderness." Now the word which is here rendered as Mules is

"Yemim," a word which is not found elsewhere in the Hebrew Scriptures. The best Hebraists are agreed that, whatever interpretation may be put upon the word, it cannot possibly have the signification that is here assigned to it. Some translate the word as "hot springs," while the editors of the Jewish Bible



MULES OF THE EAST.

prefer to leave it untranslated, thus signifying that they are not satisfied with any rendering.

The word which is properly translated as Mule is "Pered;" and the first place where it occurs is 2 Sam. xiii. 29. Absalom had taken advantage of a sheep-shearing feast to kill his brother Amnon in revenge for the insult offered to Tamar: "And the servants of Absalom did unto Amnon as Absalom had com-

manded. Then all the king's sons arose, and every man gat him up upon his mule, and fled." It is evident from this passage that the Mule must have been in use for a considerable time, as the sacred writer mentions, as a matter of course, that the king's sons had each his own riding mule.



ABSALOM IS CAUGHT IN THE BOUGHS OF AN OAK TREE.

Farther on, chap. xviii. 9 records the event which led to the death of Absalom by the hand of Joab. "And Absalom met the servants of David. And Absalom rode upon a mule, and the mule went under the thick boughs of a great oak, and his head caught hold of the oak, and he was taken up between the heaven and the earth; and the mule that was under him went away."

We see by these passages that the Mule was held in such high estimation that it was used by the royal princes for the saddle, and had indeed superseded the ass. In another passage we shall find that the Mule was ridden by the king himself

when he travelled in state, and that to ride upon the king's Mule was considered as equivalent to sitting upon the king's throne. See, for example, 1 Kings i in which there are several passages illustrative of this curious fact. See first, ver. 33, in which David gives to Zadok the priest, Nathan the prophet, and Benaiah the captain of the hosts, instructions for bringing his son Solomon to Gihon, and anointing him king in the stead of his father: "Take with you the servants of your lord, and cause Solomon my son to ride upon mine own mule, and bring him down to Gihon."

That the Mule was as obstinate and contentious an animal in Palestine as it is in Europe is evident from the fact that the Eastern mules of the present day are quite as troublesome as their European brethren. They are very apt to shy at anything, or nothing at all; they bite fiercely, and every now and then they indulge in a violent kicking fit, flinging out their heels with wonderful force and rapidity, and turning round and round on their fore-feet so quickly that it is hardly possible to approach them. There is scarcely a traveller in the Holy Land who has not some story to tell about the Mule and its perverse disposition; but, as these anecdotes have but very slight bearing on the subject of the Mule as mentioned in the Scriptures, they will not be given in these pages.



DANIEL REFUSES TO EAT THE KING'S MEAT.

SWINE.

The Mosaic prohibition of the pig—Hatred of Swine by Jews and Mahometans—
The prodigal son—Supposed connexion between Swine and diseases of the skin
—Destruction of the herd of Swine—The wild boar of the woods—The damage
which it does to the vines.

MANY are the animals which are specially mentioned in the Mosaic law as unfit for food, beside those that come under the general head of being unclean because they do not divide the hoof and chew the cud. There is none, however, that excited such abhorrence as the hog, or that was more utterly detested.

It is utterly impossible for a European, especially one of the present day, to form even an idea of the utter horror and loathing with which the hog was regarded by the ancient Jews.

Even at the present day, a zealous Jew or Mahometan looks upon the hog, or anything that belongs to the hog, with an abhorrence too deep for words. The older and stricter Jews felt so deeply on this subject, that they would never even mention the name of the hog, but always substituted for the objectionable word the term "the abomination."

Several references are made in the Scriptures to the exceeding disgust felt by the Jews towards the Swine. The portion of the Mosaic law on which a Jew would ground his antipathy to the flesh of Swine is that passage which occurs in Lev. xi. 7: "And the swine, though he divide the hoof, and be cloven-footed, yet he cheweth not the cud; he is unclean to you." But the very same paragraph, of which this passage forms the termination, treats of other unclean beasts, such as the coney (or hyrax) and the hare, neither of which animals are held in such abhorrence as the Swine.

This enactment could not therefore have produced the singular feeling with which the Swine were regarded by the Jews, and in all probability the antipathy was of far greater antiquity than the time of Moses.

How hateful to the Jewish mind was the hog we may infer from many passages, several of which occur in the Book of Isaiah. See, for example, lxxv. 3, 4: "A people that provoketh me to anger continually to my face; that sacrificeth in gardens, and burneth incense upon altars of brick;

"Which remain among the graves, and lodge in the monuments, which eat swine's flesh, and broth of abominable things is in their vessels." Here we have the people heaping one abomination upon another—the sacrifice to idols in the gardens, the burning of incense upon a forbidden altar and with strange fire, the living among the tombs, where none but madmen and evil spirits were supposed to reside, and, as the culminating point of iniquity, eating Swine's flesh, and drinking the broth in which it was boiled.

In the next chapter, verse 3, we have another reference to the Swine. Speaking of the wickedness of the people, and the uselessness of their sacrifices, the prophet proceeds to say: "He that killeth an ox is as if he slew a man; he that sacrificeth a lamb, as if he had cut off a dog's neck; he that offereth an oblation, as if he offered swine's blood." We see here how the

prophet proceeds from one image to another: the murder of a man, the offering of a dog instead of a lamb, and the pouring out of Swine's blood upon the altar instead of wine—the last-mentioned crime being evidently held as the worst of the three. Another reference to the Swine occurs in the same chapter, verse 17: "They that sanctify themselves, and purify themselves in the gardens behind one tree in the midst, eating swine's flesh, and the abomination, and the mouse, shall be consumed together, saith the Lord."

Not only did the Jews refuse to eat the flesh of the hog, but they held in utter abomination everything that belonged to it, and would have thought themselves polluted had they been even touched with a hog's bristle. Even at the present day this feeling has not diminished, and both by Jews and Mahometans the hog is held in utter abhorrence.

Some recent travellers have made great use of this feeling. Signor Pierotti, for example, during his long sojourn in Palestine, found the flesh of the hog extremely beneficial to him. "How often has the flesh of this animal supported me, especially during the earlier part of my stay in Palestine, before I had learned to like the mutton and the goats' flesh! I give the preference to this meat because it has often saved me time by rendering a fire unnecessary, and freed me from importunate, dirty, and unsavoury guests, who used their hands for spoons, knives, and forks.

"A little piece of bacon laid conspicuously upon the cloth that served me for a table was always my best friend. Without this talisman I should never have freed myself from unwelcome company, at least without breaking all the laws of hospitality by not inviting the chiefs of my escort or the guides to share my meal; a thing neither prudent nor safe in the open country. Therefore, on the contrary, when thus provided I pressed them with the utmost earnestness to eat with me, but of course never succeeded in persuading them; and so dined in peace, keeping on good terms with them, although they did call me behind my back a 'dog of a Frank' for eating pork.

"Besides, I had then no fear of my stores failing, as I always took care to carry a stock large enough to supply the real wants of my party. So a piece of bacon was more service to me than a revolver, a rifle, or a sword; and I recommend all travellers in Palestine to carry bacon rather than arms.

Such being the feelings of the Jews, we may conceive the abject degradation to which the Prodigal Son of the parable



THE PRODIGAL SON.

must have descended, when he was compelled to become a swine-herd for a living, and would have been glad even to have eaten the very husks on which the Swine fed. These husks, by the way, were evidently the pods of the locust-tree, or carob, of which we shall have more to say in a future page. We have in our language no words to express the depths of ignominy into which this young man must have fallen, nor can we conceive any office which in our estimation would be so degrading as would be that of swine-herd to a Jew.

How deeply rooted was the abhorrence of the Swine's flesh we can see from a passage in 2 Maccabees, in which is related a series of insults offered to the religion of the Jews. The temple in Jerusalem was to be called the Temple of Jupiter Olympus, and that on Gerizim was to be dedicated to Jupiter, the defender of strangers. The altars were defiled by forbidden things, and the celebration of the Sabbath, or of any Jewish ceremony, was punishable with death.

Severe as were all these afflictions, there was one which the Jews seem, from the stress laid upon it, to have felt more keenly than any other. This was the compulsory eating of Swine's flesh, an act which was so abhorrent to the Jews that in attempting to enforce it, Antiochus found that he was foiled by the passive resistance offered to him. The Jews had allowed their temples to be dedicated to the worship of heathen deities, they had submitted to the deprivation of their sacred rites, they had even consented to walk in procession on the Feast of Bacchus, carrying ivy like the rest of the worshippers in that most licentious festival. It might be thought that any people who submit to such degradation would suffer any similar in-

dignity. But even their forbearance had reached its limits, and nothing could induce them to eat the flesh of Swine.

Several examples of the resistance offered by them are recorded in the book just mentioned. Eleazer, for example, a man ninety years old, sternly refused to partake of the abominable



ELEAZAR REFUSES TO EAT SWINE'S FLESH.

food. Some of the officials, in compassion for his great age, advised him to take lawful meat with him and to exchange it for the Swine's flesh. This he refused to do, saying that his age was only a reason for particular care on his part, lest the young should be led away by his example. His persecutors then

forced the meat into his mouth, but he rejected it, and died under the lash.

Another example of similar, but far greater heroism, is given by the same chronicler. A mother and her seven sons were urged with blows to eat the forbidden food, and refused to do so. Thinking that the mother would not be able to endure the



A MOTHER AND HER SEVEN SONS TORTURED FOR REFUSING TO EAT SWINE'S FLESH.

sight of her sons' sufferings, the officers took them in succession, and inflicted a series of horrible tortures upon them, beginning by cutting off their tongues, hands, and feet, and ending by roasting them while still alive. Their mother, far from counselling her sons to yield, even though they were bribed by promises of wealth and rank, only encouraged them to persevere, and, when the last of her sons was dead, passed herself through the same fiery trial.

It has been conjectured, and with plausibility, that the pig was prohibited by Moses on account of the unwholesomeness of its flesh in a hot country, and that its almost universal repudiation in such lands is a proof of its unfitness for food. In countries where diseases of the skin are so common, and where the dreaded leprosy still maintains its hold, the flesh of the pig is

thought, whether rightly or wrongly, to increase the tendency to such diseases, and on that account alone would be avoided.

It has, however, been shown that the flesh of Swine can be habitually consumed in hot countries without producing any



THE EVIL SPIRITS ENTER A HERD OF SWINE.

evil results; and, moreover, that the prohibition of Moses was not confined to the Swine, but included many other animals whose flesh is used without scruple by those very persons who reject that of the pig.

Knowing the deep hatred of the Jews towards this animal, we may naturally wonder how we come to hear of herds of Swine kept in Jewish lands.

Of this custom there is a familiar example in the herd of Swine that was drowned in the sea (Matt. viii. 28—34). It is an open question whether those who possessed the Swine were Jews of lax principles, who disregarded the Law for the sake

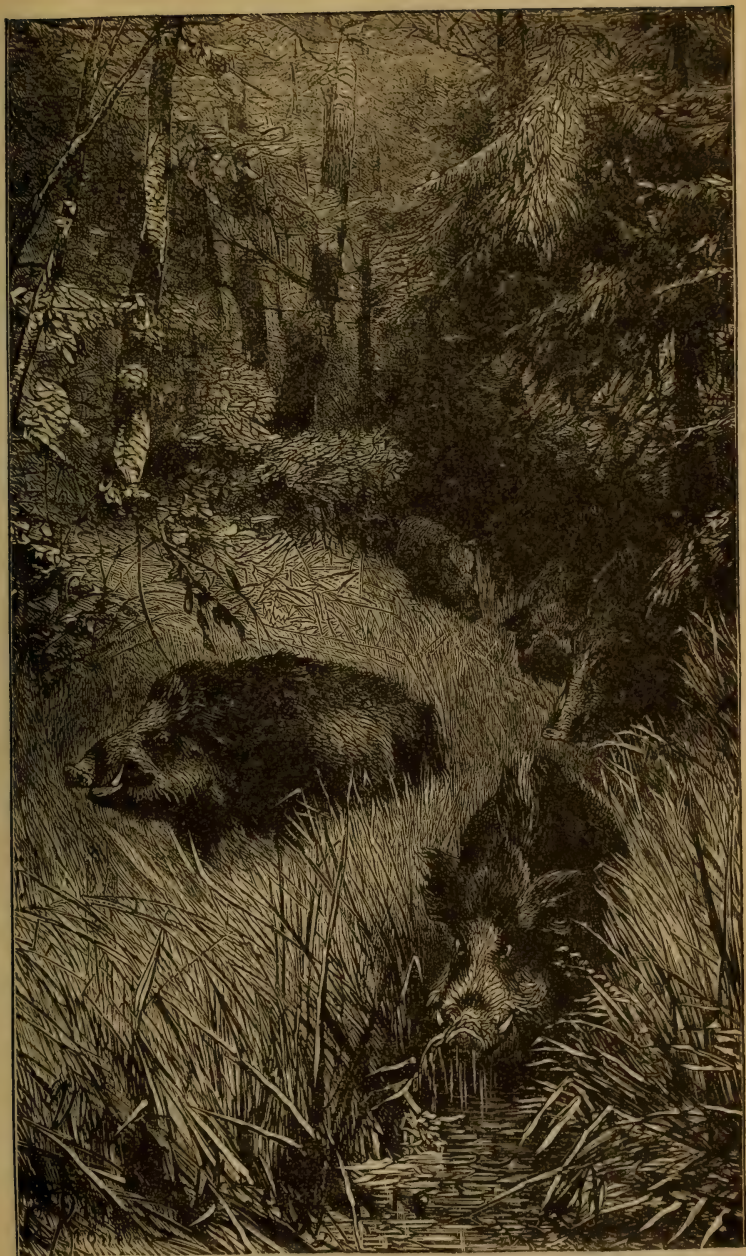
of gain, or whether they were Gentiles, who, of course, were not bound by the Law. The former seems the likelier interpretation, the destruction of the Swine being a fitting punishment for their owners. It must be here remarked, that our Lord did not, as is often said, destroy the Swine, neither did He send the devils into them, so that the death of these animals cannot be reckoned as one of the divine miracles. Ejecting the evil spirits from the maniacs was an exercise of His divine authority; the destruction of the Swine was a manifestation of diabolical anger, permitted, but not dictated.

Swine are at the present day much neglected in Palestine, because the Mahometans and Jews may not eat the flesh, and the Christians, as a rule, abstain from it, so that they may not hurt the feelings of their neighbours. Pigs are, however, reared in the various monasteries, and by the Arabs attached to them.



WILD BOARS DEVOURING THE CARCASE OF A DEER.

WE now come to the wild animal. There is only one passage in the Scriptures in which the WILD BOAR is definitely mentioned, and another in which a reference is made to it in a paraphrase.



WILD BOARS.

The former of these is the well-known verse of the Psalms : "Why hast thou broken down her hedges, so that all they which pass by the way do pluck her ?

"The boar out of the wood doth waste it, and the wild beast of the field doth devour it" (Ps. lxxx. 12, 13). The second passage is to be found in Ps. lxviii. 30. In the Authorized Version it is thus rendered : "Rebuke the company of spearmen, the multitude of bulls, with the calves of the people." If the reader will refer to the marginal translation (which, it must be remarked, is of equal authority with the text), the passage runs thus : "Rebuke the beasts of the reeds," &c. Now, this is undoubtedly the correct rendering, and is accepted in the Jewish Bible.

Having quoted these two passages, we will proceed to the description and character of the animal.

In the former times, the Wild Boar was necessarily much more plentiful than is the case in these days, owing to the greater abundance of woods, many of which have disappeared by degrees, and others been greatly thinned by the encroachments of mankind. Woods and reed-beds are always the habitations of the Wild Boar, which resides in these fastnesses, and seems always to prefer the reed-bed to the wood, probably because it can find plenty of mud, in which it wallows after the fashion of its kind. There is no doubt whatever that the "beast of the reeds" is simply a poetical phrase for the Wild Boar.

If there should be any cultivated ground in the neighbourhood, the Boar is sure to sally out and do enormous damage to the crops. It is perhaps more dreaded in the vineyards than in any other ground, as it not only devours the grapes, but tears down and destroys the vines, trampling them under foot, and destroying a hundredfold as much as it eats.

If the reader will refer again to Ps. lxxx. he will see that the Jewish nation is described under the image of a vine : "Thou hast brought a vine out of Egypt : Thou hast cast out the heathen and planted it," &c. No image of a destructive enemy could therefore be more appropriate than that which is used. We have read of the little foxes that spoil the vines, but the Wild Boar is a much more destructive enemy, breaking its way through the fences, rooting up the ground, tearing down the vines themselves, and treading them under its feet. A single party

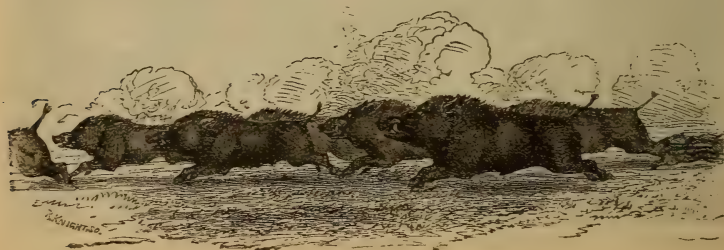


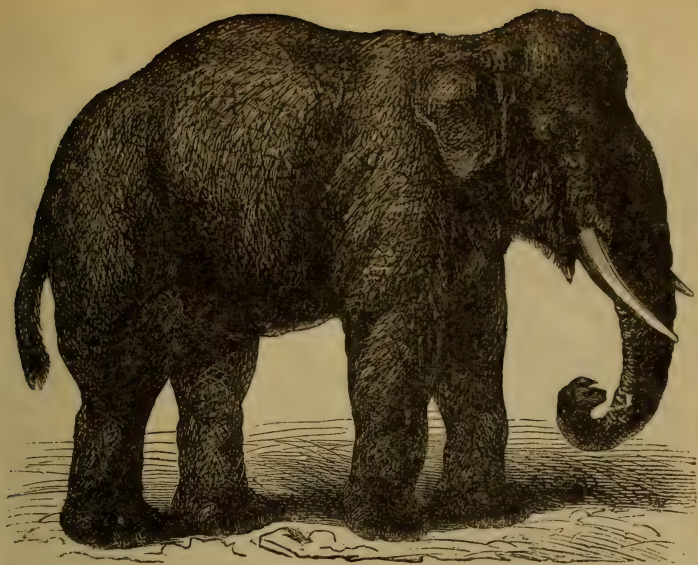
WILD BOARS DESTROYING A VINEYARD.

of these animals will sometimes destroy an entire vineyard in a single night.

We can well imagine the damage that would be done to a vineyard even by the domesticated Swine, but the Wild Boar is infinitely more destructive. It is of very great size, often resembling a donkey rather than a boar, and is swift and active beyond conception. The Wild Boar is scarcely recognisable as the very near relation of the domestic species. It runs with such speed, that a high-bred horse finds some difficulty in overtaking it, while an indifferent steed would be left hopelessly behind. Even on level ground the hunter has hard work to overtake it; and if it can get upon broken or hilly ground, no horse can catch it. The Wild Boar can leap to a considerable distance, and can wheel and turn when at full speed, with an agility that makes it a singularly dangerous foe. Indeed, the inhabitants of countries where the Wild Boar flourishes would as soon face a lion as one of these animals, the stroke of whose razor-like tusks is made with lightning swiftness, and which is sufficient to rip up a horse, and cut a dog nearly asunder.

Although the Wild Boar is not as plentiful in Palestine as used to be the case, it is still found in considerable numbers. Whenever the inhabitants can contrive to cut off the retreat of marauding parties among the crops, they turn out for a general hunt, and kill as many as they can manage to slay. After one of these hunts, the bodies are mostly exposed for sale, but, as the demand for them is very small, they can be purchased at a very cheap rate. Signor Pierotti bought one in the plains of Jericho for five shillings. For the few who may eat the hog, this is a fortunate circumstance, the flesh being very excellent, and as superior to ordinary pork as is a pheasant to a barn-door fowl or venison to mutton.





INDIAN ELEPHANT.

THE ELEPHANT.

The Elephant indirectly mentioned in the Authorized Version—The Elephant as an engine of war—Antiochus and his Elephants—Oriental exaggeration—Self-devotion of Eleazar—Attacking the Elephants, and their gradual abandonment in war.

EXCEPT indirectly, the Elephant is never mentioned in the Authorized Version of the Canonical Scriptures, although frequent references are made to ivory, the product of that animal.

The earliest mention of ivory in the Scriptures is to be found in 1 Kings x. 18: "Moreover the king (*i.e.* Solomon) made a great throne of ivory, and overlaid it with the best gold." This passage forms a portion of the description given by the sacred historian of the glories of Solomon's palace, of which this celebrated throne, with the six steps and the twelve lions on the steps, was the central and most magnificent object. It is named together with the three hundred golden shields, the golden vessel of the royal palace, and the wonderful arched viaduct crossing the valley of the Tyropœon, "the ascent by which he went up

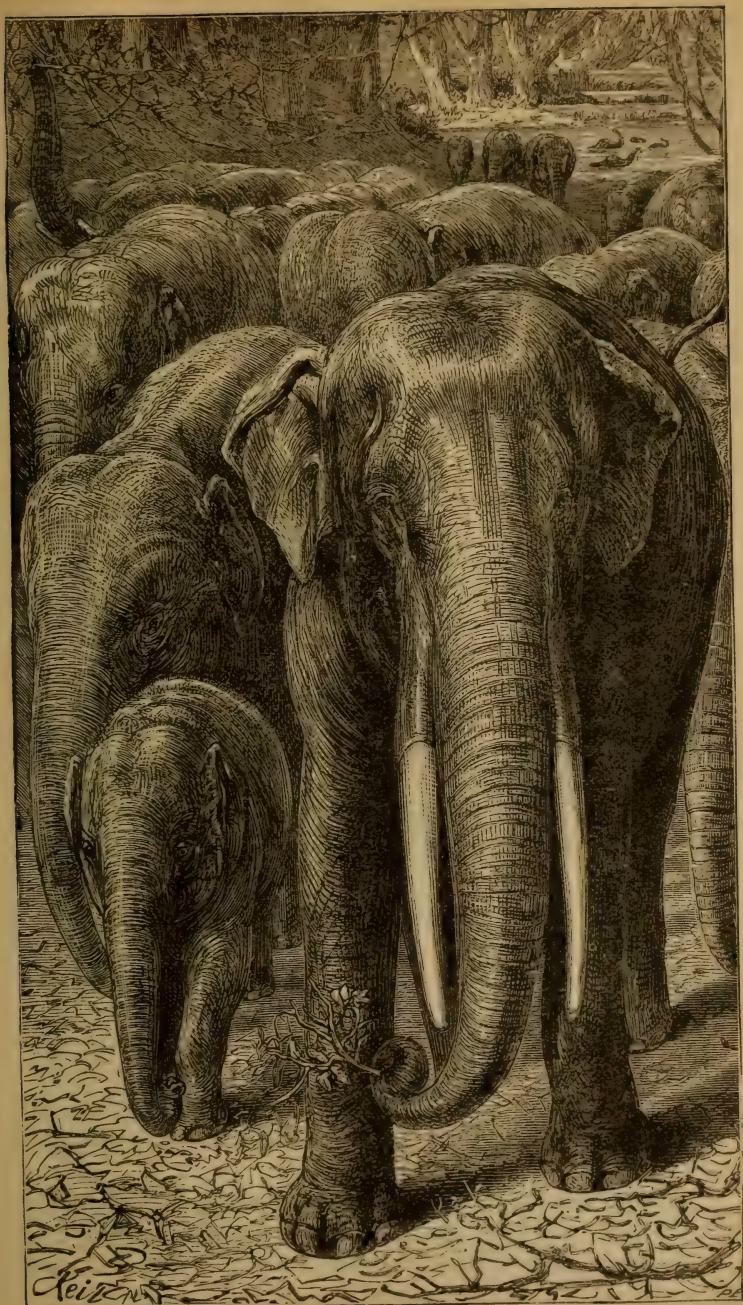
unto the house of the Lord," all of which glories so overcame the Queen of Sheba that "there was no more spirit in her."



KING SOLOMON, SEATED UPON HIS THRONE, RECEIVES THE QUEEN OF SHEBA.

We see, therefore, that in the time of Solomon ivory was so precious an article that it was named among the chief of the wonders to be seen in the palace of Solomon, the wealthiest and most magnificent monarch of sacred or profane history.

That it should not have been previously mentioned is very singular. Five hundred years had elapsed since the Israelites escaped from the power of Egypt, and during the whole of that time, though gold and silver and precious stones and costly raiment are repeatedly mentioned, we do not find a single passage in which any allusion is made to ivory. Had we not known that ivory was largely used among the Egyptians, such an omission would cause no surprise. But the researches of modern travellers have brought to light many articles of ivory that were in actual use in Egypt, and we therefore cannot but wonder that a material so valued and so beautiful does not seem to have been reckoned among the treasures which were brought by the Israelites from the land of their captivity, and which



INDIAN ELEPHANTS.

were so abundant that the Tabernacle was entirely formed of them.

In the various collections of Europe are many specimens of ivory used by the ancient Egyptians, among the chief of which may be mentioned an ivory box in the Louvre, having on its lid the name of the dynasty in which it was carved, and the ivory-tipped lynch-pins of the splendid war-chariot in Florence, from which the illustration on page 309 has been drawn.

The ivory used by the Egyptians was, of course, that of the African Elephant; and was obtained chiefly from Ethiopia, as we find in Herodotus ("Thalia," 114):—"Where the meridian declines towards the setting sun, the Ethiopian territory reaches, being the extreme part of the habitable world. It produces much gold, huge elephants, wild trees of all kinds, ebony, and men of large stature, very handsome and long-lived."

The passages in the Bible in which the Elephant itself is named are only to be found in the Apocrypha, and in all of them the Elephant is described as an engine of war. If the reader will refer to the First Book of the Maccabees, he will find that the Elephant is mentioned at the very commencement of the book. "Now when the kingdom was established before Antiochus, he thought to reign over Egypt, that he might have the dominion of two realms.

"Wherefore he entered into Egypt with a great multitude, with chariots, and elephants, and horsemen, and a great navy." (i. 16, 17.)

Here we see that the Elephant was considered as a most potent engine of war, and, as we may perceive by the context, the King of Egypt was so alarmed by the invading force, that he ran away, and allowed Antiochus to take possession of the country.

After this, Antiochus Eupator marched against Jerusalem with a vast army, which is thus described in detail:—"The number of his army was one hundred thousand footmen, and twenty thousand horsemen, and two and thirty elephants exercised in battle.

"And to the end that they might provoke the elephants to fight, they showed them the blood of grapes and mulberries.

"Moreover, they divided the beasts among the armies, and for every elephant they appointed a thousand men, armed with coats of mail, and with helmets of brass on their heads; and,

besides this, for every beast were ordained five hundred horsemen of the best.

"These were ready at every occasion wheresoever the beast was; and whithersoever the beast went they went also, neither departed they from him.

"And upon the beasts were there strong towers of wood, which covered every one of them, and were girt fast unto them with devices; there were also upon every one two and thirty strong men that fought upon them, beside the Indian that ruled him.

"As for the remnant of the horsemen, they set them on this side and that side at the two fronts of the host, giving them signs what to do, and being harnessed all over amidst the ranks." (1 Macc. vi. 30, &c.)

It is evident from this description that, in the opinion of the writer, the Elephants formed the principal arms of the opposing force, these animals being prominently mentioned, and the rest of the army being reckoned as merely subsidiaries of the terrible beasts. The thirty-two Elephants appear to have taken such a hold of the narrator's mind, that he evidently looked upon them in the same light that the ancient Jews regarded chariots of war, or as at the present day savages regard artillery. According to his ideas, the thirty-two Elephants constituted the real army, the hundred thousand infantry and twenty thousand cavalry being only in attendance upon these animals.

Taken as a whole, the description of the war Elephant is a good one, though slightly exaggerated, and is evidently written by an eye-witness. The mention of the native mahout, or "Indian that guided him," is characteristic enough, as is the account of the howdah, or wooden carriage on the back of the animal.

The number of warriors, however, is evidently exaggerated, though not to such an extent as the account of Julius Cæsar's Elephants, which are said to have carried on their backs sixty soldiers, beside the wooden tower in which they fought. It is evident that, in the first place, no Elephant could carry a tower large enough to hold so many fighting men, much less one which would afford space for them to use their weapons.

A good account of the fighting Elephant is given by Topsel (p. 157):—"There were certain officers and guides of the Ele-

phants, who were called *Elephantarchæ*, who were the governors of sixteen Elephants, and they which did institute and teach them martial discipline were called *Elephantagogi*.

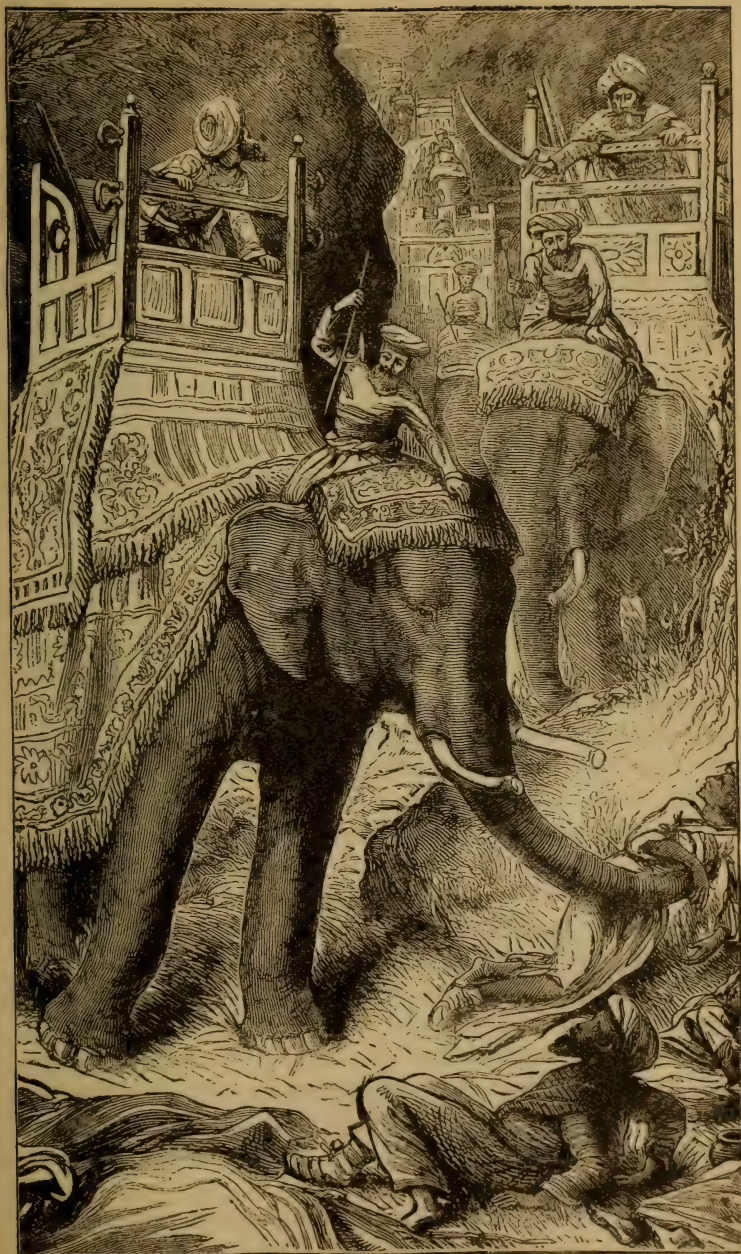
“The Military Elephant did carry four persons on his bare back, one fighting on the right hand, another fighting on the left hand, a third, which stood fighting backwards from the Elephant’s head, and a fourth in the middle of these, holding the reins, and guiding the Beast to the discretion of the Soldiers, even as the Pilot in a ship guideth the stem, wherein was required an equall knowledge and dexterity; for when the Indian which ruled them said, Strike here on the right hand, or else on the left, or refrain and stand still, no reasonable man could yield readier obedience.”

This description is really a very accurate as well as spirited one, and conveys a good idea of the fighting Elephant as it appeared when brought into action.

Strangely enough, after giving this temperate and really excellent account of the war Elephant, the writer seems to have been unable to resist the fascination of his theme, and proceeds to describe, with great truth and spirit, the mode of fighting adopted by the animal, intermixed with a considerable amount of the exaggeration from which the former part of his account is free.

“They did fasten iron chains, first of all, upon the Elephant that was to bear ten, fifteen, twenty, or thirty men, on either side two panniers of iron bound underneath their belly, and upon them the like panniers of wood, hollow, wherein they placed their men at armes, and covered them over with small boards (for the trunck of the Elephant was covered with a mail for defence, and upon that a broadsword two cubits long); this (as also the wooden Castle, or pannier aforesaid) were fastened first to the neck and then to the rump of the Elephant.

“Being thus armed, they entered the battel, and they shewed unto the Beasts, to make them more fierce, wine, liquor made of Rice, and white cloth, for at the sight of any of these his courage and rage increaseth above all measure. Then at the sound of the Trumpet, he beginneth with teeth to strike, tear, beat, spoil, take up into the air, cast down again, stamp upon men under feet, overthrow with his trunck, and make way for his riders to pierce with Spear, Shield, and Sword; so that his horrible voice,



THE WAR ELEPHANT.

his wonderful body, his terrible force, his admirable skill, his ready and inestimable obedience, and his strange and seldom-seen shape, produced in a main battel no mean accidents and overturns."

In this account there is a curious mixture of truth and exaggeration. As we have already seen, the number of soldiers which the animal was supposed to carry is greatly exaggerated, and it is rather amusing to note how the "towers" in which they fought are modified into "panniers." Then the method by which the animal is incited to the combat is partly true, and partly false. Of course an Elephant is not angered by seeing a piece of white cloth, or by looking at wine, or a liquor made of rice.

But that the wine, or the "liquor made of rice," *i.e.* arrack, was administered to the Elephant before it was brought into the battle-field, is likely enough. Elephants are wonderfully fond of strong drink. They can be incited to perform any task within their powers by a provision of arrack, and when stimulated by a plentiful supply of their favourite drink they would be in good fighting condition.

Next we find the writer describing the Elephant as being furnished with a coating of mail armour on its proboscis, the end of which was armed with a sword a yard in length. Now any one who is acquainted with the Elephant will see at once that such offensive and defensive armour would deprive the animal of the full use of the proboscis, and would, therefore, only weaken, and not strengthen, its use in battle. Accordingly we find that the writer, when describing with perfect accuracy the mode in which the Elephant fights, utterly omits all mention of the sword and the mailed proboscis, and describes the animal, not as striking or thrusting with the sword, but as overthrowing with the trunk, taking up into the air, and casting down again—acts which could only be performed when the proboscis was unencumbered by armour. The use of weapons was left to the soldiers that fought upon its back, the principal object of the huge animal being to trample its way through the opposing ranks, and to make a way for the soldiers that followed.

It may be easily imagined that, before soldiers become familiarized with the appearance of the Elephant, they might be pardoned for being panic-struck at the sight of so strange an

animal. Not only was it formidable for its vast size, and for the armed men which it carried, but for the obedience which it rendered to its keeper, and the skill with which it wielded the strange but powerful weapon with which Nature had armed it.

At first, the very approach of so terrible a foe struck consternation into the soldiers, who knew of no mode by which they could oppose the gigantic beast, which came on in its swift, swinging pace, crushing its way by sheer weight through the ranks, and striking right and left with its proboscis. No other method of checking the Elephant, except by self-sacrifice, could be found; and in 1 Macc. vi. 43—46, we read how Eleazar, the son of Mattathias, nobly devoted himself for his country.

“Eleazar also, surnamed Savaran, perceiving that one of the beasts, armed with royal harness, was higher than all the rest, and supposing that the king was upon him,

“Put himself in jeopardy, to the end he might deliver his people, and get him a perpetual name.

“Whereupon he ran upon him courageously, through the midst of the battle, slaying on the right hand and on the left, so that they were divided from him on both sides.

“Which done, he crept under the elephant, and thrust him under, and slew him; whereupon the elephant fell down upon him, and he died.”

I may here mention that the surname of Savaran, or Avaran, as it ought to be called, signifies one who pierces an animal from behind, and was given to him after his death, in honour of his exploit.

At first, then, Elephants were the most formidable engines of war that could be brought into the battle-field, and the very sight of these huge beasts, towering above even the helmets of the cavalry, disheartened the enemy so much that victory became easy.

After a while, however, when time for reflection had been allowed, the more intellectual among the soldiers began to think that, after all, the Elephant was not a mere engine, but a living animal, and, as such, subject to the infirmities of the lower animals. So they invented scheme after scheme, by which they baffled the attacks of these once dreaded foes, and sometimes even succeeded in driving them back among the ranks of their

own soldiery, so maddened with pain and anger, that they dealt destruction among the soldiers for whom they were fighting, and so broke up their order of battle that the foe easily overcame them.

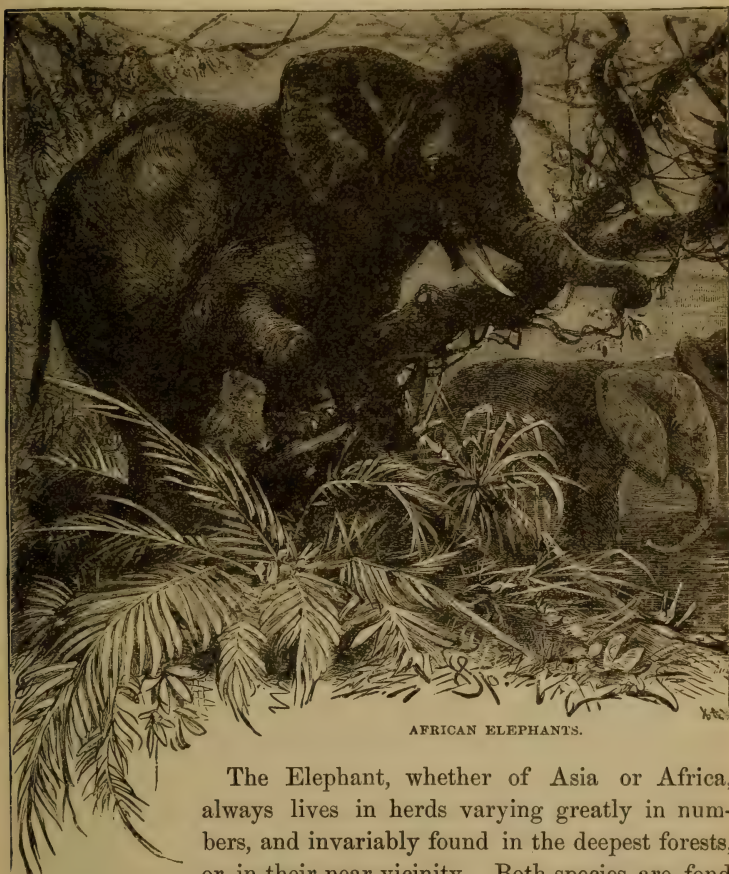
The vulnerable nature of the proboscis was soon discovered, and soldiers were armed with very sharp swords, set on long handles, with which they continually attacked the Elephants' trunks. Others were mounted on swift horses, dashed past the Elephant, and hurled their darts before the animal could strike them. Others, again, were placed in chariots, and armed with very long and sharply-pointed spears. Several of these chariots would be driven simultaneously against an Elephant, and sometimes succeeded in killing the animal. Slingers also were told off for the express purpose of clearing the "castles," or howdahs, of the soldiers who fought on the Elephants' backs, and their especial object was the native mahout, who sat on the animal's neck.

Sometimes they made way for the Elephant as it pressed forward, and then closed round it, so as to make it the central mark, on which converged a hail of javelins, arrows, and stones on every side, until the huge animal sank beneath its many wounds. By degrees, therefore, the Elephant was found to be so uncertain an engine of war, that its use was gradually discontinued, and finally abandoned altogether.

THE Elephant which was employed in these wars was the Indian species, *Elephas Indicus*, which is thought to be more susceptible of education than the African Elephant. The latter, however, has been tamed, and, in the days of Rome's greatest splendour, was taught to perform a series of tricks that seem almost incredible. As, however, the Indian species is that with which we have here to do, I have selected it for the principal illustrations.

It may be at once distinguished from its African relative by the comparatively small ears, those of the African Elephant reaching above the back of the head, and drooping well below the neck. The shape of the head, too, is different. In the Indian species, only the males bear tusks, and even many of them are unarmed. In the African species, however, both sexes bear tusks, those of the male furnishing the best ivory, with its

peculiar creamy colour and beautiful graining, and those of the female being smaller in size, and producing ivory of a much inferior quality.



AFRICAN ELEPHANTS.

The Elephant, whether of Asia or Africa, always lives in herds varying greatly in numbers, and invariably found in the deepest forests, or in their near vicinity. Both species are fond of water, and never wander far from some stream or fountain, although they can, and do, make tolerably long journeys for the purpose of obtaining the needful supply of liquid.

They have a curious capability of laying up a store of water in their interior, somewhat after the fashion of the camel, but also possess the strange accomplishment of drawing the liquid supply from their stomachs by means of their trunks, and scattering it in a shower over their backs to cool their heated bodies.

When drinking, the Elephant inserts the tip of his trunk into

the stream, fills it with water, and then, turning it into his throat, discharges the contents.

The strangest portion of the Elephant is the trunk, or proboscis. This wonderful appendage is furnished at its extremity with a finger-like projection, with which the animal can pluck a single blade of grass or pick up a small object from the ground.

The value of the proboscis to the Elephant can be estimated when it is considered that without its aid the animal must soon starve to death. The short, thick neck and projecting tusks would entirely prevent it from reaching any of the vegetation upon which it feeds.

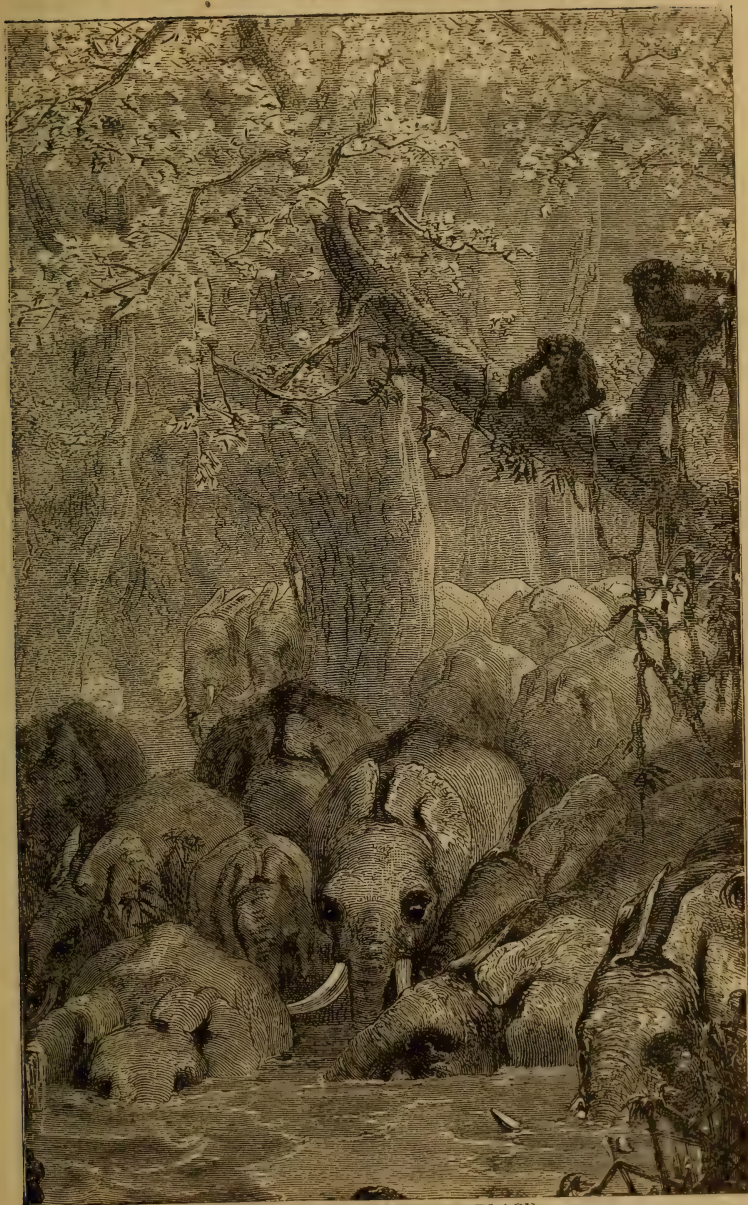
With the trunk, however, the Elephant readily carries its food to its mouth, and employs the useful member just as if it were a long and flexible arm.

The Elephant bears a worldwide fame for its capabilities as a servant and companion of man, and for the extraordinary development of its intellectual faculties. The Indian or Asiatic Elephant is the variety that is considered most docile and easy to train; these are almost invariably taken in a wild state from their native forests. The Indian hunters usually proceed into the woods with trained female Elephants. These advance quietly, and by their blandishments so occupy the attention of any unfortunate male that they meet that the hunters are enabled to tie his legs together and fasten him to a tree. His treacherous companions now leave him to struggle in impotent rage until he is so subdued by hunger and fatigue that the hunters can drive him home between two tame elephants. When once captured, he is easily trained.

The following curious instance of intelligence in an Elephant is given by a traveller in Ceylon:

"One evening, while riding in the vicinity of Kandy, my horse showed some excitement at a noise which was heard in the thick jungle, sounding something like '*Urmph! Urmph!*' uttered in a hoarse and dissatisfied tone. A turn in the forest explained the mystery, by bringing me face to face with a tame working Elephant unaccompanied by any driver or attendant. He was laboring painfully with a heavy beam of timber, which he had balanced across his tusks and was carrying to the village from which I had come.

"The pathway being narrow, he was compelled to bend his head



ELEPHANTS' WATERING-PLACE.

to one side to permit the passage of the long piece of wood, and the exertion and inconvenience combined, led him to utter the dissatisfied sounds which had frightened my horse.

"On seeing us halt, the Elephant raised his head, looked at us for a moment, then dropped the timber, and forced himself backward among the bushes at the side of the road, so as to leave us plenty of room to pass.

"My horse still hesitated; the Elephant observed this, and impatiently crowded himself still deeper in the jungle, repeating his cry of, '*Urmph! Urmph!*' but in a voice evidently meant to encourage us to come on. Still the horse trembled; and, anxious to observe the conduct of the two sagacious creatures, I forbore any interference. Again the Elephant wedged himself farther in among the trees and waited for us to pass him. At last the horse timidly did so, after which I saw the wise Elephant come out of the wood, take up the heavy timber upon his tusks, and resume his route, hoarsely snorting, as before, his discontented remonstrance."

Although so valuable an animal for certain kinds of work, the Elephant is hardly so effective an assistant as might be supposed. The working Elephant is always a delicate animal, and requires watchfulness and care; as a beast of burden he is unsatisfactory, for, although in the matter of mere strength there is hardly any weight that could be conveniently placed on him which he could not carry, it is difficult to pack it without causing abrasions of the Elephant's skin, which afterwards ulcerate.

His skin is easily chafed by harness, especially in wet weather. Either during long droughts, or too much moisture, his feet are also liable to sores which render him useless for months.

In India the Elephant is used more for purposes of state display or for hunting than for hard labor. It is especially trained for tiger-hunting, and, as there is a natural dread of the terrible tiger deeply implanted in almost all Elephants, it is no easy matter to teach the animal to approach his powerful foe.

A stuffed tiger-skin is employed for this purpose, and is continually shown to the Elephant until he learns to lose all distrust of the inanimate object, and to strike it, to crush it with his feet, or to pierce it with his tusks.

After a while a boy is put inside the tiger-skin, in order to accustom the Elephant to the sight of the tiger in motion.



TIGER.

The last stage in the proceedings is to procure a dead tiger, and to substitute it for the stuffed skin. Even with all this training, it most frequently happens that when the Elephant is brought to face a veritable living tiger the furious bounds, the savage yells, and gleaming eyes of the beast are so terrifying that he turns tail and makes a hasty retreat. Hardly one Elephant out of ten will face an angry tiger. The Elephant, when used in tiger-hunting, is always guided by a native driver, called a mahout, who sits astride of the animal's neck and guides its movements by means of the voice and the use of an iron hook at the end of a short stick.

The hunters who ride upon the Elephant sit in a kind of box called a howdah, which is strapped firmly upon the animal's back, or else merely rests upon a large flat pad furnished with cross-ropes for maintaining a firm hold. The Elephant generally kneels to



THE TIGER IN THE REEDS.

enable the riders to mount, and then rises from the ground with a peculiar swinging motion that is most discomposing to beginners in the art.

The chase of the tiger is among the most exciting and favourite sports in India. When starting on a hunt, a number of hunters usually assemble, mounted on Elephants trained for the purpose, and carrying with them a supply of loaded rifles in their howdahs, or carriages mounted on the Elephants' backs. Thus armed, they proceed to the spot where a tiger has been seen. The animal is usually found hidden in the long grass or jungle, which is fre-

quently eight or more feet in height; and when roused, it endeavours to creep away under the grass. The movement of the leaves betrays him, and he is checked by a rifle-ball aimed at him through the jungle. Finding that he cannot escape without being seen, he turns round and springs at the nearest Elephant, endeavouring to clamber up it and attack the party in the howdah. This is the most dangerous part of the proceedings, as many Elephants will turn round and run away, regardless of the efforts of their drivers to make them face the tiger. Should, however, the Elephant stand firm, a well-directed ball checks the tiger in his spring; and he then endeavours to again escape, but a volley of rifle-balls from the backs of the other Elephants, who by this time have come up, lays the savage animal prostrate, and in a very short time his skin decorates the successful marksman's howdah.





THE CONEY, OR HYRAX.

The Shaphan of Scripture, and the correct meaning of the word—Identification of the Shaphan with the Syrian Hyrax—Description of the animal—Its feet, teeth, and apparent rumination—Passages in which the Coney is mentioned—Habits of the animal—Its activity and wariness—The South African Hyrax, and its mode of life—Difficulty of procuring it—Similarity in appearance and habits of the Syrian species—Three species of Hyrax known to naturalists

AMONG the many animals mentioned in the Bible, there is one which is evidently of some importance in the Jewish code, inasmuch as it is twice named in the Mosaic law.

That it was also familiar to the Jews is evident from other references which are made to its habits. This animal is the Shaphan of the Hebrew language, a word which has very wrongly been translated in the Authorized Version as Coney, *i.e.* Rabbit, the creature in question not being a rabbit, nor even a rodent. No rabbit has ever been discovered in Palestine, and

naturalists have agreed that the true Coney or Rabbit has never inhabited the Holy Land. There is no doubt that the Shaphan of the Hebrew Scripture, and the Coney of the Vulgate, was the SYRIAN HYRAX (*Hyrax Syriacus*). This little animal is rather larger than an ordinary rabbit, is not unlike it in appearance, and has many of its habits. It is clothed with brown fur, it is very active, it inhabits holes and clefts in rocks, and it has in the front of its mouth long chisel-shaped teeth, very much like those of the rabbit. Consequently, it was classed by naturalists



THE HYRAX.

among the rodents for many years, under the name of Rock Rabbit. Yet, as I have already mentioned, it is not even a rodent, but belongs to the pachydermatous group of animals, and occupies an intermediate place between the rhinoceros and the hippopotamus.

If it be examined carefully, the rodent-like teeth will be seen to resemble exactly the long curved tusks of the hippopotamus,

with their sharp and chisel-edged tips; the little feet, on a close inspection, are seen to be furnished with a set of tiny hoofs just like those of the rhinoceros; and there are many other points in its structure which, to the eye of a naturalist, point out its true place in nature.

In common with the rodents, and other animals which have similarly-shaped teeth, the Hyrax, when at rest, is continually working its jaws from side to side, a movement which it instinctively performs, in order that the chiselled edges of the upper and lower teeth may be preserved sharp by continually rubbing against each other, and that they may not be suffered to grow too long, and so to deprive the animal of the means whereby it gains its food. But for this peculiar movement, which looks very like the action of ruminating, the teeth would grow far beyond the mouth, as they rapidly deposit dental material in their bases in order to supply the waste caused at their tips by the continual friction of the edges against each other.

It may seem strange that an animal which is classed with the elephant, the rhinoceros, and the hippopotamus, all bare-skinned animals, should be clothed with a furry coat. The reader may perhaps remember that the Hyrax does not afford a solitary instance of this structure, and that, although the elephants of our day have only a few bristly hairs thinly scattered over the body, those of former days were clad in a thick and treble coat of fur and hair.

THERE are four passages of Scripture in which the CONEY is mentioned—two in which it is prohibited as food, and two in which allusion is made to its manner of life. In order to understand the subject better, we will take them in their order.

The first mention of the Coney occurs in Leviticus xi. 5, among the list of clean and unclean animals: "The coney, because he cheweth the cud, but divideth not the hoof; he is unclean unto you." The second is of a like nature, and is to be found in Deut. xiv. 7: "These ye shall not eat of them that chew the cud, or of them that divide the cloven hoof; as the camel, and the hare, and the coney: for they chew the cud, but divide not the hoof; therefore they are unclean unto you."

The remaining passages, which describe the habits of the Coney, are as follow. The first alludes to the rock-loving

habits of the animal: "The high hills are a refuge for the wild goats, and the rocks for the conies." (Ps. civ. 18.) The second makes a similar mention of the localities which the animal frequents, and in addition speaks of its wariness, including it among the "four things which are little upon the earth, but they are exceedingly wise." The four are the ants, the locusts, the spiders, and the Conies, which "are but a feeble folk, yet make they their houses in the rocks."

We will take these passages in their order.

It has already been mentioned that the Hyrax, a true pachyderm, does not merely chew the cud, but that the peculiar and constant movement of its jaws strongly resembles the act of rumination. The Jews, ignorant as they were of scientific zoology, would naturally set down the Hyrax as a ruminant, and would have been likely to eat it, as its flesh is very good. It must be remembered that two conditions were needful to render an animal fit to be eaten by a Jew, the one that it must be a ruminant, and the second that it should have a divided hoof. Granting, therefore, the presence of the former qualification, Moses points out the absence of the latter, thereby prohibiting the animal as effectually as if he had entered into a question of comparative anatomy, and proved that the Hyrax was incapable of rumination.

We now come to the habits of the animal.

As we may gather from the passages of Scripture which have already been mentioned, the Hyrax inhabits rocky places, and lives in the clefts that are always found in such localities. It is an exceedingly active creature, leaping from rock to rock with wonderful rapidity, its little sharp hoofs giving it a firm hold of the hard and irregular surface of the stony ground. Even in captivity it retains much of its activity, and flies about its cage with a rapidity that seems more suitable to a squirrel than to an animal allied to the rhinoceros and hippopotamus.

There are several species—perhaps only varieties—of the Hyrax, all of them identical in habits, and almost precisely similar in appearance. The best known of these animals is that which inhabits Southern Africa (*Hyrax Capensis*), and which is familiar to the colonists by its name of Klip-das, or Rock-rabbit. In situations which suit it, the Hyrax is very plentiful, and is much hunted by the natives, who esteem its flesh very highly.

Small and insignificant as it appears to be, even Europeans think that to kill the Hyrax is a tolerable test of sportsmanship, the wariness of the animal being so great that much hunter's craft is required to approach it.

The following account of the Hyrax has been furnished to me by Major A. W. Drayson, R.A. :—" In the Cape Colony, and over a great portion of Southern Africa, this little creature is found. It is never, as far as my experience goes, seen in great numbers, as we find rabbits in England, though the caution of the animal is such as to enable it to remain safe in districts from which other animals are soon exterminated.

" As its name implies, it is found among rocks, in the crevices and holes of which it finds a retreat. When a natural cavity is not found, the klip-das scratches a hole in the ground under the rocks, and burrows like a common rabbit. In size it is about equal to a hare, though it is much shorter in the legs, and has ears more like those of a rat than a rabbit. Its skin is covered with fur, thick and woolly, as though intended for a colder climate than that in which it is usually found; and, when seen from a distance, it looks nearly black.

" The rock-rabbit is a very watchful creature, and usually feeds on the summit of any piece of rock near its home, always choosing one from which it can obtain a good view of the surrounding country. When it sees an enemy approaching, it sits rigidly on the rock and watches him without moving, so that at a little distance it is almost impossible to distinguish it from the rock on which it sits. When it does move, it darts quickly out of sight, and disappears into its burrow with a sudden leap.

" In consequence of its activity and cunning, the rock-rabbit is seldom killed by white men; and when a hunter does secure one, it is generally by means of a long shot. The natives usually watch near its burrow, or noiselessly stalk it.

" I once killed one of these animals by a very long shot from a rifle, as it was sitting watching us from the top of a large boulder, at a distance of a hundred and fifty yards or thereabouts. The Dutch Boers who were with me were delighted at the sight of it, as they said it was good eating; and so it proved to be, the flesh being somewhat like that of a hare, though in our rough field-cookery we could not do justice to it."

This short narrative excellently illustrates the character of the animal, which is classed among the "four things which be exceeding wise." It is so crafty that no trap or snare ever set has induced a Hyrax to enter it, and so wary that it is with difficulty to be killed even with the aid of fire-arms. "No animal," writes Mr. Tristram, "ever gave us so much trouble to secure. . . . The only chance of securing one is to be concealed, particularly about sunset or before sunrise, on some overhanging cliff, taking care not to let the shadow be cast below, and then to wait until the little creatures cautiously peep forth from their holes. They are said to be common by those who have not looked for them, but are certainly not abundant in Palestine, and few writers have ever had more than a single glimpse of one. I had the good fortune to see one feeding in the gorge of the Kedron, and then to watch it as it sat at the mouth of its hole, ruminating, metaphorically if not literally, while waiting for sunset."

Should the Hyrax manage to catch a glimpse of the enemy, it utters a shrill cry or squeal, and darts at once to its hole—an action which is followed by all its companions as soon as they hear the warning cry. It is a tolerably prolific animal, rearing four or five young at a birth, and keeping them in a soft bed of hay and fur, in which they are almost hidden. If surprised in its hole and seized, the Hyrax will bite very sharply, its long chisel-edged teeth inflicting severe wounds on the hand that attempts to grasp it. But it is of a tolerably docile disposition, and in a short time learns to know its owner, and to delight in receiving his caresses.

Three species of Hyrax are known to naturalists. One is the Klip-das, or Rock-rabbit, of Southern Africa; the second is the Ashkoko of Abyssinia; and the third is the Syrian Hyrax, or the Coney of the Bible. The two last species have often been confounded together, but the Syrian animal may be known by the oblong pale spot on the middle of its back.



HIPPOPOTAMUS.

BEHEMOTH.

Literal translation of the word Behemoth—Various theories respecting the identity of the animal—The Hippopotamus known to the ancient Hebrews—Geographical range of the animal—"He eateth grass like the ox"—Ravages of the Hippopotamus among the crops—Structure of the mouth and teeth—The "sword or scythe" of the Hippopotamus—Some strange theories—Haunts of the Hippopotamus—The Egyptian hunter—A valuable painting—Strength of the Hippopotamus—Rising of the Nile—Modern hunters—Wariness of the Hippopotamus—The pitfall and the drop-trap.

IN the concluding part of that wonderful poem which is so familiar to us as the Book of Job, the Lord is represented as reproving the murmurs of Job, by showing that he could not even understand the mysteries of the universe, much less the purposes of the Creator. By presuming to bring a charge of injustice against his Maker, he in fact inferred that the accuser was more competent to govern the world than was the Creator, and thus laid himself open to the unanswerable irony of the splendid passages contained in chapters xl. xli., which show that man cannot even rule the animals, his fellow-creatures, much less control the destinies of the human race.

The passages with which we are at present concerned are to be found at the end of the fortieth chapter, and contain a most

powerful description of some animal which is called by the name of Behemoth. Now this word only occurs once in the whole of the Scriptures, *i.e.* in Job xl. 15: "Behold now behemoth, which I made with thee," &c. Some commentators, in consequence of the plural termination of the word, which may be literally translated as "beasts," have thought that it was a collective term for all the largest beasts of the world, such as the elephant, the hippopotamus, the wild cattle, and their like. Others have thought that the elephant was signified by the word Behemoth; and some later writers, acquainted with palæontology, have put forward a conjecture that the Behemoth must have been some extinct pachydermatous animal, like the dinothierium, in which might be combined many of the qualities of the elephant and hippopotamus.

It is now, however, agreed by all Biblical scholars and naturalists, that the hippopotamus, and no other animal, is the creature which was signified by the word Behemoth, and this interpretation is followed in the Jewish Bible.

We will now take the whole of the passage, and afterwards examine it by degrees, comparing the Authorized Version with the Jewish Bible, and noting at the same time one or two variations in the rendering of certain phrases. The passage is given as follows in the Jewish Bible, and may be compared with our Authorized Version:—

"Behold now the river-horse, which I have made with thee: he eateth grass like an ox.

"Lo now, his strength is in his loins, and his vigour is in the muscles of his body.

"He moveth his tail like a cedar: the sinews of his thighs are wrapped together.

"His bones are pipes of copper; his bones are like bars of iron.

"He is the chief of the ways of God: he that made him can alone reach his sword.

"That the mountains should bring forth food for him, and all the beasts of the field play there.

"He lieth under wild lotuses, in the covert of the reed, and fens.

"Wild lotuses cover him with their shadow; willows of the brook compass him about.

"Behold, should a river overflow, he hasteth not: he feels secure should Jordan burst forth up to his mouth.

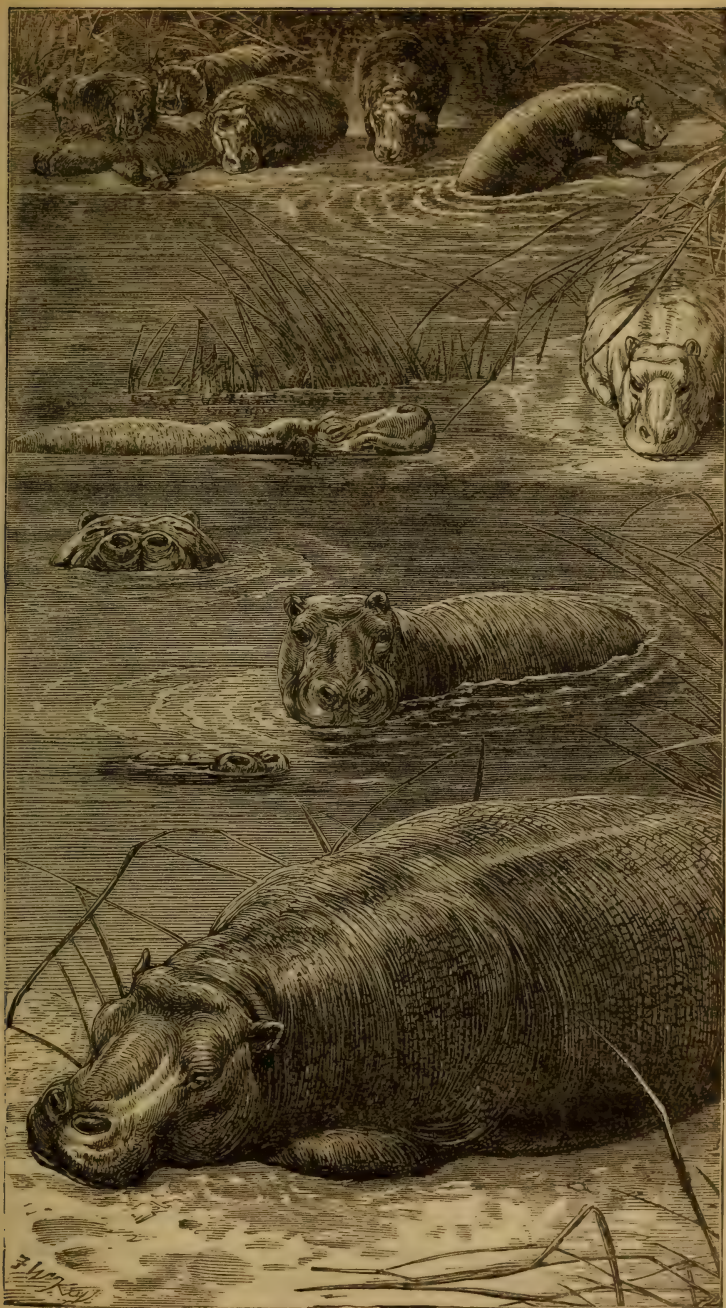
"He taketh it in with his eyes: his nose pierceth through snares."

We will now take this description in detail, and see how far it applies to the now familiar habits of the hippopotamus. A little allowance must of course be made for poetical imagery, but we shall find that in all important details the account of the Behemoth agrees perfectly with the appearance and habits of the hippopotamus.

In the first place, it is evident that we may dismiss from our minds the idea that the Behemoth was an extinct pachyderm. The whole tenor of the passage shows that it must have been an animal then existing, and whose habits were familiar to Job and his friends. Now the date of the Book of Job could not have been earlier than about 1500 B.C., and in consequence, the ideas of a palæozoic animal must be discarded.

We may also dismiss the elephant, inasmuch as it was most unlikely that Job should have known anything about the animal, and it is certain that he could not have attained the familiarity with its appearance and habits which is inferred by the context. Moreover, it cannot be said of the elephant that "he eateth grass as an ox." The elephant feeds chiefly on the leaves of trees, and when he does eat grass, he cannot do so "like an ox," but plucks it with his proboscis, and then puts the green tufts into his mouth. So characteristic a gesture as this would never have passed unnoticed in a description so full of detail.

That the hippopotamus was known to the ancient Hebrews is certain. After their sojourn in Egypt they had necessarily become familiarized with it; and if, as most commentators believe, the date of the Book of Job be subsequent to the liberation of the Israelites, there is no difficulty in assuming that Job and his companions were well acquainted with the animal. Even if the book be of an earlier date, it is still possible that the hippopotamus may, in those days, have lived in rivers where it is now as much extinct as it is in England. Mr. Tristram remarks on this point: "No hippopotamus is found in Asia, but there is no reason for asserting that it may not have had an eastern range as far as Palestine, and wallowed in the Jordan; for its bones are



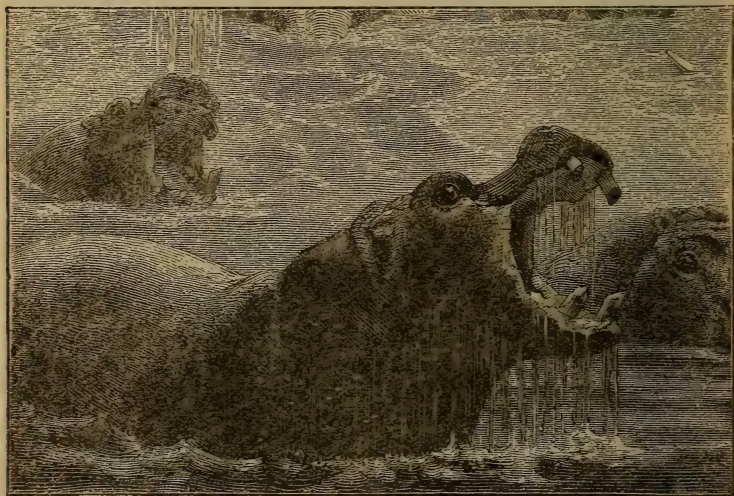
THE HIPPOPOTAMUS.

found in the *débris* of the rivers of Algeria, flowing into the Mediterranean, when tradition is quite silent as to its former existence.

There is no doubt that the hippopotamus and the urus were the two largest animals known to the Jews, and it is probably on that account that the former received the name of Behemoth.

Assuming, therefore, that the Behemoth is identical with the hippopotamus, we will proceed with the description.

"He eateth grass like the ox." The word which is here rendered "grass" is translated in Numb. xi. 5 as "leeks." It means, something that is green, and is probably used to signify green herbage of any description. Now it is perfectly true of the hippopotamus that it eats grass like an ox, or like cattle, as the passage may be translated. In order to supply its huge



THE GREAT JAWS OF THE HIPPOPOTAMUS.

massive body with nourishment, it consumes vast quantities of food. The mouth is enormously broad and shovel-shaped, so as to take in a large quantity of food at once; and the gape is so wide, that when the animal opens its jaws to their full extent it seems to split its head into two nearly equal portions. This great mobility of jaw is assisted by the peculiar form of the gape, which takes a sudden turn upwards, and reaches almost to the eyes.

Just as the mouth is formed to contain a vast quantity of



THE HIPPOPOTAMUS.

food, so the jaws and teeth are made to procure it. From the front of the lower jaw the incisor teeth project horizontally, no longer performing the ordinary duties of teeth, but being modified into tusks, which are in all probability used as levers for prising up the vegetables on which the animal lives. But the most singular portion of the jaw is the mode in which the canine teeth are modified so as to resemble the incisor teeth of rodents, and to perform a similar office.

These teeth are very long, curved, and chisel-edged at their tips, their shape being preserved by continual attrition, just as has been mentioned of the hyrax. The material of the teeth is peculiarly hard, so much so, indeed, that it is in great request for artificial teeth, the "verniers" of philosophical instruments, and similar purposes. Consequently, with these teeth the hippopotamus can cut through the stems of thick and strong herbage as with shears, and the strength of its jaws is so great that an angered hippopotamus has been known to bite a man completely in two, and to crush a canoe to fragments with a single movement of its enormous jaws.

Keeping this description in our minds, we shall see how true is the statement in verse 19. This passage is not adequately rendered in the Authorized Version : the word which is translated as "sword" also signifies a scythe, and evidently having that meaning in the text. The passage is best translated thus : "His Maker hath furnished him with his scythe."

The havoc which such an animal can make among growing crops may be easily imagined. It is fond of leaving the river, and forcing its way into cultivated grounds, where it eats vast quantities of green food, and destroys as much as it eats, by the trampling of its heavy feet. Owing to the width of the animal, the feet are placed very far apart, and the consequence is that the hippopotamus makes a double path, the feet of each side trampling down the herbage, and causing the track to look like a double rut, with an elevated ridge between them.

Some little difficulty has been made respecting the passage in verse 20, "Surely the mountains bring him forth food." Commentators ignorant of the habits of the hippopotamus, and not acquainted with the character of the country where it lives, have thought that the animal only lived in the rivers, and merely found its food along its banks, or at most upon the marshes at

the river-side. The hippopotamus, say they, is not a dweller on the mountains, but an inhabitant of the river, and therefore this passage cannot rightly be applied to the animal.

Now, in the first place, the word *harim*, which is translated as "mountains" in the Authorized Version, is rendered as "hills" by many Hebraists. Moreover, as we know from many passages of Scripture, the word "mountain" is applied to any elevated spot, without reference to its height. Such places are very common along the banks of the Nile, and are employed for the culture of vegetables, which would not grow properly upon the flat and marshy lands around them. These spots are very attractive to the hippopotamus, who likes a change of diet, and thus finds food upon the mountains. In many parts of Egypt the river runs through a mountainous country, so that the hills are within a very short distance of the water, and are easily reached by the hippopotamus.



THE HIPPOPOTAMUS EATING GRASS.

We will now proceed to the next verse. After mentioning that the Behemoth can eat grass like an ox, and finds its food upon the hills, the sacred writer proceeds to show that in its moments of repose it is an inhabitant of the rivers and marshy ground: "He lieth under the shady trees, in the covert of the reed, and fens.

"The shady trees cover him with their shadow; the willows of the brook compass him about."

Here I may remind the reader that the compound Hebrew word which is rendered in the Authorized Version as "shady trees" is translated by some persons as "wild lotuses"—a rendering which is followed by the editor of the Jewish Bible. Apparently, however, the Authorized Version gives a more correct meaning of the term. Judging from a well-known Egyptian painting,

which represents a hunter in the act of harpooning the hippopotamus, the tall papyrus reeds are the plants that are signified by this word, which occurs in no other place in the Scriptures.

Nothing can be more accurate than this description of the habits of the animal. I have now before me a number of sketches by Mr. T. Baines, representing various incidents in the life of the hippopotamus; and in one or two of them, the little islands that stud the river, as well as the banks themselves, are thickly clothed with reeds mixed with papyrus, the whole being exactly similar to those which are represented in the conventional style of Egyptian art. These spots are the favourite haunts of the hippopotamus, which loves to lie under their shadow, its whole body remaining concealed in the water, and only the eyes, ears, and nostrils appearing above the surface.

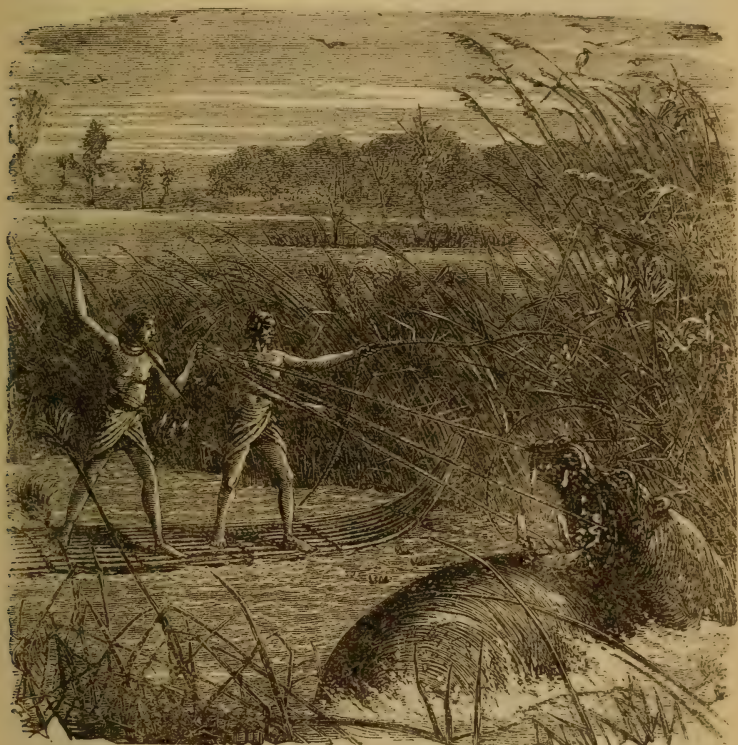
As reference will be made to this painting when we come to the Leviathan, it will be as well to describe it in detail. In order that the reader should fully understand it, I have had it translated, so to speak, from the conventional outline of Egyptian art into perspective, exactly as has been done with the Assyrian and Egyptian chariots.

In the foreground is seen the hunter, standing on a boat that closely resembles the raft-boat which is still in use in several parts of Africa. It is made of the very light wood called ambatch, by cutting down the requisite number of trees, laying them side by side so that their bases form the stern and their points the bow of the extemporized boat. They are then firmly lashed together, the pointed ends turned upwards, and the simple vessel is complete. It is, in fact, nothing more than a raft of triangular shape, but the wood is so buoyant that it answers every purpose.

In his hand the hunter grasps the harpoon which he is about to launch at the hippopotamus. This is evidently the same weapon which is still employed for that purpose. It consists of a long shaft, into the end of which a barbed iron point is loosely inserted. To the iron point is attached one end of a rope, and to the other end, which is held in the left hand of the harpooner, a float of ambatch wood is fastened.

When the weapon is thrown, the furious struggles of the wounded animal disengage the shaft of the harpoon, which is regained by the hunter; and as it dashes through the water,

throwing up spray as it goes, the ambatch float keeps the end of the rope at the surface, so that it can be seen as soon as the animal becomes quieter. Sometimes it dives to the bottom, and remains there as long as its breath can hold out ; and when it



A HIPPOPOTAMUS HUNT IN EGYPT.

(This picture is taken from an ancient Egyptian painting.)

comes up to breathe, it only pushes the nostrils out of the water under the shadow of the reeds, so that but for the float it might manage to escape.

In the meantime, guided by the float, the hunter follows the course of the animal, and, as soon as it comes within reach of his weapon, drives another spear into it, and so proceeds until the animal dies from loss of blood. The modern hunters never

throw a second harpoon unless the one already fixed gives way, mainly employing a spear to inflict the last wounds. But if we may judge from this painting, the Egyptian hunter attached a new rope with every cast of his weapon, and, when the hippopotamus became weak from its wounds, gathered up the ropes and came to close quarters.

In the bow of the boat is the hunter's assistant, armed with a rope made lasso-wise into a noose, which he is throwing over the head of the hippopotamus, whose attitude and expression show evidently, in spite of the rudeness of the drawing, the impotent anger of the weakened animal.

Behind the hippopotamus are the tall and dense reeds and papyrus under the shelter of which the animal loves to lie, and on the surface of the water float the beautiful white flowers of the lotus.

In the Egyptian painting, the artist, in spite of the conventionalities to which he was bound, has depicted the whole scene with skill and spirit. The head and open mouth of the hippopotamus are remarkably fine, and show that the artist who drew the animal must have seen it when half mad with pain, and half dead from loss of blood.

The enormous strength of the hippopotamus is shown in verses 16, 18, the last of which passages requires a little explanation. Two different words are used here to express the bones of the animal. The first is derived from a word signifying strength, and means the "strong bones," *i.e.* those of the legs. These are hollow, and are therefore aptly compared to tubes or pipes of copper. The second term is thought by some Hebraists to refer to the rib-bones, which are solid, and therefore are not likened to tubes, but to bars of iron.

The 23d verse has been translated rather variously. The Authorized Version can be seen by reference to a Bible, and another translation, that of the Jewish Bible, is given on page 374. A third, and perhaps the best rendering of this passage is given by the Rev. W. Drake, in Smith's "Dictionary of the Bible:" "Lo, the river swelleth proudly against him, yet he is not alarmed; he is securely confident though a Jordan burst forth against his mouth."

In all probability reference is here made to the annual rising of the Nile, and the inundations which it causes. In some

years, when it rises much above its usual height, the floods become most disastrous. Whole villages are swept away, and scarcely a vestige of the mud-built houses is left; the dead bodies of human beings are seen intermixed with those of cattle, and the whole country is one scene of desolation. Yet the almost amphibious hippopotamus cares nothing for the floods, as long as it can find food, and so, "though the river swelleth proudly against him," he is not alarmed.

From the use of the word "Jordan" in the same verse, it might be thought that the river of Palestine was intended. This, however, is not the case. The word "Jordan" is simply used as a poetical term for any river, and is derived from a Hebrew word which signifies "descending quickly."

We now come to the last verse of this noble description: "He taketh it in with his eyes." These words have also been variously rendered, some translating them as "He receiveth it (*i.e.* the river) up to his eyes." But the translation which seems to suit the context best is, "Who will take him when in his sight? His nose pierceth through (*i.e.* detects) snares." Now, this faculty of detecting snares is one of the chief characteristics of the hippopotamus, when it lives near places inhabited by mankind, who are always doing their best to destroy it. In the first place, its body gives them an almost unlimited supply of flesh, the fat is very highly valued for many purposes, the teeth are sold to the ivory-dealers, and the hide is cut up into whips, or khoorbashes.

There is now before me a khoorbash, purchased from a native Egyptian who was beating a servant with it. The whip is identical with that which was used by the ancient Egyptians in urging the Israelites to their tasks, and the scene reminded the traveller so forcibly of the old Scriptural times that he rescued the unfortunate servant, and purchased the khoorbash, which is now in my collection.

Not content with hunting the hippopotamus, the natives contrive various traps, either pitfalls or drop-traps. The former are simply pits dug in the path of the animal, covered with sticks and reeds, and having at the bottom a sharp stake on which the victim is impaled, and so effectually prevented from escaping or damaging the pit by its struggles.

The drop-trap is a log of wood, weighted with stones, and

having at one end an iron spike, which is sometimes poisoned. The path which the animal takes is watched, a conveniently overhanging branch is selected, and from that branch the cruel spear is suspended, by a catch or trigger, exactly over the centre of the path. There is no difficulty in finding the precise centre



HIPPOPOTAMUS AND TRAP.

of the path, owing to the peculiar gait of the animal, which has already been described. One end of the trigger supports the spear, and to the other is attached a rope, which is brought across the path in such a way that when touched it relieves the spear, which is driven deeply into the animal's back. If well hung, the spear-blade divides the spine, and the wounded animal

falls on the spot, but, even if it should miss a vital part, the poison soon does its fatal work.

In consequence of the continual persecution to which it is subjected, the hippopotamus becomes exceedingly wary, and, huge, clumsy, and blundering as it looks, is clever enough to detect either pitfall or drop-trap that have not been contrived with especial care. An old and experienced hippopotamus becomes so wary that he will be suspicious even of a bent twig, and, rather than venture across it, he will leave the path, force for himself a roundabout passage, and return to the path beyond the object that alarmed him.

Mr. T. Baines, to whose sketches I am indebted for the illustration, told me that the hippopotamus is possessed of much more intellect than might be expected from a creature of so dull, clumsy, and unpromising aspect. Apathetic it generally is, and, as long as it is left unmolested, does not care to molest even the human beings that intrude upon its repose.

It likes to lie in the shade of the reeds and rushes, and may be seen floating in the water, with only the nostrils, the eyes, and the ears above the surface, these organs being set in a line along the head, evidently for the purpose of allowing the whole body to be hidden under water while the three most important senses are capable of acting.

A canoe-man who knows the habits of the hippopotamus will fearlessly take his fragile vessel through a herd of the animals, knowing that, if he only avoids contact with them, they will not interfere with him. The only danger is, that a hippopotamus may rise under the canoe, and strike itself against the boat, in which case the animal is rather apt to consider the intruding object as an enemy, and to attack it, sometimes crushing the canoe between its teeth, and mostly upsetting it, and throwing the crew into the water. In such a case, the men always dive at once to the bottom of the river, and hold on to some weed or rock as long as they can exist without breathing. The reason for this proceeding is, that the hippopotamus always looks for its enemy upon the surface of the water, and, if the men were to swim to shore, they would be caught and killed before they had swum many strokes. But, as it sees nothing but the damaged canoe, its short-lived anger vanishes, and it sinks again

into the river, leaving the men at liberty to regain and repair their vessel.

There is one passage in the description of the Behemoth which requires a few words of explanation: "He moveth his tail like a cedar" (v. 17).

Several commentators have imagined that this expression shows that the Behemoth must have been an animal which had a very long and powerful tail, and have adduced the passage as a proof that the crocodile was the animal that was signified by the Behemoth. Others, again, have shifted the position of the tail, and, by rendering it as the "proboscis," have identified the Behemoth with the elephant. There is, however, no necessity for straining the interpretation, the passage evidently signifying that the member in question is stiff and inflexible as the cedar-stem.





BABOON.

THE APE.

The Monkey tribe rarely mentioned in Scripture—Why the Ape was introduced into Palestine—Solomon's ships, and their cargo of Apes, peacocks, ivory, and gold—Various species of Monkey that might have been imported—Habits of the Monkey, and reverence in which it is held by the natives—The Egyptians and their Baboon worship—Idols and memorials—The Wanderoo—its singular aspect—Reasons why it should be introduced into Palestine—General habits of the Wanderoo—Various species of Monkey that may be included in the term "Kophim."

ANIMALS belonging to the monkey tribe are but sparingly mentioned in Holy Writ. If, as is possible, the Satyr of Scripture signifies some species of baboon, there are but three passages either in the Old or New Testament where these animals are mentioned. In 1 Kings x. 22, and the parallel passage 2 Chron. ix. 21, the sacred historian makes a passing allusion to apes as forming part of the valuable cargoes which were brought by Solomon's fleet to Tharshish, the remaining

articles being gold, ivory, and peacocks. The remaining passage occurs in Is. xiii. 21, where the prophet foretells that on the site of Babylon satyrs shall dance.

The reason for this reticence is simple enough. No monkey was indigenous to Palestine when the various writers of the Bible lived, and all their knowledge of such animals must have been derived either from the description of sailors, or from the sight of the few specimens that were brought as curiosities from foreign lands. Such specimens must have been extremely rare, or they would not have been mentioned as adjuncts to the wealth of Solomon, the wealthiest, as well as the wisest monarch of his time. To the mass of the people they must have been practically unknown, and therefore hold but a very inferior place in the Scriptures, which were addressed to all mankind.

There is scarcely any familiar animal, bird, reptile or insect, which is not used in some metaphorical sense in the imagery which pervades the whole of the Scriptures. For example, the various carnivorous animals, such as the lion, wolf, and bear, are used as emblems of destruction in various ways; while the carnivorous birds, such as the eagle and hawk, and the destructive insects, such as the locust and the caterpillar, are all similarly employed in strengthening and illustrating the words of Holy Writ.

But we never find any animal of the monkey tribe mentioned metaphorically, possibly because any monkeys that were imported into Palestine must only have been intended as objects of curiosity, just as the peacocks which accompanied them were objects of beauty, and the gold and ivory objects of value—all being employed in the decoration of the king's palace.

The question that now comes before us is the species of monkey that is signified by the Hebrew word *Kophim*. In modern days, we distinguish this tribe of animals into three great sections, namely, the apes, the baboons, and the monkey; and according to this arrangement the ape, being without tails, must have been either the chimpanzee of Africa, the orang-outan of Sumatra, or one of the Gibbons. But there is no reason to imagine that the word *Kophim* was intended to represent any one of these animals, and it seems evident that the word was applied to any species of monkey, whether it had a tail or not.

Perhaps the best method of ascertaining approximately the

particular species of monkey, is to notice the land from which the animals came. Accordingly, we find that the ships of Solomon brought gold, ivory, apes, and peacocks, and that they evidently brought their cargoes from the same country. Consequently, the country in question must produce gold, and must be inhabited by the monkey tribe, by the elephant, and by the peacock. If the peacock had not been thus casually mentioned, we should have been at a loss to identify the particular country to which reference is made ; but the mention of that bird shows that some part of Asia must be signified. It is most probable



THE RHESUS MONKEY.

that the vessels in question visited both India and Ceylon, although, owing to the very imperfect geographical knowledge of the period, it is not possible to assert absolutely that this is the case. In India, however, and the large island of Ceylon, gold, elephants, peacocks, and monkeys exist ; and therefore we will endeavour to identify the animals which are mentioned under the general term Apes, or Kophim.

We are quite safe in suggesting that some of the apes in question must have belonged to the Macaques, and it is most likely that one of them was the RHESUS MONKEY.

This animal is very plentiful in India, and is one of the many creatures which are held sacred by the natives. Consequently, it takes up its quarters near human habitations, feeling sure that it will not be injured, and knowing that plenty of food is at hand. It is said that in some parts of India the natives always leave one-tenth of their grain-crops for the monkeys, and thus



FEEDING THE MONKEYS IN INDIA.

the animals content themselves with this offering, and refrain from devastating the fields, as they would otherwise do. This story may be true or not. It is certainly possible that in a long series of years the monkeys of that neighbourhood have come to look upon their tithe as a matter belonging to the ordinary course of things ; but whether it be true or not, it illustrates the reverence entertained by the Hindoos for their monkeys.

In many places where grain and fruit crops are cultivated, the monkeys get rather more than their share, plundering without scruple, and finding no hindrance from the rightful owners, who dare not drive them away, lest they should injure any of these sacred beings. However, being of the opinion that no evil will follow a foreigner's action, they are only too glad to avail themselves of the assistance of Europeans, who have no scruples on the subject. Still, although they are pleased to see the



TROUBLESOME NEIGHBORS.

monkeys driven off, and their crops saved, they would rather lose all their harvest than allow a single monkey to be killed, and in the earlier years of the Indian colony, several riots took place between the natives and the English, because the latter had killed a monkey through ignorance of the reverence in which it was held.

Another monkey which may probably have been brought to Palestine from India is the HOONUMAN, ENTELLUS, or MAKUR,

which is more revered by the Hindoos than any other species. Its scientific title is *Presbytes entellus*. In some parts of India it is worshipped as a form of divinity, and in all it is revered and protected to such an extent that it becomes a



MONKEYS ENTERING A PLANTATION.

positive nuisance to Europeans who are not influenced by the same superstitious ideas as those which are so prevalent in India. Being a very common species, it could easily be captured, especially if, as is likely to be the case, it was fearless of man through long immunity from harm. The sailors who manned Solomon's navy would not trouble themselves about the sacred character of the monkeys, but would take them without the least scruple wherever they could be found.

The Hoonuman would also be valued by them on account of its docility when taken young, and the amusing tricks which it is fond of displaying in captivity as well as in a state of freedom. Moreover, it is rather a pretty creature, the general colour being yellowish, and the face black,

Perfectly aware of the impunity with which they are permitted to act, these monkeys prefer human habitations to the forests which form the natural home of their race, and crowd into the villages and temples, the latter being always swarming with the long-tailed host. As is the case with the Rhesus, the Hoonuman monkeys are much too fond of helping themselves



SLOTHFUL MONKEYS.

from the shops and stalls, and if they can find a convenient roof, will sit there and watch for the arrival of the most dainty fruits.

However, the natives, superstitious as they are, and unwilling to inflict personal injury on a monkey, have no scruple in making arrangements by which a monkey that trespasses on forbidden spots will inflict injury on itself. They may not shoot or wound in any way the monkeys which cluster on their roofs,

and the animals are so perfectly aware of the fact, that they refuse to be driven away by shouts and menacing gestures. But, they contrive to make the roofs so uncomfortable by covering them with thorns, that the monkeys are obliged to quit their points of vantage, and to choose some spot where they can sit down without fear of hurting themselves.



A PRIVILEGED RACE.

That the Hindoos should pay homage almost divine to a monkey, does seem equally absurd and contemptible. But, strange as this superstition may be, and the more strange because the intellectual powers of the educated Hindoos are peculiarly subtle and penetrating, it was shared by a greater, a mightier, and a still more intellectual race, now extinct as a nation. The ancient Egyptians worshipped the baboon, and ranked it among the most potent of their deities; and it can but strike us with wonder when we reflect that a people who could erect buildings perfectly unique in the history of the world, who held the fore-

most place in civilization, who perfected arts which we, at a distance of three thousand years, have only just learned, should pay divine honours to monkeys, bulls, and snakes. Such, however, was the case; and we find that the modern Hindoo shows as great reverence for the identical animals as did the Egyptian when Pharaoh was king, and Joseph his prime minister.

It is said by some, that neither the Egyptian of the ancient times, nor the Hindoo of the present day, actually worshipped these creatures, but that they revered them as external signs of some attribute of God. Precisely the same remarks have been made as to the worship of idols, and it is likely enough that the highly educated among the worshippers did look upon a serpent merely as an emblem of divine wisdom, a bull as an image of divine strength, and a monkey as an external memorial of the promised incarnation of divinity. So with idols, which to the man of educated and enlarged mind were nothing but visible symbols employed for the purpose of directing the mind in worship. But, though this was the case with the educated and intellectual, the ignorant and uncultivated, who compose the great mass of a nation, did undoubtedly believe that both the living animal and the lifeless idol were themselves divine, and did worship them accordingly.

There is one species of monkey, which is extremely likely to have been brought to Palestine, and used for the adornment of a luxurious monarch's palace. This is the WANDEROO, or NIL-BHUNDER (*Silenus veter*). The Wanderoo, or Ouanderoo, as the name is sometimes spelled, is a very conspicuous animal, on account of the curious mane that covers its neck and head, and the peculiarly formed tail, which is rather long and tufted, like that of a baboon, and has caused it to be ranked among those animals by several writers, under the name of the Lion-tailed Baboon. That part of the hairy mass which rolls over the head is nearly black, but as it descends over the shoulders, it assumes a greyer tinge, and in some specimens is nearly white. As is the case with many animals, the mane is not noticeable in the young specimens, but increases in size with age, only reaching its full dimensions when the animal has attained adult age. Only in the oldest specimens is the full, white, venerable, wig-like mane to be seen in perfection.

In captivity, the general demeanour of this monkey corresponds with its grave and dignified aspect. It seems to be more sedate than the ordinary monkeys, to judge from the specimens which have lived in the Zoological Gardens, and sits peering with its shiny brown eyes out of the enormous mane, with as much gravity as if it were really a judge deciding an important case in law. Not that it will not condescend to the little tricks and playful sallies for which the monkeys are so celebrated; but it soon loses the vivacity of youth, and when full-



THE WANDEROO.

grown, presents as great a contrast to its former vivacity, as does a staid full-grown cat sitting by the fire, to the restless, lively, playful kitten of three months old. During its growth, it can be taught to go through several amusing performances, but it has little of the quick, mercurial manner, which is generally found among the monkey tribe.

The docility of the Wanderoo often vanishes together with its youth. The same animal may be gentle, tractable, and teachable when young, and yet, when a few years have passed over its head and whitened its mane, may be totally obstinate and dull.



THE ENEMY DISCOVERED.

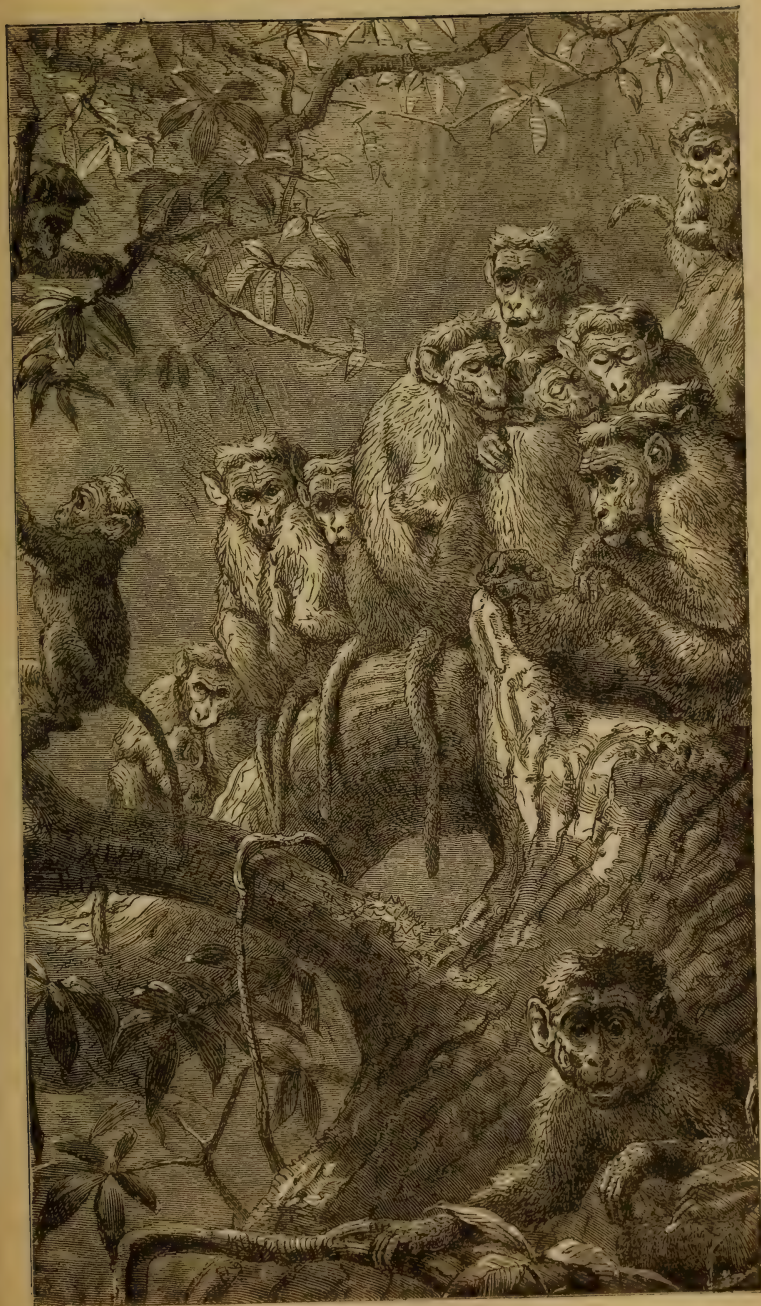
The natives of the country in which the Wanderoo lives, attribute to it the wisdom which its venerable aspect seems to imply, much as the ancient Athenians venerated the owl as the bird of wisdom, and the chosen companion of the learned Minerva. In many places, the Wanderoo is thought to be a sort of king among monkeys, and to enjoy the same supremacy over its maneless kinsfolk, that the king-vulture maintains over the other vultures which are destitute of the brilliant crest that marks its rank.

I am induced to believe that the Wanderoo must have been one of the monkeys which were brought to Solomon, for two reasons.

In the first place, it is a native both of India and Ceylon, and therefore might have formed an article of merchandise, together with the peacock, gold, and ivory. And if, as is extremely probable, the Tharshish of the Scripture is identical with Ceylon, it is almost certain that the Wanderoo would have been brought to Solomon, in order to increase the glories of his palace. Sir Emerson Tennant points out very forcibly, that in the Tamil language, the words for apes, ivory, and peacocks, are identical with the Hebrew names for the same objects, and thus gives a very strong reason for supposing that Ceylon was the country from which Solomon's fleet drew its supplies.

Another reason for conjecturing that the Wanderoo would have been one of the animals sent to grace the palace of Solomon is this. In the days when that mighty sovereign lived, as indeed has been the case in all partially civilized countries, the kings and rulers have felt a pride in collecting together the rarest objects which they could purchase, giving the preference to those which were in any way conspicuous, whether for intrinsic value, for size, for beauty, or for ugliness. Thus, giants, dwarfs, and deformed persons of either sex, and even idiots, were seen as regular attendants at royal courts, a custom which extended even into the modern history of England, the "Fool" being an indispensable appendage to the train of every person of rank. Animals from foreign lands were also prized, and value was set upon them, not only for their variety, but for any external characteristic which would make them especially conspicuous.

Ordinary sovereigns would make collections of such objects, simply because they were rare, and in accordance with the



BONNET MONKEYS.

general custom; and in importing the "apes" and peacocks together with the gold and ivory, Solomon but followed the usual custom. He, however, on whom the gift of wisdom had been especially bestowed, would have another motive besides ostentation or curiosity. He was learned in the study of that science which we now call Natural History. It is, therefore, extremely probable, that he would not neglect any opportunities of procuring animals from distant lands, in order that he might study the products of countries which he had not personally visited, and it is not likely that so conspicuous an animal as the Wanderoo would have escaped the notice of those who provided the cargo for which so wealthy a king could pay, and for which they would demand a price proportionate to its variety.

There is perhaps no monkey which is so conspicuous among its kin as the Wanderoo, and certainly no monkey or ape inhabiting those parts of the world to which the fleet of Solomon would have access. Its staid, sedate manners, its black body, lion-like tail, and huge white-edged mane, would distinguish it so boldly from its kinsfolk, that the sailors would use all their efforts to capture an animal for which they would be likely to obtain a high price.

The peculiar and unique character of Solomon affords good reason for conjecture that, not only were several species of the monkey tribe included under the general word *Kophim*, but that the number of species must have been very great. He wrote largely of the various productions of the earth, and, to judge him by ourselves, it is certain that with such magnificent means at his command, he would have ransacked every country that his ships could visit, for the purpose of collecting materials for his works. It is therefore almost certain that under the word *Kophim* may be included all the most plentiful species of monkey which inhabit the countries to which his fleet had access, and that in his palace were collected together specimens of each monkey which has here been mentioned, besides many others of which no special notice need be taken, such as the Bonnet Monkeys, and other Macaques.



THE BAT.

THE BAT.

The Bat mentioned always with abhorrence—Meaning of the Hebrew name—The prohibition against eating Bats—The edible species, their food and mode of life—The noisome character of the Bat, and the nature of its dwelling-place—Its hatred of light—Mr. Tristram's discoveries—Bats found in the quarries from which the stone of the Temple was hewn—Edible Bats in a cave near the centre of Palestine—Another species of long-tailed Bat captured in the rock caves where hermits had been buried—Other species which probably inhabit Palestine.

AMONG the animals that are forbidden to be eaten by the Israelites we find the BAT prominently mentioned, and in one or two parts of Scripture the same creature is alluded to with evident abhorrence. In Isaiah ii. 20, for example, it is prophesied that when the day of the Lord comes, the worshippers of idols will try to hide themselves from the presence of the Lord, and will cast their false gods to the bats and the moles, both animals being evidently used as emblems of darkness and ignorance, and associated together for a reason which will be given when treating of the mole. The Hebrew name of the Bat is expressive of its nocturnal habits, and literally signifies some being that flies by night, and it is a notable fact that the

Greek and Latin names for the bat have also a similar derivation.

In Lev. xi. 20, the words, "All fowls that creep, going upon all four, shall be an abomination unto you," are evidently intended to apply to the bat, which, as is now well known, is not a bird with wings, but a mammal with very long toes, and a well developed membrane between them. Like other mammals, the Bat crawls, or walks, on all four legs, though the movement is but a clumsy one, and greatly different from the graceful ease with which the creature urges its course through the evening air in search of food.

Perhaps the prohibition to eat so unsightly an animal may seem almost needless; but it must be remembered that in several parts of the earth, certain species of Bat are used as food. These are chiefly the large species, that are called Kalongs, and which feed almost entirely on fruit, thus being to their insectivorous relatives what the fruit-loving bear is among the larger carnivora. These edible Bats have other habits not shared by the generality of their kin. Some of the species do not retire to caves and hollow trees for shelter during their hours of sleep, but suspend themselves by their hind legs from the topmost branches of the trees whose fruit affords them nourishment. In this position they have a most singular aspect, looking much as if they themselves were large bunches of fruit hanging from the boughs. Thus, they are cleanly animals, and are as little repulsive as bats can be expected to be.

But the ordinary bats, such as are signified by the "night-fliers" of the Scriptures, are, when in a state of nature, exceedingly unpleasant creatures. Almost all animals are infested with parasitic insects, but the Bat absolutely swarms with them, so that it is impossible to handle a Bat recently dead without finding some of them on the hands. Also, the bats are in the habit of resorting to caverns, clefts in the rocks, deserted ruins, and similar dark places, wherein they pass the hours of daylight, and will frequent the same spots for a long series of years. In consequence of this habit, the spots which they select for their resting place become inconceivably noisome, and can scarcely be entered by human beings, so powerful is the odour with which they are imbued.

Sometimes, when travellers have been exploring the chambers

of ruined buildings, or have endeavoured to penetrate into the recesses of rocky caves, they have been repelled by the bats which had taken up their habitation therein. No sooner does the light of the torch or lamp shine upon the walls, than the



BATS' RESTING-PLACE.

clusters of bats detach themselves from the spots to which they had been clinging, and fly to the light like moths to a candle. No torch can withstand the multitude of wings that come flapping about it, sounding like the rushing of a strong wind, while

the bats that do not crowd around the light, dash against the explorers, beating their leathery wings against their faces, and clinging in numbers to their dress. They would even settle on the face unless kept off by the hands, and sometimes they force the intruders to beat a retreat. They do not intend to attack, for they are quite incapable of doing any real damage; and, in point of fact, they are much more alarmed than those whom they annoy. Nocturnal in their habits, they cannot endure the light, which completely dazzles them, so that they dash about at random, and fly blindly towards the torches in their endeavours to escape.

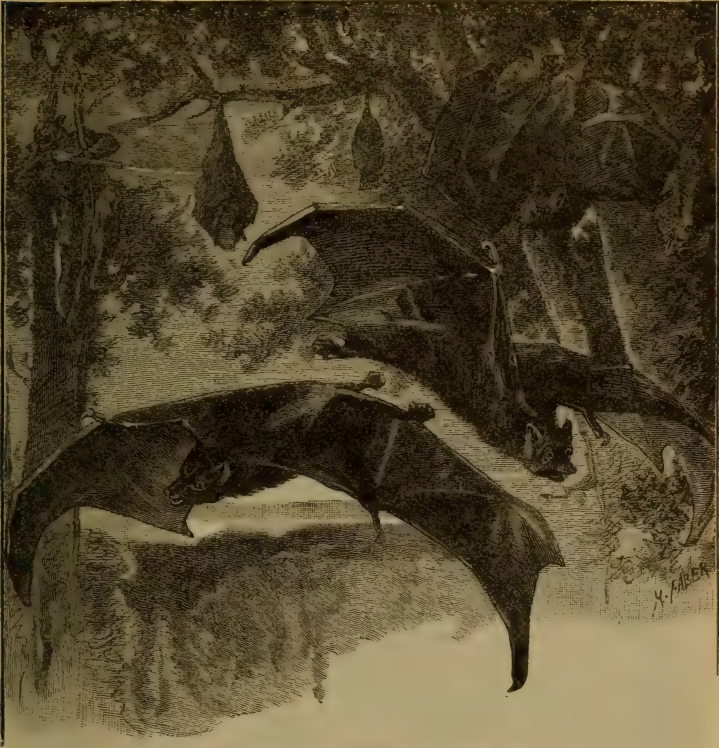
If, then, we keep in mind the habits of the bats, we shall comprehend that their habitations must be inexpressibly revolting to human beings, and shall the better understand the force of the prophecy that the idols shall be cast to the bats and the moles.

No particular species of Bat seems to be indicated by the Hebrew word *Hatalleph*, which is evidently used in a comprehensive sense, and signifies all and any species of Bat. Until very lately, the exact species of Bats which inhabit Palestine were not definitely ascertained, and could only be conjectured. But, Mr. Tristram, who travelled in the Holy Land for the express purpose of investigating its physical history, has set this point at rest, in his invaluable work, "*The Land of Israel*," to which frequent reference will be made in the course of the following pages.

Almost every cavern which he entered was tenanted by bats, and he procured several species of these repulsive but interesting animals. While exploring the vast quarries in which the stone for the Temple was worked beneath the earth, so that no sound of tool was heard during the building, numbers of bats were disturbed by the lights, and fluttered over the heads of the exploring party.

On another occasion, he was exploring a cave near the centre of Palestine, when he succeeded in procuring some specimens, and therefore in identifying at least one species. "In climbing the rocks soon afterwards, to examine a cave, I heard a singular whining chatter within, and on creeping into its recesses, a stone thrown up roused from their roosting-places a colony of large bats, the soft waving flap of whose wings I could hear in the darkness. How to obtain one I knew not; but on vigorously plying my

signal whistle, all the party soon gathered to my help. B. suggested smoking them, so a fire of brushwood was kindled, and soon two or three rushed out. Two fell to our shot, and I was delighted to find myself the possessor of a couple of large fox-headed bats of the genus *Pteropus* (*Xantharpya ægyptiaca*), and



GREAT FOX-HEADED BAT, OR FLYING FOX.

extending twenty and a half inches from wing to wing. As none of the bats of Palestine are yet known, this was a great prize, and another instance of the extension westward of the Indian fauna." These Bats belong to the fruit-eating tribe, and are closely allied to the Flying Foxes of Java, Australia, and Southern Africa. Therefore, this would be one of the species commonly used for food, and hence the necessity for the prohibition. The present species extends over the greater part of Northern Africa and into parts of Asia.

The same traveller subsequently discovered several more species of bats. On one occasion, he was exploring some caves, near the site of the ancient Jericho. On the eastern face of the cliffs are a number of caves, arranged in regular tiers, and originally approached by steps cut out of the face of the rock. These staircases are, however, washed away by time and the rains, and in consequence the upper tiers were almost inacces-



CAVE NEAR THE SITE OF ANCIENT JERICO.

sible. In some of these caves the walls were covered with brilliant, but mutilated frescoes; and in others, hermits had lived and died and been buried. Mr. Tristram and his companions had penetrated to the second tier, and there made a curious discovery.

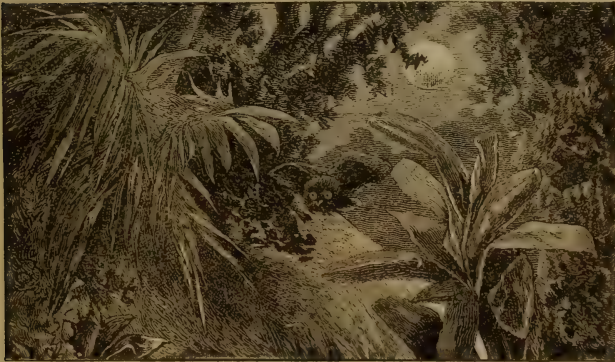
"In the roof of this was a small hole, athwart which lay a stick. After many efforts, we got a string across it, and so

hauled up a rope, by which, finding the stick strong enough, we climbed, and with a short exercise of the chimney-sweeper's art, we found ourselves in a third tier of cells, similar to the lower ones, and covered with the undisturbed dust of ages. Behind the chapel was a dark cave, with an entrance eighteen inches high. Having lighted our lantern, we crept in on our faces, and found the place full of human bones and skulls; with dust several inches deep. We were in an ancient burying-place of the Anchorites, or hermits of the country, whose custom it was to retire to such desert and solitary places.

"Their bones lay in undisturbed order, probably as the corpses had been stretched after death.

"After capturing two or three long-tailed bats, of a species new to us, which were the only living occupants of the cave, we crept out, with a feeling of religious awe, from this strange, sepulchral cavern."

Besides the species of bats that have been described, it is probable that representatives of several more families of bats inhabit Palestine.

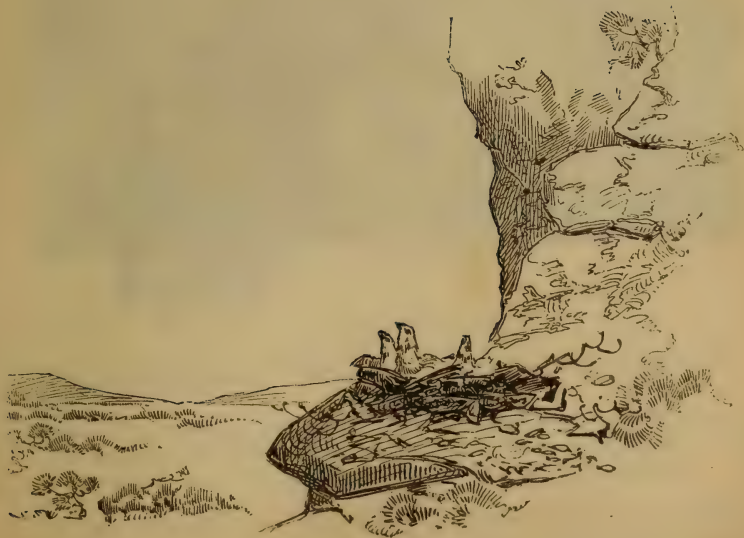




LEOPARDS.



BIRDS.







THE

LÄMMERGEIER, OR OSSIFRAGE OF SCRIPTURE.

Difficulty of identifying the various birds mentioned in Scripture—The vultures of Palestine—The Lämmergeier, or Ossifrage of Scripture—Appearance of the Lämmergeier—Its flight and mode of feeding—Nest of the Lämmergeier.

It has already been mentioned that even the best Biblical scholars have found very great difficulties in identifying several

of the animals which are named in Scripture. This difficulty is greatly increased when we come to the BIRDS, and in many instances it is absolutely impossible to identify the Hebrew word with any precise species. In all probability, however, the nomenclature of the birds is a very loose one, several species being classed under the same title.



THE LAMMERGEIER.

Keeping this difficulty in mind, I shall mention all the species which are likely to have been classed under a single title, giving a general description of the whole, and a detailed account of the particular species which seems to answer most closely to the Hebrew word.

FOLLOWING the arrangement which has been employed in this work, I shall begin with the bird which has been placed by

zoologists at the head of its class, namely, the LÄMMERGEIER, the bird which may be safely identified with the Ossifrage of Scripture. The Hebrew word is "Peres," a term which only occurs twice when signifying a species of bird; namely, in Lev. xi. 13, and the parallel passage in Deut. xiv. 12. The first of these passages runs as follows: "These ye shall have in abomination among the fowls; they shall not be eaten, they are an abomination: the eagle, and the ossifrage, and the ospray." The corresponding passage in Deuteronomy has precisely the same signification, though rather differently worded: "These are they of which ye shall not eat: the eagle, and the ossifrage, and the ospray."

The word *peres* signifies a breaker; and the Latin term *Ossifraga*, or Bone-breaker, is a very good translation of the word. How it applies to the Lämmergeier we shall presently see.

The Lämmergeier belongs to the vultures, but has much more the appearance of an eagle than a vulture, the neck being clothed with feathers, instead of being naked or only covered with down. It may at once be known by the tuft of long, hair-like feathers which depends from the beak, and which has gained for the bird the title of Bearded Vulture. The colour of the plumage is a mixture of different browns and greys, tawny below and beautifully pencilled above, a line of pure white running along the middle of each feather. When young it is nearly black, and indeed has been treated as a separate species under the name of Black Vulture.

It is one of the largest of the flying birds, its length often exceeding four feet, and the expanse of its wings being rather more than ten feet. In consequence of this great spread of wing, it looks when flying like a much larger bird than it really is, and its size has often been variously misstated. Its flight, as may be imagined from the possession of such wings, is equally grand and graceful, and it sweeps through the air with great force, apparently unaccompanied by effort.

The Lämmergeier extends through a very large range of country, and is found throughout many parts of Europe and Asia. It is spread over the Holy Land, never congregating in numbers, like ordinary vultures, but living in pairs, and scarcely any ravine being uninhabited by at least one pair of Lämmergeiers.

The food of the Lämmergeier is, like that of other vultures, the flesh of dead animals, though it does not feed quite in the same manner that they do. When the ordinary vultures have found a carcase they tear it to pieces, and soon remove all the flesh. This having been done, the Lämmergeier comes to the half-picked bones, eats the remaining flesh from them, and finishes by breaking them and eating the marrow. That a bird should be able to break a bone as thick and hard as the thigh-bone of a horse or ox seems rather problematical, but the bird achieves the feat in a simple and effectual manner.

Seizing the bone in its claws, it rises to an immense height in the air, and then, balancing itself over some piece of rock, it lets the bone fall, and sweeps after it with scarce less rapidity than the bone falls. Should the bone be broken by the fall, the bird picks the marrow out of the fragments; and should it have escaped fracture by reason of falling on a soft piece of ground instead of a hard rock, the bird picks it up, and renews the process until it has attained its object. It will be seen, therefore, that the name of Ossifrage, or Bone-breaker, may very properly be given to this bird.

Not only does it extract the marrow from bones in this peculiar manner, but it procures other articles of food by employing precisely the same system. If it sees a tortoise, many of which reptiles are found in the countries which it inhabits, it does not waste time and trouble by trying to peck the shell open, but carries its prey high in the air, drops it on the ground, and so breaks its shell to pieces. Tortoises are often very hard-shelled creatures, and the Lämmergeier has been observed to raise one of them and drop it six or seven times before the stubborn armour would yield. Snakes, too, are killed in a similar manner, being seized by the neck, and then dropped from a height upon rocks or hard ground. The reader may perhaps be aware that the Hooded Crow of England breaks bones and the shells of bivalve molluscs in a similar manner.

Mr. Tristram suggests, with much probability, that the "eagle" which mistook the bald head of the poet Æschylus for a white stone, and killed him by dropping a tortoise upon it, was in all likelihood a Lämmergeier, the bird being a denizen of the same country, and the act of tortoise-dropping being its usual mode of killing those reptiles.



A SUCCESSFUL DEFENCE.

We now see why the Lämmergeier is furnished with such enormous wings, and so great a power of flight, these attributes being needful in order to enable it to lift its prey to a sufficient height. The air, as we all know, becomes more and more attenuated in exact proportion to the height above the earth ; and did not the bird possess such great powers of flight, it would not be able to carry a heavy tortoise into the thinner strata of air which are found at the height to which it soars.

The instinct of killing its prey by a fall is employed against other animals besides snakes and tortoises, though exerted in a somewhat different manner. The bird, as has already been mentioned, lives among mountain ranges, and it may be seen floating about them for hours together, watching each inch of ground in search of prey. Should it see a goat or other inhabitant of the rocks standing near a precipice, the Lämmergeier sweeps rapidly upon it, and with a blow of its wing knocks the animal off the rock into the valley beneath, where it lies helplessly maimed, even if not killed by the fall.

Even hares and lambs are killed in this manner, and it is from the havoc which the Lämmergeier makes among the sheep that it has obtained the name of Lämmergeier, or Lamb-Vulture. So swift and noiseless is the rush of the bird, that an animal which has once been marked by its blood-red eye seldom escapes from the swoop ; and even the Alpine hunters, who spend their lives in pursuit of the chamois, have occasionally been put in great jeopardy by the sudden attack of a Lämmergeier, the bird having mistaken their crouching forms for the chamois, and only turned aside at the last moment.

The reason for employing so remarkable a mode of attack is to be found in the structure of the feet, which, although belonging to so large and powerful a bird, are comparatively feeble, and are unable, like those of the eagle, to grasp the living animal in a deadly hold, and to drive the sharp talons into its vitals. They are not well adapted for holding prey, the talons not possessing the hook-like form or the sharp points which characterise those of the eagle. The feet, by the way, are feathered down to the toes. The beak, too, is weak when compared with the rest of the body, and could not perform its work were not the object which it tears previously shattered by the fall from a height.



The nest of the Lämmergeier is made of sticks and sods, and is of enormous dimensions. It is almost always placed upon a lofty cliff, and contains about a wagon-load or so of sticks rudely interwoven, and supporting a nearly equal amount of sods and moss.

An allied species lives in Northern Africa, where it is called by a name which signifies Father Longbeard, in allusion to the beard-like tufts of the bill.



THE EGYPTIAN VULTURE, OR GIER-EAGLE.

The Râchâm or Gier-Eagle identified with the Egyptian Vulture—Its appearance on the Egyptian monuments—The shape, size, and colour of the bird—Its value as a scavenger, and its general habits—The Egyptian Vultures and the griffons—Its fondness for the society of man—Nest of the Egyptian Vulture.

IN the same list of unclean birds which has already been given, we find the name of a bird which we can identify without much difficulty, although there has been some little controversy about it. This is the so-called Gier-Eagle, which is named with the cormorant and the pelican as one of the birds which the Jews are forbidden to eat. The word which is translated as Gier-Eagle is Râchâm, a name which is almost identical with the Arabic name of the EGYPTIAN VULTURE, sometimes called Pharaoh's Chicken, because it is so often sculptured on the ancient monuments of Egypt. It is called by the Turks by a name which signifies White Father, in allusion to the colour of its plumage.

This bird is not a very large one, being about equal to a raven in size, though its enormously long wings give it an appearance of much greater size. Its colour is white, with the exception of the quill feathers of the wings, which are dark-brown. The bill and the naked face and legs are bright ochreous yellow. It does not attain this white plumage until its third year, its colour before reaching adult age being brown, with a grey neck and dull yellow legs and face.

The Egyptian Vulture, although not large, is a really handsome bird, the bold contrast of pure white and dark brown being very conspicuous when it is on the wing. In this plumage it has never been seen in England, but one or two examples are known of the Egyptian Vulture being killed in England while still in its dark-brown clothing.

It inhabits a very wide range of country, being found throughout all the warmer parts of the Old World. Although

it is tolerably plentiful, it is never seen in great numbers, as is the case with several of the vultures, but is always to be found in pairs, the male and female never separating, and invariably being seen close together. In fact, in places where it is common it is hardly possible to travel more than a mile or two without seeing a pair of Egyptian Vultures. Should more than two of these birds be seen together, the spectator may be sure that they



EGYPTIAN VULTURE, OR GIER-EAGLE.

have congregated over some food. It has been well suggested that its Hebrew name of *Râchâm*, or Love, has been given to it in consequence of this constant association of the male and female.

The Egyptian Vulture is one of the best of scavengers, not only devouring the carcasses of dead animals, but feeding on every kind of offal or garbage. Indeed, its teeth and claws are

much too feeble to enable it to cope with the true vultures in tearing up a large carcase, and in consequence it never really associates with them, although it may be seen hovering near them, and it never ventures to feed in their company, keeping at a respectful distance while they feed, and, when they retire, humbly making a meal on the scraps which they have left.

Mr. Tristram narrates an amusing instance of this trait of character. "On a subsequent occasion, on the north side of Hermon, we observed the griffons teaching a lesson of patience to the inferior scavengers. A long row of Egyptian vultures were sitting on some rocks, so intently watching a spot in a corn-field that they took no notice of our approach. Creeping cautiously near, we watched a score of griffons busily engaged in turning over a dead horse, one side of which they had already reduced to a skeleton.

"Their united efforts had just effected this, when we showed ourselves, and they quickly retired. The inferior birds, who dreaded us much less than them, at once darted to the repast, and, utterly regardless of our presence within ten yards of them, began to gorge. We had hardly retired two hundred yards, when the griffons came down with a swoop, and the Egyptian vultures and a pair or two of eagles hurriedly resumed their post of observation; while some black kites remained, and contrived by their superior agility to filch a few morsels from their lordly superiors."

So useful is this bird as a scavenger, that it is protected in all parts of the East by the most stringent laws, so that a naturalist who wishes for specimens has some difficulty in procuring the bird, or even its egg. It wanders about the streets of the villages, and may generally be found investigating the heaps of refuse which are left to be cleared away by the animals and birds which constitute the scavengers of the East.

It not only eats dead animal substances, but kills and devours great quantities of rats, mice, lizards, and other pests that swarm in hot countries. So tame is it, that it may even be observed, like the gull and the rook of our own country, following the ploughman as he turns up the ground, and examining the furrow for the purpose of picking up the worms, grubs, and similar creatures that are disturbed by the share.

Being thus protected and encouraged by man, there is good

reason why it should have learned in course of time to fear him far less than its own kind. Indeed, it is so utterly fearless with regard to human beings, that it habitually follows the caravans as they pass from one town to another, for the sake of feeding on the refuse food and other offal which is thrown aside on the road.

Two articles of diet which certainly do not seem to fall within the ordinary range of vulture's food are said to be consumed by this bird. The first is the egg of the ostrich, the shell of which is too hard to be broken by the feeble beak of the Egyptian Vulture. The bird cannot, like the *lämmergeier*, carry the egg into the air and drop it on the ground, because its feet are not large enough to grasp it, and only slip off its round and polished surface. Therefore, instead of raising the egg into the air and dropping it upon a stone, it carries a stone into the air and drops it upon the egg. So at least say the natives of the country which it inhabits, and there is no reason why we should doubt the truth of the statement.

The other article of food is a sort of melon, very full of juice. This melon is called "nara," and is devoured by various creatures, such as lions, leopards, mice, ostriches, &c. and seems to serve them instead of drink.

The nest of the Egyptian Vulture is made in some rocky ledge, and the bird does not trouble itself about selecting a spot inaccessible to man, knowing well that it will not be disturbed. The nest is, like that of other vultures, a large and rude mass of sticks, sods, bones, and similar materials, to which are added any bits of rag, rope, skin, and other village refuse which it can pick up as it traverses the streets. There are two, and occasionally three, eggs, rather variously mottled with red. In its breeding, as in its general life, it is not a gregarious bird, never breeding in colonies, and, indeed, very seldom choosing a spot for its nest near one which has already been selected by another pair.

The illustration on page 420 represents part of the nest of the Egyptian Vulture, in which the curious mixture of bones and sticks is well shown. The parent birds are drawn in two characteristic attitudes taken from life, and well exhibit the feeble beak, the peculiar and intelligent, almost cunning expression of the head, and the ruff of feathers which surrounds

the upper part of the neck. In the distance another bird is drawn as it appears on the wing, in order to show the contrast between the white plumage and the dark quill feathers of the wings, the bird presenting a general appearance very similar to that of the common sea-gull.

THE

GRIFFON VULTURE, OR EAGLE OF SCRIPTURE.

The Griffon Vulture identified with the Eagle of Scripture—Geographical range of the Griffon—Its mode of flight and sociable habits—The featherless head and neck of the bird—The Vulture used as an image of strength, swiftness, and rapacity—Its powers of sight—How Vultures assemble round a carcase—Nesting-places of the Griffon—Mr. Tristram's description of the Griffon—Rock-caves of the Wady Hamâm—Care of the young, and teaching them to fly—Strength of the Griffon.

THE Griffon Vulture is found throughout a large portion of the Old World, inhabiting nearly all the warmer portions of this hemisphere. The colour of the adult bird is a sort of yellowish brown, diversified by the black quill feathers and the ruff of white down that surrounds the neck. The head and neck are without feathers, but are sparingly covered with very short down of a similar character to that of the ruff.

It is really a large bird, being little short of five feet in total length, and the expanse of wing measuring about eight feet.

The Griffon Vulture is very plentiful in Palestine, and, unlike the lesser though equally useful Egyptian Vulture, congregates together in great numbers, feeding, flying, and herding in company. Large flocks of them may be seen daily, soaring high in the air, and sweeping their graceful way in the grand curves which distinguish the flight of the large birds of prey. They

are best to be seen in the early morning, being in the habit of quitting their rocky homes at daybreak, and indulging in a flight for two or three hours, after which they mostly return to the rocks, and wait until evening, when they take another short flight before retiring to rest.

Allusion is made in the Scriptures to the gregarious habits of the Vultures: "Whosoever the carcase is, there will the eagles be gathered together" (Matt. xxiv. 28). That the Vulture, and not the eagle, is here signified, is evident from the fact that the eagles do not congregate like the Vultures, never being seen in greater numbers than two or three together, while the Vultures assemble in hundreds.

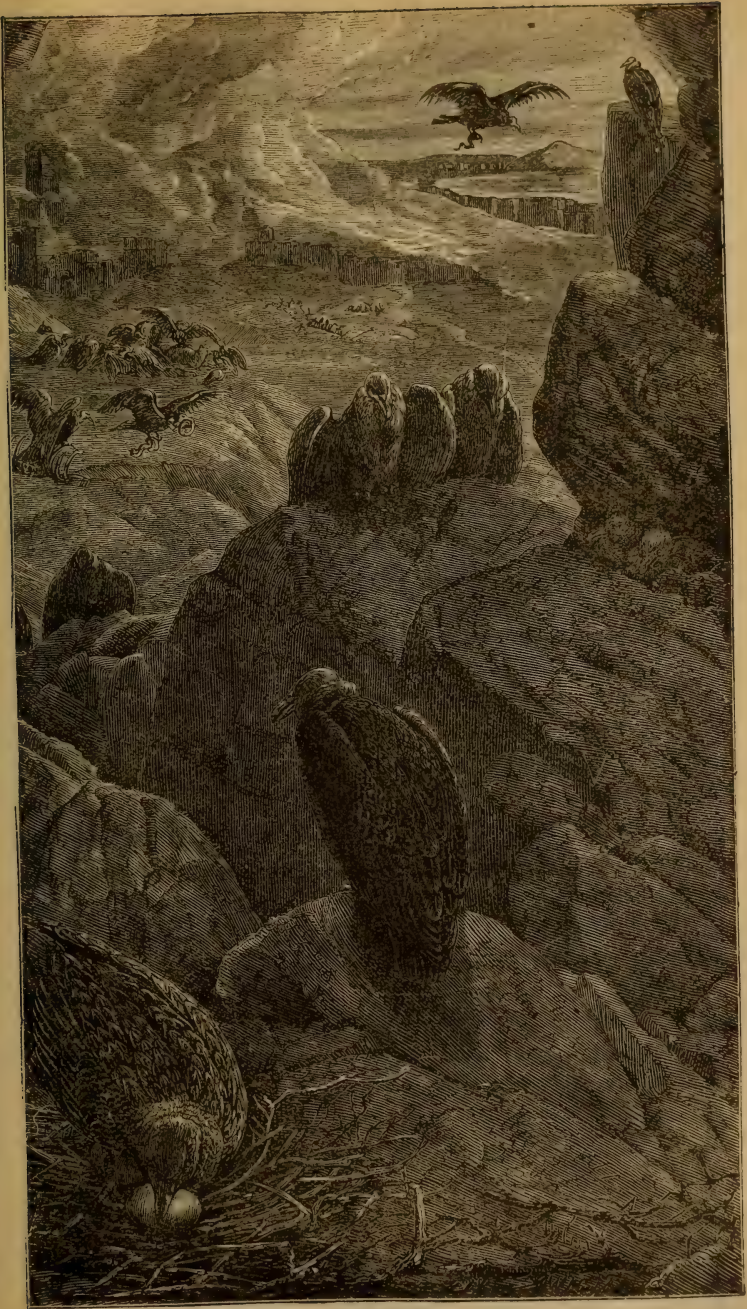
There is also a curious passage in the Book of Proverbs, chap. xxx. ver. 17, which alludes to the carnivorous nature of the bird: "The eye that mocketh at his father, and despiseth to obey his mother, the ravens of the valley shall pick it out, and the young eagles shall eat it."

Allusion is made in several passages to the swiftness of the Vulture, as well as its voracity. See, for example, a portion of David's lamentation over the bodies of Saul and Jonathan, who, according to the poet's metaphor, "were lovely and pleasant in their lives, and in their death they were not divided; they were swifter than eagles, they were stronger than lions."

The "bitter" people—namely, the Chaldeans—are again mentioned in a very similar manner by the prophet Jeremiah: "Our persecutors are swifter than the eagles of the heavens; they pursued us upon the mountains, they laid wait for us in the wilderness" (Lam. iv. 19).

There is something peculiarly appropriate in employing the Vulture as an image of strength and swiftness when applied to warriors, the bird being an invariable attendant on the battle, and flying to the field of death with marvellous swiftness. All who had ever witnessed a battle were familiar with the presence of the Vulture—the scene of carnage, and the image which is employed, would be one which commended itself at once to those for whom it was intended. And, as the earlier history of the Jewish nation is essentially of a warlike character, we cannot wonder that so powerful and familiar an image should have been repeatedly introduced into the sacred writings.

Wonderful powers of sight are possessed by this bird. Its eyes



VULTURES.

are able to assume either a telescopic or a microscopic character, by means of a complex and marvellous structure, which can alter the whole shape of the organ at the will of the bird.

Not only can the eye be thus altered, but it changes instantaneously, so as to accommodate itself to the task which it is to perform. A Vulture, for example, sees from a vast height the body of a dead animal, and instantly swoops down upon it like an arrow from a bow. In order to enable the bird to see so distant an object, the eye has been exercising its telescopic powers, and yet, in a second or two, when the Vulture is close to its prey, the whole form of the eye must be changed, or the bird would mistake its distance, and dash itself to pieces on the ground.

By means of its powerful eyes, the Vulture can see to an enormous distance, and with great clearness, but neither so far nor so clearly as is popularly supposed. It is true that, as soon as a carcase is discovered, it will be covered with Vultures, who arrive from every side, looking at first like tiny specks in the air, scarcely perceptible even to practised eyes, and all directing their flight to the same point. "Where the carcase is, there will the vultures be gathered together." But, although they all fly towards the same spot, it does not follow that they have all seen the same object. The fact is, they see and understand each other's movements.

A single Vulture, for example, sees a dead or dying sheep, and swoops down upon it. The other Vultures which are flying about in search of food, and from which the animal in question may be concealed, know perfectly well that a Vulture soars high in the air when searching for food, and only darts to the earth when it has found a suitable prey. They immediately follow its example, and in their turn are followed by other Vultures, which can see their fellows from a distance, and know perfectly well why they are all converging to one spot.

In this way all the Vultures of a neighbourhood will understand, by a very intelligible telegraph, that a dead body of some animal has been found, and, aided by their wonderful powers of flight, will assemble over its body in an almost incredibly short space of time.

The resting-place of the Griffon Vulture is always on some lofty spot. The Arabian Vulture will build within easy reach,

the eagle prefers lofty situations, but nothing but the highest and most inaccessible spots will satisfy the Vulture. To reach the nest of this bird is therefore a very difficult task, only to be attempted by experienced and intrepid cragsmen; and, in consequence, both the eggs and young of the Griffon Vulture cannot be obtained except for a very high price. The birds are fond of building in the rock-caves which are found in so many parts of Palestine, and in some places they fill these places as thickly as rooks fill a rookery.

In Mr. Tristram's "Land of Israel," there is a very graphic description of the Griffon's nests, and of the difficulty experienced in reaching them. "A narrow gorge, with limestone cliffs from five hundred to six hundred feet high, into which the sun never penetrates, walls the rapid brook on each side so closely that we often had to ride in the bed of the stream. The cliffs are perforated with caves at all heights, wholly inaccessible to man, the secure resting-place of hundreds of noble griffons, some *lämmergeiers*, *lanner falcons*, and several species of eagle. . . . One day in the ravine well repaid us, though so terrific were the precipices, that it was quite impossible to reach any of the nests with which it swarmed.

"We were more successful in the Wady Hamâm, the southwest end of the plain, the entrance from Hattin and the Buttauf, where we spent three days in exploration. The cliffs, though reaching the height of fifteen hundred feet, rise like terraces, with enormous masses of *débris*, and the wood is half a mile wide. By the aid of Giacomo, who proved himself an expert rope-climber, we reaped a good harvest of griffons' eggs, some of the party being let down by ropes, while those above were guided in working them by signals from others below in the valley. It required the aid of a party of a dozen to capture these nests. The idea of scaling the cliff with ropes was quite new to some Arabs who were herding cattle above, and who could not, excepting one little girl, be induced to render any assistance. She proved herself most sensible and efficient in telegraphing.

"While capturing the griffons' nests, we were re-enacting a celebrated siege in Jewish history. Close to us, at the head of the cliffs which form the limits of the celebrated Plain of Hattin, were the ruins of Irbid, the ancient Arbela, marked

principally by the remains of a synagogue, of which some marble shafts and fragments of entablature, like those of Tell Hûm, are still to be seen, and were afterwards visited by us.

"Hosea mentions the place apparently as a strong fortress: 'All thy fortresses shall be spoiled, as Shalman spoiled Beth-arbel in the day of battle' (Hos. x. 14). Perhaps the prophet here refers to the refuges in the rocks below.

"The long series of chambers and galleries in the face of the precipice are called by the Arabs, Kulat Ibn Maân, and are very fully described by Josephus. These cliffs were the homes of a set of bandits, who resided here with their families, and for years set the power of Herod the Great at defiance. At length, when all other attempts at scaling the fortress had failed, he let down soldiers at this very spot in boxes, by chains, who attacked the robbers with long hooks, and succeeded in rooting them all out.

"The rock galleries, though now only tenanted by griffons, are very complete and perfect, and beautifully built. Long galleries wind backwards and forwards in the cliff side, their walls being built with dressed stone, flush with the precipice, and often opening into spacious chambers. Tier after tier rise one after another with projecting windows, connected by narrow staircases, carried sometimes upon arches, and in the upper portions rarely broken away. In many of the upper chambers to which we were let down, the dust of ages had accumulated, undisturbed by any foot save that of the birds of the air; and here we rested during the heat of the day, with the plains and lake set as in a frame before us. We obtained a full zoological harvest, as in three days we captured fourteen nests of griffons."

Although these caverns and rocky passages are much more accessible than most of the places whereon the Griffons build, the natives never venture to enter them, being deterred not so much by their height, as by their superstitious fears. The Griffons instinctively found out that man never entered these caverns, and so took possession of them.

As the young Griffons are brought up in these lofty and precipitous places, it is evident that their first flight must be a dangerous experiment, requiring the aid of the parent birds. At first the young are rather nervous at the task which lies

before them, and shrink from trusting themselves to the air. The parents, however, encourage them to use their wings, take short flights in order to set them an example, and, when they at last venture from the nest, accompany and encourage them in their first journey.

In flight it is one of the most magnificent birds that can be seen, and even when perched it often retains a certain look of majesty and grandeur. Sometimes, however, especially when basking in the sun, it assumes a series of attitudes which are absolutely grotesque, and convert the noble-looking bird into a positively ludicrous object. At one moment it will sit all hunched up, its head sunk between its shoulders, and one wing trailing behind it as if broken. At another it will bend its legs and sit down on the ankle-joint, pushing its feet out in front, and supporting itself by the stiff feathers of its tail. Often it will Touch nearly flat on the ground, partly spread its wings, and allow their tips to rest on the earth, and sometimes it will support nearly all the weight of its body on the wings, which rest, in a half doubled state, on the ground. I have before me a great number of sketches, taken in a single day, of the attitudes assumed by one of these birds, every one of which is strikingly different from the others, and transforms the whole shape of the bird so much that it is scarcely recognisable as the same individual.





THE EAGLE.

Signification of the word *Asniyeh*—The Golden Eagle and its habits—The Imperial Eagle—Its solitary mode of life—The Short-toed Eagle—Its domestic habits and fondness for the society of man—The Osprey, or Fishing Eagle—Its mode of catching fish—Its distribution in Palestine.

As to the EAGLE, rightly so called, there is little doubt that it is one of the many birds of prey that seem to have been classed under the general title of *Asniyeh*—the word which in the Authorized Version of the Bible is rendered as Osprey. A similar confusion is observable in the modern Arabic, one word, *ogab*, being applied indiscriminately to all the Eagles and the large *falconidæ*.

The chief of the true Eagles, namely, the Golden Eagle (*Aquila chrysaëtos*), is one of the inhabitants of Palestine, and is seen frequently, though never in great numbers. Indeed, its predacious habits unfit it for associating with its kind. Any animal which lives chiefly, if not wholly, by the chase, requires a large district in order to enable it to live, and thus twenty or thirty eagles will be scattered over a district of twice the number of miles. Like the lion among the mammalia, the Eagle leads an almost solitary life, scarcely ever associating with any of its kind except its mate and its young.

The whole of the Falconidæ, as the family to which the Eagles belong is called, are very destructive birds, gaining their subsistence chiefly by the chase, seldom feeding on carrion except when pressed by hunger, or when the dead animal has only recently been killed.

Herein they form a complete contrast to the vultures, whose usual food is putrefying carrion, and fresh meat the exception.

Destructive though the Eagles may be, they cannot be called cruel birds, for, although they deprive many birds and beasts of life, they effect their purpose with a single blow, sweeping down upon the doomed creature with such lightning velocity, and striking it so fiercely with their death-dealing talons, that almost instantaneous death usually results.

When the Eagle pounces on a bird, the mere shock caused by the stroke of the Eagle's body is almost invariably sufficient to cause death, and the bird, even if a large one—such as the swan, for example—falls dead upon the earth with scarcely a wound.

Smaller birds are carried off in the talons of their pursuers, and are killed by the grip of their tremendous claws, the Eagle in no case making use of its beak for killing its prey. If the great bird carries off a lamb or a hare, it grasps the body firmly with its claws, and then by a sudden exertion of its wonderful strength drives the sharp talons deep into the vitals of its prey, and does not loosen its grasp until the breath of life has fled from its victim.

The structure by means of which the Eagle is enabled to use its talons with such terrible effect is equally beautiful and simple, deserving special mention.

Now, many observant persons have been struck with the curious power possessed by birds which enables them to hold their position upon a branch or perch even while sleeping. In many instances the slumbering bird retains its hold of the perch by a single foot, the other being drawn up and buried in the feathers.

As this grasp is clearly an involuntary one, it is evidently independent of the mere will of the bird, and is due to some peculiar formation.

On removing the skin from the leg of any bird, and separating the muscles from each other, the structure in question is easily seen. The muscles which move the leg and foot, and the tendons or leaders which form the attachment of the muscles to the bones,

are so arranged that whenever the bird bends its leg the foot is forcibly closed, and is opened again when the leg is straightened.

A common chicken, as it walks along, closing its toes as it lifts its foot from the ground and spreading them as the leg is unbent, cannot do otherwise, as the tendons are shortened and lengthened as each step is taken.



EAGLES.

It will be seen, therefore, that when a bird falls asleep upon a branch the legs are not only bent, but are pressed downwards by the weight of the body; so that the claws hold the perch with a firm and involuntary grasp which knows no fatigue, and which

remains secure as long as the pressure from above keeps the limbs bent.

To return to the Eagle. When, therefore, the bird desires to drive his talons into the body of his prey, he needs only to sink downwards with his whole weight, and the forcible bending of his legs will contract the talons with irresistible force, without the necessity of any muscular exertion.

Exertion, indeed, is never needlessly used by the Eagle, for it is very chary of putting forth its great muscular powers, and unless roused by the sight of prey, or pressed to fly abroad in search of food, will sit upon a tree or point of rock for hours as motionless as a stuffed figure.

The Golden Eagle is a truly magnificent bird in size and appearance. A full-grown female measures about three feet six inches in length, and the expanse of her wings is nine feet. The male bird is smaller by nearly six inches. The colour of the bird is a rich blackish brown on the greater part of the body, the head and neck being covered with feathers of a golden red, which have earned for the bird its customary name.

The Golden Eagle is observed to frequent certain favourite places, and to breed regularly in the same spot, for a long series of years. The nest is always made upon some high place, generally upon a ledge of rock, and is most roughly constructed of sticks.

In hunting for their prey the Eagle and his mate assist each other. It may be also mentioned here that Eagles keep themselves to a single mate, and live together throughout their lives. Should, however, one of them die or be killed, the survivor does not long remain in a state of loneliness, but vanishes from the spot for a longer, or shorter time, and then returns with a new mate.

As rabbits and hares, which form a frequent meal for the Eagle, are usually hidden under bushes and trees during the day, the birds are frequently forced to drive them from their place of concealment; this they have been observed to do in a very clever manner. One of the Eagles conceals itself near the cover, and its companion dashes among the bushes, screaming and making such a disturbance that the terrified inmates rush out in hopes of escape, and are immediately pounced upon by the watchful confederate.

The prey is immediately taken to the nest, and distributed to the young after being torn to pieces by the parent birds.

Four or five species of Eagle are known to inhabit Palestine. There is, for example, the Imperial Eagle (*Aquila mogilnik*), which may be distinguished from the Golden Eagle by a white patch on the shoulders, and the long, lancet-shaped feathers of the head and neck. These feathers are of a fawn colour, and contrast beautifully with the deep black-brown of the back and wings. It is not very often seen, being a bird that loves the forest, and that does not care to leave the shelter of the trees. It is tolerably common in Palestine.

Then there are several of the allied species, of which the best example is perhaps the Short-toed Eagle (*Circaëtus cinereus*), a bird which is extremely plentiful in the Holy Land—so plentiful indeed that, as Mr. Tristram remarks, there are probably twice as many of the Short-toed Eagles in Palestine as of all the other species put together. The genus to which this bird belongs does not take rank with the true Eagles, but is supposed by systematic naturalists to hold an intermediate place between the true Eagles and the ospreys.

The Short-toed Eagle is seldom a carrion-eater, preferring to kill its prey for itself. It feeds mostly on serpents and other reptiles, and is especially fond of frogs. It is a large and somewhat heavily built bird, lightness and swiftness being far less necessary than strength in taking the animals on which it feeds. It is rather more than two feet in length, and is a decidedly handsome bird, the back being dark brown, and the under parts white, covered with crescent-shaped black spots.





EAGLE RETURNING TO THE NEST WITH HER PREY.

THE OSPREY.

The Osprey, or Fishing Eagle—Its geographical range—Mode of securing prey—Structure of its feet—Its power of balancing itself in the air.

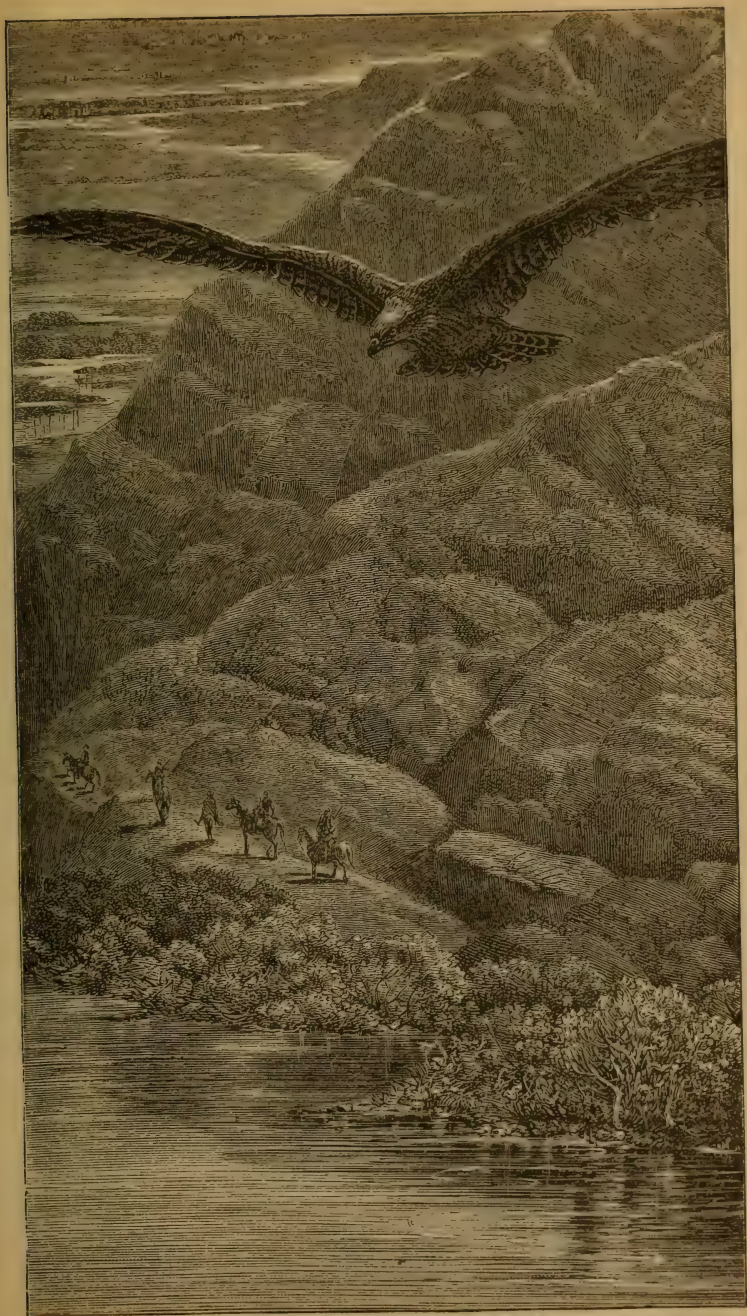
WE now come to the Osprey itself (*Pandion haliaëtus*), which was undoubtedly one of the birds grouped together under the collective term Asniyeh. This word occurs only in the two passages in Deut. xiv. and Lev. xi. which have been several times quoted already, and need not be mentioned again.

This fine bird is spread over a very large range of country, and is found in the New World as well as the Old. In consequence of its peculiar habits, it is often called the Fishing Eagle.

The Osprey is essentially a fish-eater. It seems very strange that a predacious bird allied to the eagles, none of which birds can swim, much less dive, should obtain its living from the water. That the cormorant and other diving birds should do so is no matter of surprise, inasmuch as they are able to pursue the fish in their own element, and catch them by superior speed. But any bird which cannot dive, and which yet lives on fish, is forced to content itself with those fish that come to the surface of the water, a mode of obtaining a livelihood which does not appear to have much chance of success. Yet the Osprey does on a large scale what the kingfisher does on a small one, and contrives to find abundant food in the water.

Its method of taking prey is almost exactly like that which is employed by the kingfisher. When it goes out in search of food, it soars into the air, and floats in circles over the water, watching every inch of it as narrowly as a kestrel watches a stubble-field. No sooner does a fish rise toward the surface to take a fly, or to leap into the air for sport, than the Osprey darts downwards, grasps the fish in its talons, drags the struggling prey from the water, and with a scream of joy and triumph bears it away to shore, where it can be devoured at leisure.

The bird never dives, neither does it seize the fish with its beak like the kingfisher. It plunges but slightly into the water, as



THE OSPREY SEARCHING FOR FISH.

otherwise it would not be able to use its strong wings and carry off its prey. In order to enable the bird to seize the hard and slippery body of the fish, it is furnished with long, very sharp, and boldly-hooked talons, which force themselves into the sides of the fish, and hold it as with grappling irons.

The flight of the Osprey is peculiarly easy and elegant, as might be expected from a bird the length of whose body is only twenty-two inches, and the expanse of wing nearly five feet and a half.

It is therefore able to hover over the water for long periods of time, and can balance itself in one spot without seeming to move a wing, having the singular facility of doing so even when a tolerably strong breeze is blowing. It has even been observed to maintain its place unmoved when a sharp squall swept over the spot.

Harmless though the Osprey be—except to the fish—it is a most persecuted bird, being everywhere annoyed by rooks and crows, and, in America, robbed by the more powerful white-headed eagle.

Such a scene is thus described by Wilson :

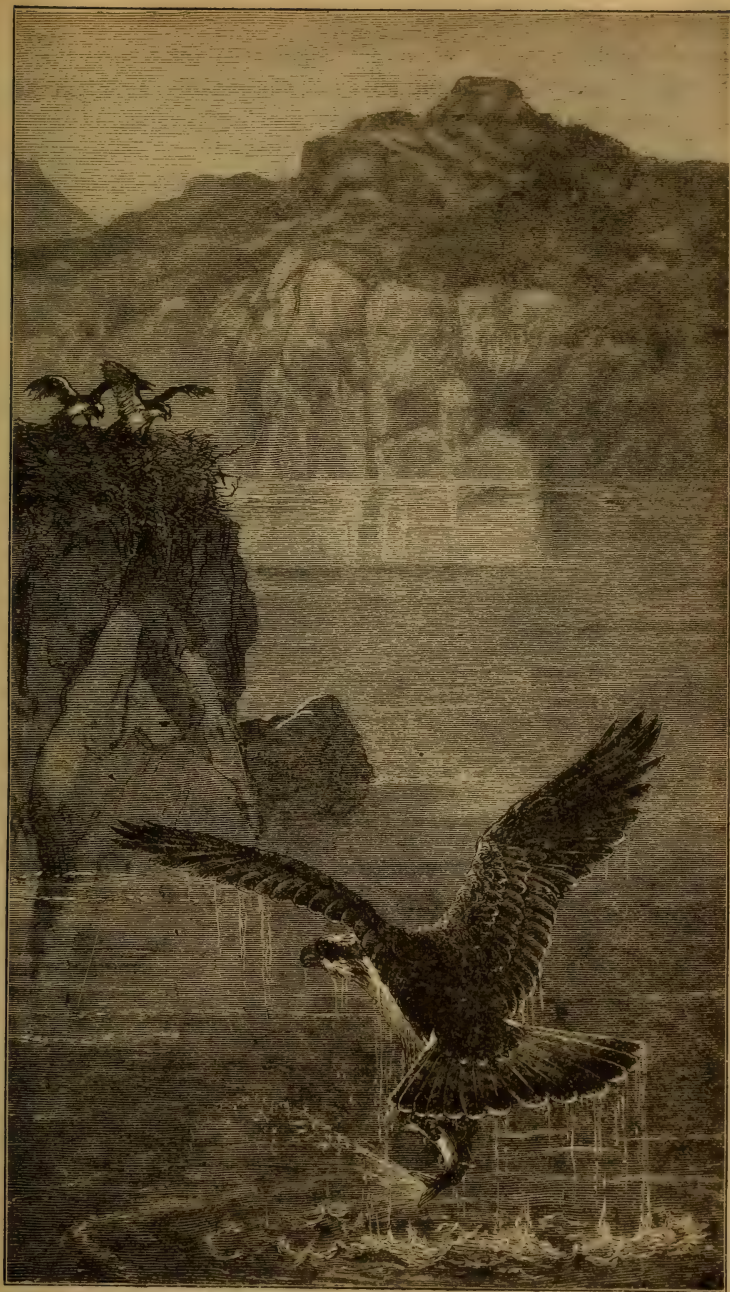
“Elevated on the high, dead limb of a gigantic tree that commanded a wide view of the neighbouring shore and ocean, the great white-headed eagle calmly surveys the motions of various smaller birds that pursue their busy avocations below.

“The snow-white gulls slowly winnowing the air; the trains of ducks streaming over the surface; silent and watchful cranes, intent and wading, and all the winged multitude that subsist by the bounty of this vast liquid magazine of nature.

“High over all these, hovers one whose action instantly arrests the eagle’s attention. By his wide curvature of wing and sudden suspension in the air he knows him to be the Osprey, settling over some devoted victim of the deep. The eyes of the eagle kindle at the sight, and balancing himself with half-opened wings on the branch, he watches the result.

“Down, rapid as an arrow, from heaven descends the Osprey, the roar of its wings reaching the ear as it disappears in the water, making the surges foam around! At this moment the eager looks of the eagle are all ardour, and, levelling his neck for flight, he sees the Osprey once more emerge, struggling with his prey, and mounting in the air with screams of exultation.

“These are the signals for the eagle, who, launching into the



SNATCHED FROM THE DEEP: THE OSPREY RISES WITH HIS PREY.

air, instantly gives chase, and soon gains on the Osprey; each exerts his utmost to mount above the other, displaying in this encounter the most elegant and sublime aërial evolutions.

“The unencumbered eagle rapidly advances, and is just on the point of reaching his opponent, when, with a sudden scream, probably of despair and honest execration, the Osprey drops his fish.

“The eagle, poising himself for a moment, as if to take a more certain aim, descends like a whirlwind, snatches it in his grasp ere it reaches the water, and bears his ill-gotten booty silently away to the woods.”

Although not very plentiful in Palestine, nor indeed in any other country, the Osprey is seen throughout the whole of that country where it can find a sufficiency of water. It prefers the sea-shore and the rivers of the coast, and is said to avoid the Sea of Galilee.

THE KITE, OR VULTURE OF SCRIPTURE.

The word *Dayah* and its signification—*Dayah* a collective term for different species of Kites—The Common or Red Kite plentiful in Palestine—Its piercing sight and habit of soaring—The Black Kite of Palestine and its habits—The Egyptian Kite—The Raah or Glede of Scripture—The Buzzards and their habits—The Peregrine Falcon an inhabitant of Central Palestine, and the Lanner of the eastern parts of the country.

IN Lev. xi. 14 and Deut. xiv. 13, we find the Vulture among the list of birds which the Jews were not permitted to eat. The word which is translated as Vulture is *dayah*, and we find it occurring again in Isaiah xxxiv. 15, “There shall the vultures also be gathered, every one with her mate.” There is no doubt, however, that this translation of the word is an incorrect one, and that it ought to be rendered as KITE. In Job xxviii. 7, there is a similar word, *ayah*, which is also translated as Vulture, and which is acknowledged to be not a Vulture, but one of the Kites: “There is a path which no fowl knoweth, and which the vulture’s eye hath not seen.” Both these words are nearly

identical with modern Arabic terms which are employed rather loosely to signify several species of Kite. Buxtorf, in his Hebrew Lexicon, gives the correct rendering, translating *dayah* as *Milvus*, and the Vulgate in one or two places gives the same translation, though in others it renders the word as Vulture.

Mr. Tristram, who has given much attention to this subject, is inclined to refer the word *ayah* to the Common Kite (*Milvus*



THE KITE, OR VULTURE OF SCRIPTURE.

regalis), which was once so plentiful in this country, and is now nearly extinct; and *dayah* to the Black Kite (*Milvus atra*). He founds this distinction on the different habits of the two species, the Common or Red Kite being thinly scattered, and being in the habit of soaring into the air at very great heights, and the latter being very plentiful and gregarious.

We will first take the Red Kite.

This bird is scattered all over Palestine, feeding chiefly on the smaller birds, mice, reptiles, and fish. In the capture of fish the Kite is almost as expert as the osprey, darting from a great

height into the water, and bearing off the fish in its claws. The wings of this bird are very long and powerful, and bear it through the air in a peculiarly graceful flight. It is indeed in consequence of this flight that it has been called the Glede, the word being derived from its gliding movements.

The sight of this bird is remarkably keen and piercing, and, from the vast elevation to which it soars when in search of food, it is able to survey the face of the country beneath, and to detect the partridge, quail, chicken, or other creature that will serve it for food. This piercing sight and habit of soaring render the passage in Job peculiarly appropriate to this species of Kite, though it does not express the habits of the other. Should the Kite suspect danger when forced to leave its nest, it escapes by darting rapidly into the air, and soaring at a vast height above the trees among which its home is made. From that elevation it can act as a sentinel, and will not come down again until it is assured of safety.

OF the habits of the BLACK KITE (*Milvus atra*), Mr. Tristram gives an admirable description. "The habits of the bird bear out the allusion in Isa. xxxiv. 15, for it is, excepting during the winter three months, so numerous everywhere in Palestine as to be almost gregarious. It returns about the beginning of March, and scatters itself over the whole country, preferring especially the neighbourhood of valleys, where it is a welcome and unmolested guest. It does not appear to attack the poultry, among whom it may often be seen feeding on garbage. It is very sociable, and the slaughter of a sheep at one of the tents will soon attract a large party of black kites, which swoop down regardless of man and guns, and enjoy a noisy scramble for the refuse, chasing each other in a laughable fashion, and sometimes enabling the wily raven to steal off with the coveted morsel during their contentions. It is the butt of all the smaller scavengers, and is evidently most unpopular with the crows and daws, and even rollers, who enjoy the amusement of teasing it in their tumbling flight, which is a manœuvre most perplexing to the kite."

The same writer proceeds to mention that the Black Kite unlike the red species, is very careless about the position of its nest, and never even attempts to conceal it, sometimes building

it in a tree, sometimes on a rock-ledge, and sometimes in a bush growing on the rocks. It seems indeed desirous of making the nest as conspicuous as possible, and hangs it all over with bits of cloth, strips of bark, wings of birds, and even the cast skins of serpents.

Another species (*Milvus Egyptianus*) is sometimes called the Black Kite from the dark hue of its plumage, but ought rather to retain the title of Egyptian Kite. Unlike the black kite, this bird is a great thief, and makes as much havoc among poultry as the red kite. It is also a robber of other birds, and if it should happen to see a weaker bird with food, it is sure to attack and rob it. Like the black kite, it is fond of the society of man, and haunts the villages in great numbers, for the purpose of eating the offal, which in Oriental towns is simply flung into the streets to be devoured by the dogs, vultures, kites, and other scavengers, without whom no village would be habitable for a month.

WHETHER the word *raah*, which is translated as Glede in Deut. xiv. 13, among the list of birds which may not be eaten, is one of these species of Kite, or a bird of a different group, is a very doubtful point. This is the only passage in which the word occurs, and we have but small grounds for definitely identifying it with any one species. The Hebrew Bible retains the word Glede, but affixes a mark of doubt to it, and several commentators are of opinion that the word is a wrong reading of *dayah*, which occurs in the parallel passage in Lev. xi. 14. The reading of the Septuagint follows this interpretation, and renders it as Vulture in both cases. Buxtorf translates the word *raah* as Rook, but suggests that *dayah* is the correct reading.

Accepting, however, the word *raah*, we shall find that it is derived from a root which signifies sight or vision, especially of some particular object, so that a piercing sight would therefore be the chief characteristic of the bird, which, as we know, is one of the attributes of the Kites, together with other birds of prey, so that it evidently must be classed among the group with which we are now concerned. It has been suggested that, granting the *raah* to be a species distinct from the *dayah*, it is a collective term for the larger falcons and buzzards, several species of which inhabit Palestine, and are not distinctly mentioned in the Bible.

Several species of buzzard inhabit the Holy Land, and there is no particular reason why they should be mentioned except by a collective name. Some of the buzzards are very large birds, and though their wings are short when compared with those of the vultures and eagles, the flight of the bird is both powerful and graceful. It is not, however, remarkable for swiftness, and



THE PEREGRINE FALCON, OR GLEDE OF SCRIPTURE.

never was employed, like the falcon, in catching other birds, being reckoned as one of the useless and cowardly birds of prey. In consonance with this opinion, to compare a man to a buzzard was thought a most cutting insult.

As a general rule, it does not chase its prey like the eagles or the large-winged falcons, but perches on a rock or tree, watches

for some animal on which it can feed, pounces on it, and returns to its post, the whole movements being very like those of the flycatcher. This sluggishness of disposition, and the soft and almost owl-like plumage, have been the means of bringing the bird into contempt among falconers.

As to the large falcons, which seem to be included in the term *raah*, the chief of them is the Peregrine Falcon (*Falco peregrinus*), which is tolerably common in the Holy Land. In his "Land of Israel," Mr. Tristram gives several notices of this bird, from which we may take the following picture from a description of a scene at Endor. "Dreary and desolate looked the plain, though of exuberant fertility. Here and there might be seen a small flock of sheep or herd of cattle, tended by three or four mounted villagers, armed with their long firelocks, and pistols and swords, on the watch against any small party of marauding cattle-lifters.

"Griffon vultures were wheeling in circles far over the rounded top of Tabor; and here and there an eagle was soaring beneath them in search of food, but at a most inconvenient distance from our guns. Harriers were sweeping more rapidly and closely over the ground, where lambs appeared to be their only prey; and a noble peregrine falcon, which in Central Palestine does not give place to the more eastern lanner, was perched on an isolated rock, calmly surveying the scene, and permitting us to approach and scrutinize him at our leisure."

The habit of perching on the rock, as mentioned above, is very characteristic of the Peregrine Falcon, who loves the loftiest and most craggy cliffs, and makes its nest in spots which can only be reached by a bold and experienced climber. The nests of this bird are never built in close proximity, the Peregrine preferring to have its home at least a mile from the nest of any other of its kinsfolk. Sometimes it makes a nest in lofty trees, taking possession of the deserted home of some other bird; but it loves the cliff better than the tree, and seldom builds in the latter when the former is attainable.

In the passage from the "Land of Israel" is mentioned the LANNER FALCON (*Falco lanarius*), another of the larger falcons to which the term *raah* may have been applied.

This bird is much larger than the Peregrine Falcon, and, indeed, is very little less than the great gerfalcon itself. It is one

of the birds that were reckoned among the noble falcons ; and the female, which is much larger and stronger than the male, was employed for the purpose of chasing the kite, whose long and powerful wings could not always save it from such a foe.

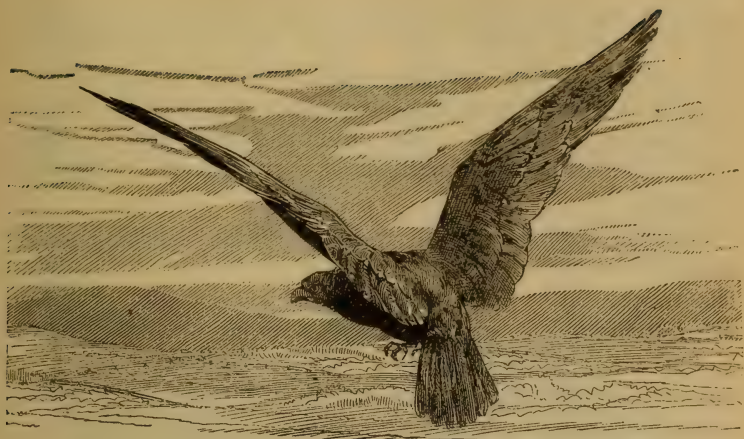
Although the Lanner has been frequently mentioned among the British birds, and the name is therefore familiar to us, it is



THE LANNER FALCON.

not even a visitor of our island. The mistake has occurred by an error in nomenclature, the young female Peregrine Falcon, which is much larger and darker than the male bird, having been erroneously called by the name of Lanner.

In the illustration, a pair of Lanner Falcons are depicted as pursuing some of the rock-pigeons which abound in Palestine, the attitudes of both birds being taken from life.



THE HAWK.

The Netz or Hawk—Number of species probably grouped under that name—Rare occurrence of the word—The Sparrow-Hawk and its general habits—Its place of nesting—The Kestrel, or Wind-hover—Various names by which it is known in England—Its mode of feeding and curious flight—The Hariers—Probable derivation of the name—Species of Harier known to inhabit Palestine—Falconry apparently unknown to the ancient Jews.

THERE is no doubt that a considerable number of species are grouped together under the single title Netz, or Hawk, a word which is rightly enough translated. That a great number of birds should have been thus confounded together is not surprising, seeing that even in this country and at the present time, the single word Hawk may signify any one of at least twelve different species. The various falcons, the hariers, the kestrel, the sparrow-hawk, and the hobbies, are one and all called popularly by the name of Hawk, and it is therefore likely that the Hebrew word Netz would signify as many species as

the English word Hawk. From them we will select one or two of the principal species.

In the first place, the word is of very rare occurrence. We only find it three times. It first occurs in Lev. xi. 16, in which it is named, together with the eagle, the ossifrage, and many other birds, as among the unclean creatures, to eat which was an abomination. It is next found in the parallel passage in Deut. xiv. 15, neither of which portions of Scripture need be quoted at length.

That the word *netz* was used in its collective sense is very evident from the addition which is made to it in both cases. The Hawk, "after its kind," is forbidden, showing therefore that several kinds or species of Hawk were meant. Indeed, any specific detail would be quite needless, as the collective term was quite a sufficient indication, and, having named the vultures, eagles, and larger birds of prey, the simple word *netz* was considered by the sacred writer as expressing the rest of the birds of prey.

We find the word once more in that part of the Bible to which we usually look for any reference to natural history. In Job xxxix. 26, we have the words, "Doth the hawk fly by thy wisdom, and turn [or stretch] her wings toward the south?" The precise signification of this passage is rather doubtful, but it is generally considered to refer to the migration of several of the Hawk tribe. That the bird in question was distinguished for its power of flight is evident from the fact that the sacred poet has selected that one attribute as the most characteristic of the *Netz*.

Taking first the typical example of the Hawks, we find that the SPARROW-HAWK (*Accipiter nisus*) is plentiful in Palestine, finding abundant food in the smaller birds of the country. It selects for its nest just the spots which are so plentiful in the Holy Land, *i.e.* the crannies of rocks, and the tops of tall trees. Sometimes it builds in deserted ruins, but its favourite spot seems to be the lofty tree-top, and, in default of that, the rock-crevice. It seldom builds a nest of its own, but takes possession of that which has been made by some other bird. Some ornithologists think that it looks out for a convenient nest, say of the crow or magpie, and then ejects the rightful owner. I am inclined to think, however, that it mostly takes possession of a

nest that is already deserted, without running the risk of fighting such enemies as a pair of angry magpies. This opinion is strengthened by the fact that the bird resorts to the same nest year after year.

It is a bold and dashing bird, though of no great size, and when wild and free displays a courage which it seems to lose in captivity. As is the case with so many of the birds, the female is much larger than her mate, the former weighing about six ounces, and measuring about a foot in length, and the latter weighing above nine ounces, and measuring about fifteen inches in length.



KESTREL HOVERING OVER A FIELD IN SEARCH OF PREY.

THE most plentiful of the smaller Hawks of Palestine is the COMMON KESTREL. This is the same species which is known under the names of Kestrel, Wind-hover, and Stannel Hawk.

It derives its name of Wind-hover from its remarkable habit of hovering, head to windward, over some spot for many minutes together. This action is always performed at a moderate distance from the ground; some naturalists saying that the Hawk in question never hovers at an elevation exceeding forty feet, while

others, myself included, have seen the bird hovering at a height of twice as many yards. Generally, however, it prefers a lower distance, and is able by employing this manœuvre to survey a



THE WIND-HOVER, OR KESTREL.

tolerably large space beneath. As its food consists in a very great measure of field-mice, the Kestrel is thus able by means of its telescopic eyesight to see if a mouse rises from its hole;

and if it should do so, the bird drops on it and secures it in its claws.

Unlike the sparrow-hawk, the Kestrel is undoubtedly gregarious, and will build its nest in close proximity to the habitations of other birds, a number of nests being often found within a few yards of each other. Mr. Tristram remarks that he has found its nest in the recesses of the caverns occupied by the griffon vultures, and that the Kestrel also builds close to the eagles, and is the only bird which is permitted to do so. It also builds in company with the jackdaw.

Several species of Kestrel are known, and of them at least two inhabit the Holy Land, the second being a much smaller bird than the Common Kestrel, and feeding almost entirely on insects, which it catches with its claws, the common chafers forming its usual prey. Great numbers of these birds live together, and as they rather affect the society of mankind, they are fond of building their nests in convenient crannies in the mosques or churches. Independently of its smaller size, it may be distinguished from the Common Kestrel by the whiteness of its claws.

The illustration is drawn from a sketch taken from life. The bird hovered so near a house, and remained so long in one place, that the artist fixed a telescope and secured an exact sketch of the bird in the peculiar attitude which it is so fond of assuming. After a while, the Kestrel ascended to a higher elevation, and then resumed its hovering, in the attitude which is shown in the upper figure. In consequence of the great abundance of this species in Palestine, and the peculiarly conspicuous mode of balancing itself in the air while in search of prey, we may feel sure that the sacred writers had it specially in their minds when they used the collective term *Netz*.

It is easily trained, and, although in the old hawking days it was considered a bird which a noble could not carry, it can be trained to chase the smaller birds as successfully as the falcons can be taught to pursue the heron. The name *Tinnunculus* is supposed by some to have been given to the bird in allusion to its peculiar cry, which is clear, shrill, and consists of a single note several times repeated.

On page 444 the reader may see a representation of a pair of **HARRIER HAWKS** flying below the rock on which the peregrine

falcon has perched, and engaged in pursuing one of the smaller birds.

They have been introduced because several species of Harier are to be found in Palestine, where they take, among the plains and lowlands, the place which is occupied by the other hawks and falcons among the rocks.

The name of Harier appears to be given to these birds on account of their habit of regularly quartering the ground over which they fly when in search of prey, just like hounds when searching for hares. This bird is essentially a haunter of flat and marshy lands, where it finds frogs, mice, lizards, on which it usually feeds. It does not, however, confine itself to such food, but will chase and kill most of the smaller birds, and occasionally will catch even the leveret, the rabbit, the partridge, and the curlew.

When it chases winged prey, it seldom seizes the bird in the air, but almost invariably keeps above it, and gradually drives it to the ground. It will be seen, therefore, that its flight is mostly low, as suits the localities in which it lives, and it seldom soars to any great height, except when it amuses itself by rising and wheeling in circles together with its mate. This proceeding generally takes place before nest-building. The usual flight is a mixture of that of the kestrel and the falcon, the Harier sometimes poising itself over some particular spot, and at others shooting forwards through the air with motionless wings.

Unlike the falcons and most of the hawks, the Harier does not as a rule perch on rocks, but prefers to sit very upright on the ground, perching generally on a mole-hill, stone, or some similar elevation. Even its nest is made on the ground, and is composed of reeds, sedges, sticks, and similar matter, materials that can be procured from marshy land. The nest is always elevated a foot or so from the ground, and has occasionally been found on the top of a mound more than a yard in height. It is, however, conjectured that in such cases the mound is made by one nest being built upon the remains of another. The object of the elevated nest is probably to preserve the eggs in case of a flood.

At least five species of Hariers are known to exist in the Holy Land, two of which are among the British birds, namely, the Marsh Harier (*Circus æruginosus*), sometimes called the Duck

Hawk and the Moor Buzzard, and the Hen Harrier (*Circus cyaneus*), sometimes called the White Hawk, Dove Hawk, or Blue Hawk, on account of the plumage of the male, which differs greatly according to age; and the Ring-tailed Hawk, on account of the dark bars which appear on the tail of the female. All the Harriers are remarkable for the circlet of feathers that surrounds the eyes, and which resembles in a lesser degree the bold feather-circle around the eye of the owl tribe.

BEFORE taking leave of the Hawks, it is as well to notice the entire absence in the Scriptures of any reference to falconry. Now, seeing that the art of catching birds and animals by means of Hawks is a favourite amusement among Orientals, as has already been mentioned when treating of the gazelle (page 168), and knowing the unchanging character of the East, we cannot but think it remarkable that no reference should be made to this sport in the Scriptures.

It is true that in Palestine itself there would be but little scope for falconry, the rough hilly ground and abundance of cultivated soil rendering such an amusement almost impossible. Besides, the use of the falcon implies that of the horse, and, as we have already seen, the horse was scarcely ever used except for military purposes.

Had, therefore, the experience of the Israelites been confined to Palestine, there would have been good reason for the silence of the sacred writers on this subject. But when we remember that the surrounding country is well adapted for falconry, that the amusement is practised there at the present day, and that the Israelites passed so many years as captives in other countries, we can but wonder that the Hawks should never be mentioned as aids to bird-catching. We find that other bird-catching implements are freely mentioned and employed as familiar symbols, such as the gin, the net, the snare, the trap, and so forth; but that there is not a single passage in which the Hawks are mentioned as employed in falconry.



BARN OWL.

THE OWL.

The words which have been translated as Owl—Use made of the Little Owl in bird-catching—Habits of the bird—The Barn, Screech, or White Owl a native of Palestine—The Yanshûph, or Egyptian Eagle Owl—Its food and nest.

IN various parts of the Old Testament there occur several words which are translated as OWL in the Authorized Version, and in most cases the rendering is acknowledged to be the correct one, while in one or two instances there is a difference of opinion on the subject.

In Lev. xi. 16, 17, we find the following birds reckoned among those which are an abomination, and which might not be eaten by the Israelites: "The owl, and the night-hawk, and the cuckoo, and the hawk after his kind ;

"And the little owl, and the cormorant, and the great owl."

It is very likely that the Little Owl here mentioned is identical with the Boomah of the Arabs. It is a bird that is common in Europe, where it is much valued by bird-catchers, who employ it as a means of attracting small birds to their traps. They place it on the top of a long pole, and carry it into the fields, where they plant the pole in the ground. This Owl has a curious habit of swaying its body backwards and forwards, and is sure to attract the notice of all the small birds in the neighbourhood. It is well known that the smaller birds have a peculiar hatred to the Owl, and never can pass it without mobbing it, assembling in great numbers, and so intent on their occupation that they seem to be incapable of perceiving anything but the object of their hatred. Even rooks, magpies, and hawks are taken by this simple device.

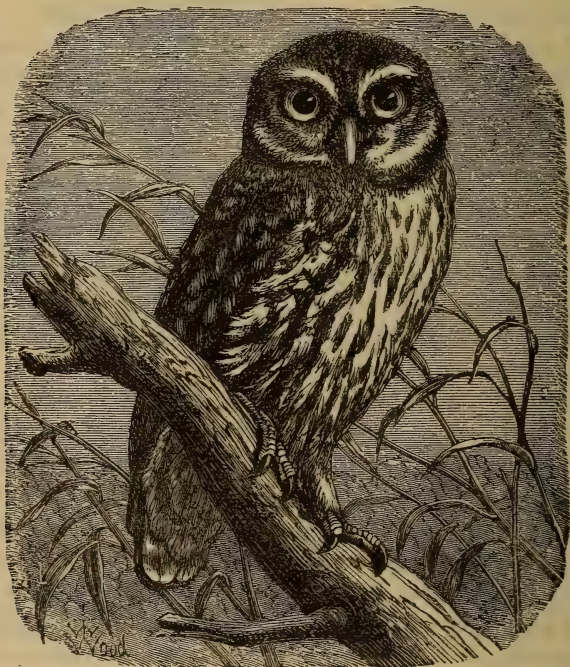
Whether or not the Little Owl was used for this object by the ancient inhabitants of Palestine is rather doubtful; but as they certainly did so employ decoy birds for the purpose of attracting game, it is not unlikely that the Little Owl was found to serve as a decoy. We shall learn more about the system of decoy-birds when we come to the partridge.

The Little Owl is to be found in almost every locality, caring little whether it takes up its residence in cultivated grounds, in villages, among deserted ruins, or in places where man has never lived. As, however, it is protected by the natives, it prefers the neighbourhood of villages, and may be seen quietly perched in some favourite spot, not taking the trouble to move unless it be approached closely. And to detect a perched Owl is not at all an easy matter, as the bird has a way of selecting some spot where the colours of its plumage harmonize so well with the surrounding objects that the large eyes are often the first indication of its presence. Many a time I have gone to search after Owls, and only been made aware of them by the sharp angry snap that they make when startled.

The common and well-known Barn Owl, also inhabits Palestine. Like the Little Owl, it affects the neighbourhood of man, though it may be found in ruins and similar localities. An old ruined building is sure to be tenanted by the Barn Owl, whose nightly shrieks very often terrify the belated wanderer, and make him fancy that the place is haunted by disturbed spirits. Such being the habits of the bird, it is likely that in the East,

where popular superstition has peopled every well with its jinn and every ruin with its spirit, the nocturnal cry of this bird, which is often called the Screech Owl from its note, should be exceedingly terrifying, and would impress itself on the minds of sacred writers as a fit image of solitude, terror, and desolation.

The Screech Owl is scarcely less plentiful in Palestine than the Little Owl, and, whether or not it be mentioned under a



THE LITTLE OWL.

separate name, is sure to be one of the birds to which allusion is made in the Scriptures.

ANOTHER name now rises before us: this is the Yanshûph, translated as the Great Owl, a word which occurs not only in the prohibitory passages of Leviticus and Deuteronomy, but in the Book of Isaiah. In that book, ch. xxxiv. ver. 10, 11, we find the following passage: "From generation to generation it shall lie waste; none shall pass through it for ever and ever."



CAUGHT NAPPING.

"But the cormorant and the bittern shall possess it; the owl (*yanshûph*) also and the raven shall dwell in it: and He shall stretch out upon it the line of confusion, and the stones of emptiness." The Jewish Bible follows the same reading.

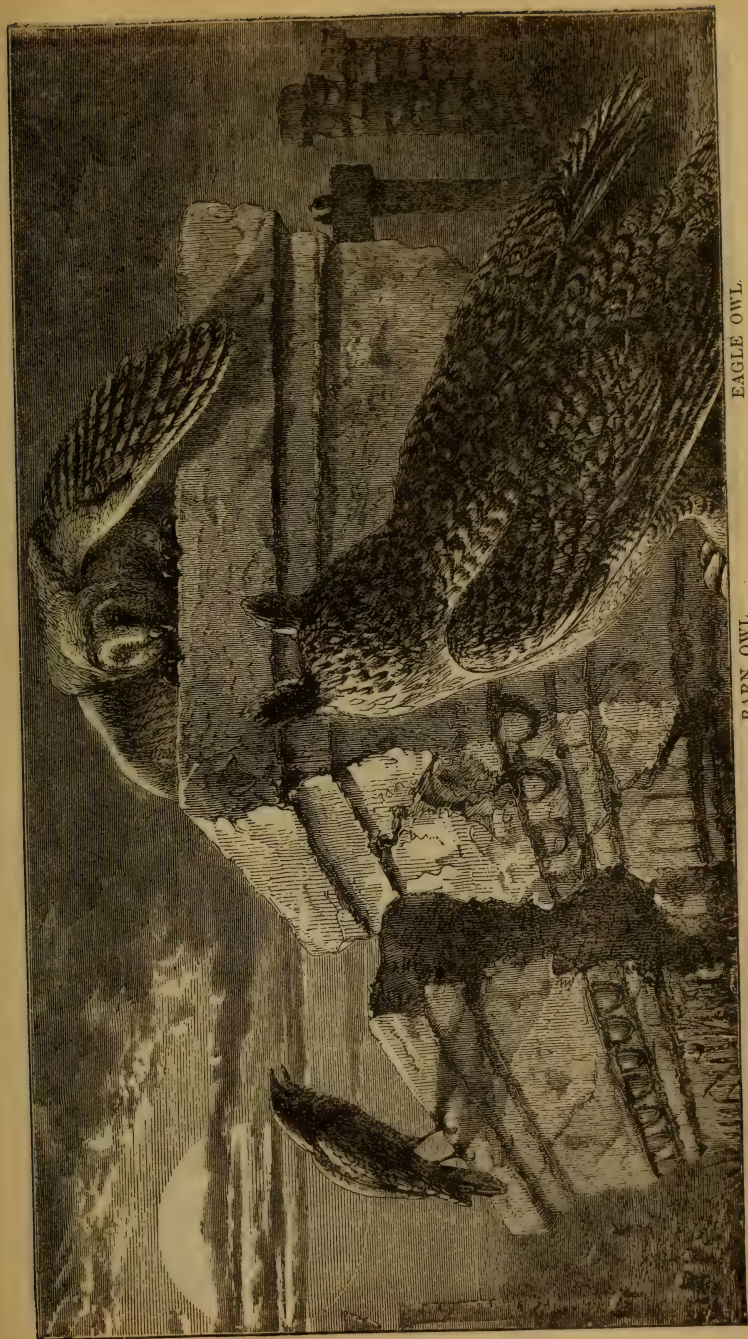
It is most probable that the Great Owl or *Yanshûph* is the EGYPTIAN EAGLE OWL (*Bubo ascalaphus*), a bird which is closely allied to the great Eagle Owl of Europe (*Bubo maximus*), and the Virginian Eared Owl (*Bubo Virginianus*) of America. This fine bird measures some two feet in length, and looks much larger than its real size, owing to the thick coating of feathers which it wears in common with all true Owls, and the ear-like feather tufts on the top of its head, which it can raise or depress at pleasure. Its plumage is light tawny.

This bird has a special predilection for deserted places and ruins, and may at the present time be seen on the very spots of which the prophet spoke in his prediction. It is very plentiful in Egypt, where the vast ruins are the only relics of a creed long passed away or modified into other forms of religion, and its presence only intensifies rather than diminishes the feeling of loneliness that oppresses the traveller as he passes among the ruins.

The European Eagle Owl has all the habits of its Asiatic congener. It dwells in places far from the neighbourhood of man, and during the day is hidden in some deep and dark recess, its enormous eyes not being able to endure the light of day. In the evening it issues from its retreat, and begins its search after prey, which consists of various birds, quadrupeds, reptiles, fish, and even insects when it can find nothing better.

On account of its comparatively large dimensions, it is able to overcome even the full-grown hare and rabbit, while the lamb and the young fawn occasionally fall victims to its voracity. It seems never to chase any creature on the wing, but floats silently through the air, its soft and downy plumage deadening the sound of its progress, and suddenly drops on the unsuspecting prey while it is on the ground.

The nest of this Owl is made in the crevices of rocks, or in ruins, and is a very large one, composed of sticks and twigs, lined with a tolerably large heap of dried herbage, the parent Owls returning to the same spot year after year. Should it not be able to find either a rock or a ruin, it contents itself with a



EAGLE OWL.

BARN OWL.

RAVEN.



A FAMILY COUNCIL.

hollow in the ground, and there lays its eggs, which are generally two in number, though occasionally a third egg is found. The Egyptian Eagle Owl does much the same thing, burrowing in sand-banks, and retreating, if it fears danger, into the hollow where its nest has been made.

In the large illustration the two last-mentioned species are given. The Egyptian Eagle Owl is seen with its back towards the spectator, grasping in its talons a dead hare, and with ear-tufts erect is looking towards the Barn Owl, which is contemplating in mingled anger and fear the proceedings of the larger bird. Near them is perched a raven, in order to carry out more fully the prophetic words, "the owl also and the raven shall dwell in it."





THE NIGHT-HAWK.

Different interpretations of the word *Tachmâs*—Probability that it signifies the Nightjar—Various names of the bird—Its remarkable jarring cry, and wheeling flight—Mode of feeding—Boldness of the bird—Deceptive appearance of its size.

WE next come to the vexed question of the word *Tachmâs* which is rendered in the Authorized Version as NIGHT-HAWK.

This word only occurs among the list of prohibited birds (see Lev. xi. 16, and Deut. xiv. 15), and has caused great controversies among commentators. The balance of probability seems to lie between two interpretations,—namely, that which considers the word *tachmâs* to signify the Night-hawk, and that which translates it as Owl. For both of these interpretations much is to be said, and it cannot be denied that of the two the latter is perhaps the preferable. If so, the White or Barn Owl is probably the particular species to which reference is made.

Still, many commentators think that the Night-hawk or Nightjar is the bird which is signified by the word *tachmâs*;

and, as we have already treated of the owls, we will accept the rendering of the Authorized Version. Moreover, the Jewish Bible follows the same translation, and renders *tachmâs* as Night-hawk, but affixes the mark of doubt.

It is not unlikely that the Jews may have reckoned this bird among the owls, just as is the case with the uneducated among ourselves, who popularly speak of the Nightjar as the Fern Owl, Churn Owl, or Jar Owl, the two last names being given to



THE NIGHT-HAWK.

it on account of its peculiar cry. There are few birds, indeed, which have received a greater variety of popular names, for, besides the Goatsucker and the five which have already been mentioned, there are the Wheel-bird and Dor-hawk, the former of these names having been given to the bird on account of its wheeling round the trees while seeking for prey, and the latter on account of the dor-beetles on which it largely feeds.

This curious variety of names is probably due to the very conspicuous character of the Nightjar, its strange, jarring, weird-like cry forcing itself on the ear of the least attentive, as it

breaks the silence of night. It hardly seems like the cry of a bird, but rather resembles the sound of a pallet falling on the cogs of a rapidly-working wheel. It begins in the dusk of evening, the long, jarring note being rolled out almost interminably, until the hearer wonders how the bird can have breath enough for such a prolonged sound. The hearer may hold his breath as long as he can, take a full inspiration, hold his breath afresh, and repeat this process over and over again, and yet the Nightjar continues to trill out its rapid notes without a moment's cessation for breath, the sound now rising shrill and clear, and now sinking as if the bird were far off, but never ceasing for an instant.

This remarkable cry has caused the uneducated rustics to look upon the bird with superstitious dread, every one knowing its cry full well, though to many the bird is unknown except by its voice. It is probable that, in the days when Moses wrote the Law, so conspicuous a bird was well known to the Jews, and we may therefore conjecture that it was one of those birds which he would specially mention by name.

The general habits of the Nightjar are quite as remarkable as its note. It feeds on the wing, chasing and capturing the various moths, beetles, and other insects that fly abroad by night. It may be seen wheeling round the branches of some tree, the oak being a special favourite, sometimes circling round it, and sometimes rising high in the air, and the next moment skimming along the ground. Suddenly it will disappear, and next moment its long trilling cry is heard from among the branches of the tree round which it has been flying. To see it while singing is almost impossible, for it has a habit of sitting longitudinally on the branch, and not across it, like most birds, so that the outline of its body cannot be distinguished from that of the bough on which it is seated. As suddenly as it began, the sound ceases, and simultaneously the bird may be seen wheeling again through the air with its noiseless flight.

Being a very bold bird, and not much afraid of man, it allows a careful observer to watch its movements clearly. I have often stood close to the tree round which several Nightjars were circling, and seen them chase their prey to the ground within a yard or two of the spot on which I was standing. The flight of the Nightjar is singularly graceful. Swift as the swallow itself,

it presents a command of wing that is really wonderful, gliding through the air with consummate ease, wheeling and doubling in pursuit of some active moth, whose white wings glitter against the dark background, while the sober plumage of its pursuer is scarcely visible, passing often within a few feet of the spectator, and yet not a sound or a rustle will reach his ears. Sometimes the bird is said to strike its wings together over its back, so as to produce a sharp snapping sound, intended to express anger at the presence of the intruder. I never, however, heard this sound, though I have watched the bird so often.

Owing to the soft plumage with which it is clad, this bird, like the owls, looks larger than really is the case. It is between ten and eleven inches in length, with an expanse of wing of twenty inches, and yet weighs rather less than three ounces. Its large mouth, like that of the swallow tribe, opens as far as the eyes, and is furnished with a set of *vibrissæ* or bristles, which remind the observer of the "whale-bone" which is set on the jaw of the Greenland whale.





THE SWALLOW.

Identification of the smaller birds—Oriental indifference to natural history—Use of collective terms—The Swallow—The Bird of Liberty—Swallows and Swifts—Variety of small birds found in Palestine—The Swallows of Palestine.

DIFFICULT as is the identification of the mammalia mentioned in the Bible, that of the birds is much more intricate.

Some of the larger birds can be identified with tolerable certainty, but when we come to the smaller and less conspicuous species, we are at once lost in uncertainty, and at the best can only offer conjectures. The fact is, the Jews of old had no idea of discriminating between the smaller birds, unless they happened to be tolerably conspicuous by plumage or by voice. We need not be much surprised at this. The Orientals of the present day do precisely the same thing, and not only fail to discriminate between the smaller birds, but absolutely have no names for them.

By them, the shrikes, the swallows, the starlings, the thrushes, the larks, the warblers, and all the smaller birds, are called by a common title, derived from the twittering sound of their voices, only one or two of them having any distinctive titles. They look upon the birds much as persons ignorant of entomology look at a collection of moths. There is not much difficulty in discriminating between the great hawk-moths, and perhaps in giving a name to one or two of them which are specially noticeable for any peculiarity of form or colour; but when they come to the "Rustics," the "Carpets," the "Wainscots," and similar groups, they are utterly lost; and, though they may be able to see the characteristic marks when

the moths are placed side by side, they are incapable of distinguishing them separately, and, to their uneducated eyes, twenty or thirty species appear absolutely alike.

I believe that there is no country where a knowledge of practical natural history is so widely extended as in England, and yet how few educated persons are there who, if taken along a country lane, can name the commonest weed or insect, or distinguish between a sparrow, a linnet, a hedge-sparrow, and a chaffinch. Nay, how many are there who, if challenged even to repeat the names of twelve little birds, would be unable to do so without some consideration, much less to know them if the birds were placed before them.

Such being the case in a country where the capability of observation is more or less cultivated in every educated person, we may well expect that a profound ignorance on the subject should exist in countries where that faculty is absolutely neglected as a matter of education. Moreover, in England, there is a comparatively limited list of birds, whereas in Palestine are found nearly all those which are reckoned among British birds, and many other species besides. Those which reside in England reside also for the most part in Palestine, while the greater part of the migratory birds pass, as we might expect, into the Holy Land and the neighbouring countries.

If then we put together the two facts of an unobservant people and a vastly extended fauna, we shall not wonder that so many collective terms are used in the Scriptures, one word often doing duty for twenty or thirty species. The only plan, therefore, which can be adopted, is to mention generally the birds which were probably grouped under one name, and to describe briefly one or two of the most prominent.

It is, however, rather remarkable that the song of birds does not appear to be noticed by the sacred writers. We might expect that several of the prophets, especially Isaiah, the great sacred poet, who drew so many of his images from natural objects, would have found in the song of birds some metaphor expressive of sweetness or joy. We might expect that in the Book of Job, in which so many creatures are mentioned, the singing of birds would be brought as prominently forward as the neck clothed with thunder of the horse, the tameless freedom of the wild ass, the voracity of the vulture, and the swift-

ness of the ostrich. We might expect the song of birds to be mentioned by Amos, the herdman of Tekoa, who introduces into his rugged poem the roar of the old lion and the wail of the cub, the venom of the serpent hidden in the wattled wall of the herdman's hut, and the ravages of the palmer-worm among the olives. Above all, we might expect that in the Psalms there would be many allusions to the notes of the various birds which have formed such fruitful themes for the poets of later times. There are, however, in the whole of the Scriptures but two passages in which the song of birds is mentioned, and even in these only a passing allusion is made.

One of them occurs in Psalm civ. 12: "By them (*i.e.* the springs of water) shall the fowls of the heaven have their habitation, which sing among the branches." This passage is perhaps rendered more closely in the Jewish Bible: "Over them dwell the fowls of the heaven; they let their voices resound (or give their voice) from between the foliage."

The other occurs in Eccles. xii. 4: "And the doors shall be shut in the streets, when the sound of the grinding is low, and he shall rise up at the voice of the bird, and all the daughters of music shall be brought low." The word which is here translated as "bird," is that which is rendered in some places as "sparrow," in others as "fowl," and in others as "bird." Even in these passages, as the reader will have noticed, no marks of appreciation are employed, and we hear nothing of the sweetness, joyousness, or mournfulness of the bird's song.

We will now proceed to the words which have been translated as Swallow in the Authorized Version.

These are two in number, namely, *derôr* and *agar*. Hebraists are, however, agreed that the latter word has been wrongly applied, the translators having interchanged the signification of two contiguous words.

We will therefore first take the word *deror*. This word signifies liberty, and is well applied to the Swallow, the bird of freedom. It is remarkable, by the way, how some of the old commentators have contrived to perplex themselves about a very simple matter. One of them comments upon the bird as being "so called, because it has the liberty of building in the houses of mankind." Another takes a somewhat similar view of the



LOST FROM THE FLOCK.

case, but puts it in a catechetical form: "Why is the swallow called the bird of liberty? Because it lives both in the house and in the field." It is scarcely necessary to point out to the reader that the "liberty" to which allusion is made is the liberty of flight, the bird coming and going at its appointed times, and not being capable of domestication.

Several kinds of Swallow are known in Palestine, including the true Swallows, the martins, and the swifts, and, as we shall presently see, it is likely that one of these groups was distinguished by a separate name. Whether or not the word *deror* included other birds beside the Swallows is rather doubtful, though not at all unlikely; and if so, it is probable that any swift-winged insectivorous bird would be called by the name of *Deror*, irrespective of its size or colour.

The bee-eaters, for example, are probably among the number of the birds grouped together under the word *deror*, and we may conjecture that the same is the case with the sunbirds, those bright-plumed little beings that take in the Old World the place occupied by the humming-birds in the New, and often mistaken for them by travellers who are not acquainted with ornithology. One of these birds, the *Nectarinia Oseeæ*, is described by Mr. Tristram as "a tiny little creature of gorgeous plumage, rivalling the humming-birds of America in the metallic lustre of its feathers—green and purple, with brilliant red and orange plumes under its shoulders."

In order to account for the singular variety of animal life which is to be found in Palestine, and especially the exceeding diversity of species among the birds, we must remember that Palestine is a sort of microcosm in itself, comprising within its narrow boundaries the most opposite conditions of temperature, climate, and soil. Some parts are rocky, barren, and mountainous, chilly and cold at the top, and acting as channels through which the winds blow almost continuously. The cliffs are full of holes, rifts, and caverns, some natural, some artificial, and some of a mixed kind, the original caverns having been enlarged and improved by the hand of man.

As a contrast to this rough and ragged region, there lie close at hand large fertile plains, affording pasturage for unnumbered cattle, and of a tolerably equable temperature, so that the animals which are pastured in it can find food throughout

the year. Through the centre of Palestine runs the Jordan, fertilizing its banks with perpetual verdure, and ending its course in the sulphurous and bituminous waters of the Dead Sea, under whose waves the ruins of the wicked cities are supposed to lie. Westward we have the shore of the Mediterranean with



THE SWALLOW AND SWIFT.

its tideless waves of the salt sea, and on the eastward of the mountain range that runs nearly parallel to the sea is the great Lake of Tiberias, so large as to have earned the name of the Sea of Galilee.

Under these favourable conditions, therefore, the number of species which are found in Palestine is perhaps greater than can be seen in any other part of the earth of the same dimensions,

and it seems probable that for this reason, among many others, Palestine was selected to be the Holy Land. If, for example, the Christian Church had been originated under the tropics, those who lived in a cold climate could scarcely have understood the language in which the Scriptures must necessarily have been couched. Had it, on the contrary, taken its rise in the Arctic regions, the inhabitants of the tropics and temperate regions



VIEW OF THE SEA OF GALILEE.

could not have comprehended the imagery in which the teachings of Scripture must have been conveyed. But the small and geographically insignificant Land of Palestine combines in itself many of the characteristics which belong respectively to the cold, the temperate, and the hot regions of the world, so that the terms in which the sacred writings are couched are intelligible to a very great proportion of the world's inhabitants.

This being the case, we naturally expect to find that several species of the Swallow are inhabitants of Palestine, if so migratory a bird can be said to be an inhabitant of any one country.



THE SWALLOW'S FAVOURITE HAUNT.

The chief characteristic of the Swallow, the "bird of freedom," is that it cannot endure captivity, but is forced by instinct to pass from one country to another for the purpose of preserving itself in a tolerably equable temperature, moving northwards as the spring ripens into summer, and southwards as autumn begins to sink into winter. By some marvellous instinct it traces its way over vast distances, passing over hundreds of miles where nothing but the sea is beneath it, and yet at the appointed season returning with unerring certainty to the spot where it was hatched. How it is guided no one knows, but the fact is certain, that Swallows, remarkable for some peculiarity by which they could be at once identified, have been observed to leave the country on their migration, and to return in the following year to the identical nest whence they started.

Its habit of making its nest among the habitations of mankind is mentioned in a well-known passage of the Psalms: "The sparrow hath found an house, and the swallow a nest for herself, where she may lay her young, even Thine altars, O Lord of Hosts, my King and my God" (Ps. lxxxiv. 3). The Swallow seems in all countries to have enjoyed the protection of man, and to have

been suffered to build in peace under his roof. We find the same idea prevalent in the New World as well as the Old, and it is rather curious that the presence of the bird should so generally be thought to bring luck to a house.

In some parts of our country, a farmer would not dare to kill a Swallow or break down its nest, simply because he thinks that if he did so his cows would fail to give their due supply of milk. The connexion between the milking of a cow in the field and the destruction of a Swallow's nest in the house is not very easy to see, but nevertheless such is the belief. This idea ranks with that which asserts the robin and the wren to be the male and female of the same species, and to be under some special divine protection.

Whatever may be the origin of this superstition, whether it be derived from some forgotten source, or whether it be the natural result of the confiding nature of the bird, the Swallow enjoys at the present day the protection of man, and builds freely in his houses, and even his places of worship. The heathen temples, the Mahometan mosques, and the Christian churches are alike inhabited by the Swallow, who seems to know her security, and often places her nest where a child might reach it.

The bird does not, however, restrict itself to the habitations of man, though it prefers them; and in those places where no houses are to be found, and yet where insects are plentiful, it takes possession of the clefts of rocks, and therein makes its nest. Many instances are known where the Swallow has chosen the most extraordinary places for its nest. It has been known to build year after year on the frame of a picture, between the handles of a pair of shears hung on the wall, on a lamp-bracket, in a table-drawer, on a door-knocker, and similar strange localities.

The swiftness of flight for which this bird is remarkable is noticed by the sacred writers. "As the bird by wandering, as the swallow by flying, so the curse causeless shall not come" (Prov. xxvi. 2). This passage is given rather differently in the Jewish Bible, though the general sense remains the same: "As the bird is ready to flee, as the swallow to fly away; so a causeless execration, it shall not come." It is possible, however, that this passage may allude rather to the migration than the swiftness of the bird.



SWALLOWS AT HOME.

THE HOOPOE, OR LAPWING OF SCRIPTURE

The "Dukiphath" of Scripture—Various interpretations of the word—The Hoopoe—Its beauty and ill reputation—The unpleasant odour of its nest—Food of the Hoopoe—Its beautiful nest, and remarkable gestures—A curious legend of Solomon and the Hoopoe.

IN the two parallel chapters, Lev. xi. and Deut. xiv., there occurs the name of a bird which is translated in the Authorized Version, Lapwing: "And the stork, the heron after her kind, the lapwing, and the bat."

The Hebrew word is *dukiphath*, and various interpretations have been proposed for it, some taking it to be the common domestic fowl, others the cock-of-the-woods, or capercailzie, while others have preferred to translate it as Hoopoe. The Jewish Bible retains the word lapwing, but adds the mark of doubt. Commentators are, however, agreed that of all these interpretations, that which renders the word as HOOPOE (*Upupa epops*) is the best.

There would be no particular object in the prohibition of such a bird as the lapwing, or any of its kin, while there would be very good reasons for the same injunction with regard to the Hoopoe.

In spite of the beauty of the bird, it has always had rather an ill reputation, and, whether in Europe or Asia, its presence seems to be regarded by the ignorant with a kind of superstitious aversion. This universal distaste for the Hoopoe is probably occasioned by an exceedingly pungent and disagreeable odour which fills the nest of the bird, and which infects for a considerable time the hand which is employed to take the eggs.

The nest is, moreover, well calculated for retaining any unpleasant smell, being generally made in the hollow of a tree, and having therefore but little of that thorough ventilation which is found in nearly all nests which are built on boughs and sprays.

The food of the Hoopoe consists almost entirely of insects. They have been said to feed on earth-worms; but this notion seems to be a mistaken one, as in captivity they will not touch an earth-worm so long as they can procure an insect. Beetles of various kinds seem to be their favourite food, and when the beetles are tolerably large—say, for example, as large as the common cockchafer and dor-beetle—the bird beats them into a soft mass before it attempts to eat them. Smaller beetles are swallowed without any ceremony. The various boring insects which make their home in decaying wood are favourite articles of diet with the Hoopoe, which digs them out of the soft wood with its long curved beak.

It has already been mentioned that the nest is usually made in the hollow of a tree. In many parts of the country however, hollow trees cannot be found, and in that case the Hoopoe resorts to clefts in the rock, or even to holes in old ruins.

The bird is a peculiarly conspicuous one, not only on account of its boldly-barred plumage and its beautiful crest, but by its cry and its gestures. It has a way of elevating and depressing its crest, and bobbing its head up and down, in a manner which could not fail to attract the attention even of the most incurious, the whole aspect and expression of the bird varying with the raising and depressing of the crest.

Respecting this crest there is a curious old legend. As is the case with most of the Oriental legends, it introduces the name of King Solomon, who, according to Oriental notions, was a mighty wizard rather than a wise king, and by means of his seal, on which was engraven the mystic symbol of Divinity, held sway over the birds, the beasts, the elements, and even over the Jinns and Afreet, *i.e.* the good and evil spirits, which are too ethereal for the material world and too gross for the spiritual, and therefore hold the middle place between them.

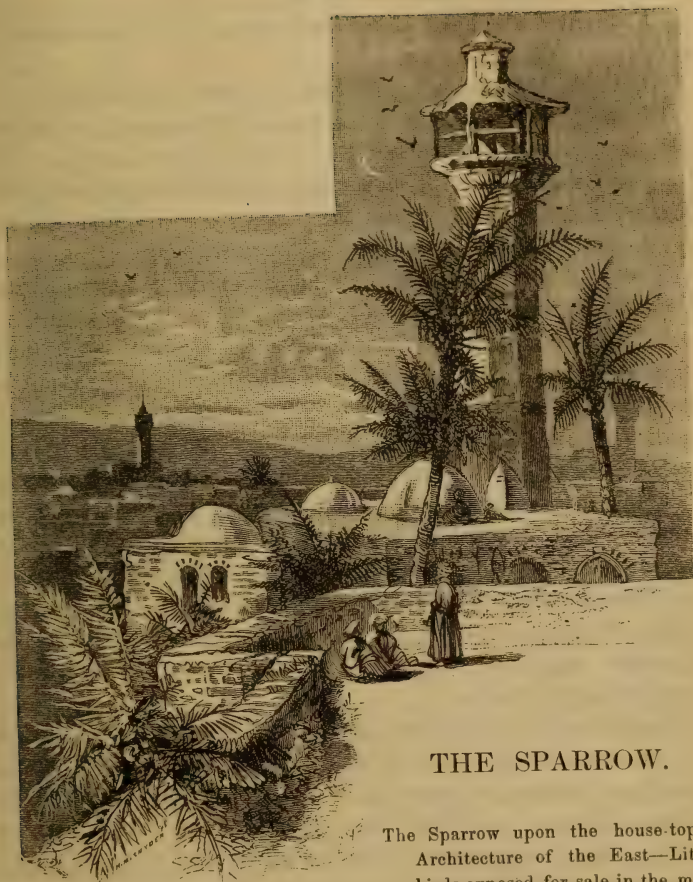
On one of his journeys across the desert, Solomon was perishing from the heat of the sun, when the Hoopoes came to his aid, and flew in a dense mass over his head, thus forming a shelter from the fiery sunbeams. Grateful for this assistance, the monarch told the Hoopoes to ask for a boon, and it should be granted to them. The birds, after consulting together, agreed to ask that from that time every Hoopoe should wear a crown of gold like Solomon himself. The request was immediately

granted, and each Hoopoe found itself adorned with a royal crown. At first, while their honours were new, great was the joy of the birds, who paused at every little puddle of water to contemplate themselves, bowing their heads over the watery mirror so as to display the crown to the best advantage.

Soon, however, they found cause to repent of their ambition. The golden crown became heavy and wearisome to them, and, besides, the wealth bestowed on the birds rendered them the prey of every fowler. The unfortunate Hoopoes were persecuted in all directions for the sake of their golden crowns which they could neither take off nor conceal.

At last, the few survivors presented themselves before Solomon, and begged him to rescind his fatal gift, which he did by substituting a crest of feathers for the crown of gold. The Hoopoe, however, never forgets its former grandeur, and is always bowing and bending itself as it used to do when contemplating its golden crown in the water.





EASTERN HOUSE-TOP.

THE SPARROW.

The Sparrow upon the house-top—
Architecture of the East—Little
birds exposed for sale in the mar-
ket—The two Sparrows sold for a

farthing—Bird-catching—The net, the snare, and the trap.

WE have already discussed the signification of the compound word *tzippor-deror*, and will now take the word *tzippor* alone.

Like many other Hebrew terms, the word is evidently used in a collective sense, signifying any small bird that is not specially designated. In several portions of Scripture it is translated as Sparrow, and to that word we will at present restrict ourselves.

On turning to Ps. cii. 5-7, we find that the word is used as an emblem of solitude and misery: "By reason of the voice of my groaning, my bones cleave to my skin.

"I am like a pelican of the wilderness: I am like an owl of the desert.

"I watch, and am as a sparrow alone upon the house-top."

The word which is here translated as "Sparrow" is *tzippor*, the same which is rendered as "bird" in Lev. xiv. 4. The Hebrew Bible more consistently uses the collective term "bird" in both instances, and renders the passage as, "I watch, and am as a lonely bird upon a roof."

Now, any one who knows the habits of the Sparrow is perfectly aware that it is a peculiarly sociable bird. It is quarrelsome enough with its fellows, and always ready to fight for a stray grain or morsel of food; but it is exceedingly gregarious, assembling together in little parties, enlivening the air with its merry though unmusical twitterings.

This cosmopolitan bird is plentiful in the coast towns of Palestine, where it haunts the habitations of men with the same dauntless confidence which it displays in this country. It is often seen upon roofs or house-tops, but is no more apt to sit alone in Palestine than it is here. On the contrary, the Sparrows collect in great numbers on the house-tops, attracted by the abundant supply of food which it finds there. This requires some little explanation.

The house-tops of the East, instead of being gabled and tiled as among ourselves, to allow the rain to run off, are quite flat, and serve as terraces or promenades in the evening, or even for sleeping-places; and from the house-tops proclamations were made. See, for example, 1 Sam. ix. 25: "And when they were come down from the high place into the city, Samuel communed with Saul upon the top of the house"—this being the ordinary place which would be chosen for a conversation. In order to keep out the heat of the mid-day sun, tents were sometimes pitched upon these flat house-tops. (See 2 Sam. xvi. 22.) Reference to the use of the house-tops as places for conversation are made in the New Testament. See, for example, Matt. x. 27: "What I tell you in darkness, that speak ye in light; and what ye hear in the ear, that preach ye upon the house-tops." Another passage of a similar nature occurs in Luke xii. 3: "Therefore

whatsoever ye have spoken in darkness shall be heard in the light, and that which ye have spoken in the ear in closets shall be proclaimed on the house-tops."

These roofs, instead of being built with sloping rafters like those to which we are accustomed in this country, are made with great beams of wood laid horizontally, and crossed by planks, poles, and brushwood packed tightly together. As this roof would not keep out the rain, it is covered with a thick layer of clay mixed with straw, and beaten down as hard as possible. This covering has constantly to be renewed, as, even in the best made roofs, the heavy rains are sure to wash away some portion of the clay covering, which has to be patched up with a fresh supply of earth. A stone roller is generally kept on the roof of each house for the purpose of making a flat and even surface.

The earth which is used for this purpose is brought from the uncultivated ground, and is full of various seeds. As soon as the rains fall, these seeds spring up, and afford food to the Sparrows and other little birds, who assemble in thousands on the house-tops, and then peck away just as they do in our own streets and farm-yards.

It is now evident that the "sparrow alone and melancholy upon the house-tops" cannot be the lively, gregarious Sparrow which assembles in such numbers on these favourite feeding-places. We must therefore look for some other bird, and naturalists are now agreed that we may accept the BLUE THRUSH (*Petrocosyphus cyaneus*) as the particular Tzippor, or small bird, which sits alone on the house-tops.

The colour of this bird is a dark blue, whence it derives its popular name. Its habits exactly correspond with the idea of solitude and melancholy. The Blue Thrushes never assemble in flocks, and it is very rare to see more than a pair together. It is fond of sitting on the tops of houses, uttering its note, which, however agreeable to itself, is monotonous and melancholy to a human ear.

In connexion with the passage already quoted, "What ye hear in the ear, that preach ye upon the house-tops," I will take the opportunity of explaining the passage itself, which scarcely seems relevant to the occasion unless we understand its bearings. The context shows that our Lord was speaking of the new doctrines which He had come to teach, and the duty of spreading

them, and alludes to a mode of religious teaching which was then in vogue.

The long captivity of the Jews in Babylon had caused the Hebrew language to be disused among the common people, who had learned the Chaldaic language from their captors. After their return to Palestine, the custom of publicly reading the



READING THE LAW TO THE PEOPLE AFTER THE RETURN FROM CAPTIVITY.

Scriptures was found to be positively useless, the generality of the people being ignorant of the Hebrew language.

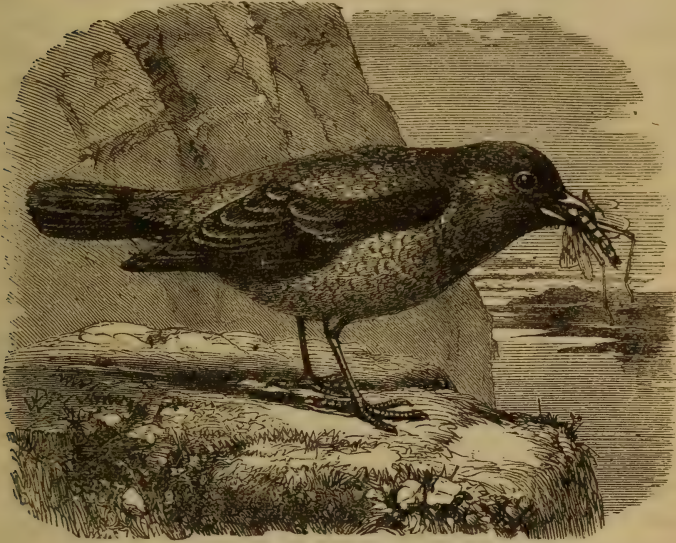
Accordingly, the following modification was adopted. The roll of the Scriptures was brought out as usual, and the sacred words read, or rather chanted. After each passage was read, a doctor of the law whispered its meaning into the ear of a Targumista or interpreter, who repeated to the people in the Chaldaic language the explanation which the doctor had whispered in Hebrew. The reader will now see how appropriate is the metaphor, the whispering in the ear and subsequent proclamation being the customary mode of imparting religious instruction.

If the reader will now turn to Matt. x. 29, he will find that the word "sparrow" is used in a passage which has become very familiar to us. "Are not two sparrows sold for a farthing? and one of them shall not fall on the ground without your Father.

"But the very hairs of your head are all numbered.

"Fear ye not therefore, ye are of more value than many sparrows." The same sentences are given by St. Luke (xii. 6), in almost the same words.

Now the word which is translated as "Sparrow" is *strouthion*,



THE BLUE THRUSH, OR SPARROW OF SCRIPTURE.

a collective word, signifying a bird of any kind. Without the addition of some epithet, it was generally used to signify any kind of small bird, though it is occasionally employed to signify even so large a creature as an eagle, provided that the bird had been mentioned beforehand. Conjoined with the word "great," it signifies the ostrich; and when used in connexion with a word significative of running, it is employed as a general term for all cursorial birds.

In the passages above quoted it is used alone, and evidently signifies any kind of little bird, whether it be a sparrow or not. Allusion is made by our Lord to a custom, which has survived to the present day, of exposing for sale in the markets the bodies of little birds. They are stripped of their feathers, and spitted together in rows, and always have a large sale.

Various birds are sold in this manner, little if any distinction being made between them, save perhaps in respect of size, the larger species commanding a higher price than the small birds. In fact, they are arranged exactly after the manner in which the Orientals sell their "kabobs," *i.e.* little pieces of meat pierced by wooden skewers.

It is evident that to supply such a market it is necessary that the birds should be of a tolerably gregarious nature, so that a considerable number can be caught at a time. Nets were employed for this purpose, and we may safely infer that the forms of the nets and the methods of using them were identical with those which are employed in the same country at the present day.

The fowlers supply themselves with a large net supported on two sticks, and, taking a lantern with them fastened to the top of a pole, they sally out at night to the places where the small birds sleep.

Raising the net on its sticks, they lift it to the requisite height, and hold the lantern exactly opposite to it, so as to place the net between the birds and the lantern. The roosting-places are then beaten with sticks or pelted with stones, so as to awaken the sleeping birds. Startled by the sudden noise, they dash from their roosts, instinctively make towards the light, and so fall into the net. Bird-catching with nets is several times mentioned in the Old Testament, but in the New the net is only alluded to as used for taking fish.

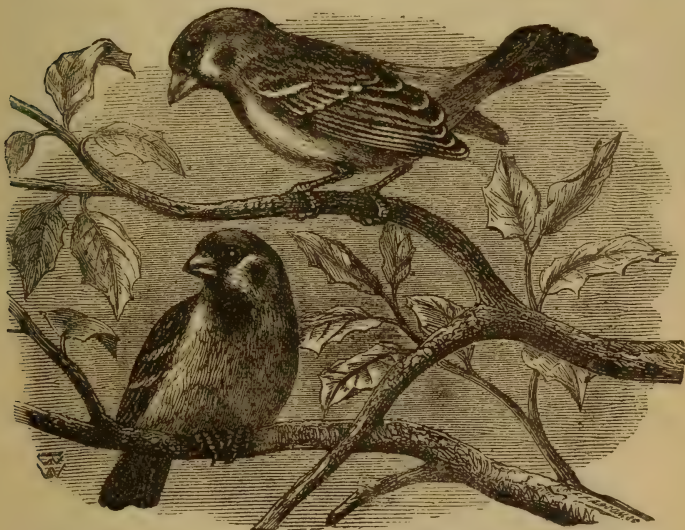
Beside the net, several other modes of bird-catching were used by the ancient Jews, just as is the case at the present day. Boys, for example, who catch birds for their own consumption, and not for the market, can do so by means of various traps, most of which are made on the principle of the noose, or snare. Sometimes a great number of hair-nooses are set in places to which the birds are decoyed, so that in hopping about many of them are sure to become entangled in the snares. Sometimes the noose is ingeniously suspended in a narrow passage which the birds are likely to traverse, and sometimes a simple fall-trap is employed.

WE now pass to another division of the subject. In Ps. lxxxiv. 1-3, we come upon a passage in which the Sparrow is again mentioned: "How amiable are Thy tabernacles, O Lord of hosts!

“ My soul longeth, yea, even fainteth for the courts of the Lord ; my heart and my flesh crieth out for the living God.

“ Yea, the sparrow hath found an house, and the swallow a nest for herself, where she may lay her young, even Thine altars, O Lord of hosts, my King, and my God.”

It is evident that we have in this passage a different bird from the Sparrow that sitteth alone upon the house-tops ; and though the same word, *tzippor*, is used in both cases, it is clear



THE TREE-SPARROW, OR SPARROW OF SCRIPTURE.

that whereas the former bird was mentioned as an emblem of sorrow, solitude, and sadness, the latter is brought forward as an image of joy and happiness. “ Blessed are they,” proceeds the Psalmist, “ that dwell in Thy house : they will be still praising Thee. . . . For a day in Thy courts is better than a thousand. I had rather be a doorkeeper in the house of my God, than to dwell in the tents of wickedness.”

According to Mr. Tristram, this is probably one of the species to which allusion is made by the Psalmist. While inspecting the ruins in the neighbourhood of the Temple, he came upon an old wall. “ Near this gate I climbed on to the top of the wall,

and walked along for some time, enjoying the fine view at the gorge of the Kedron, with its harvest crop of little white tombs. In a chink I discovered a sparrow's nest (*Passer cisalpinus*, var.) of a species so closely allied to our own that it is difficult to distinguish it, one of the very kind of which the Psalmist sung. . . . The swallows had departed for the winter, but the sparrow has remained pertinaciously through all the sieges and changes of Jerusalem."

The same traveller thinks that the TREE SPARROW (*Passer montanus*) may be the species to which the sacred writer refers, as it is even now very plentiful about the neighbourhood of the Temple. In all probability we may accept both these birds as representatives of the Sparrow which found a home in the Temple. The swallow is separately mentioned, possibly because its migratory habits rendered it a peculiarly conspicuous bird; but it is probable that many species of birds might make their nests in a place where they felt themselves secure from disturbance, and that all these birds would be mentioned under the collective and convenient term of Tzipporim.





THE CUCKOO.

The Cuckoo only twice mentioned in Scripture—The common species, and the Great Spotted Cuckoo—Depositing the egg.

ONLY in two instances is the word CUCKOO found in the Authorized Version of the Bible, and as they occur in parallel passages they are practically reduced to one. In Lev. xi. 16 we find it mentioned among the birds that might not be eaten, and the same prohibition is repeated in Deut. xiv. 15, the Jews being ordered to hold the bird in abomination.

It is rather remarkable that the Arabic name for the bird is exactly the same as ours, the peculiar cry having supplied the name. Its habit of laying its eggs in the nests of other birds is well known, together with the curious fact, that although so large a bird, measuring more than a foot in length, its egg is not

larger than that of the little birds, such as the hedge-sparrow, robin, or redstart.

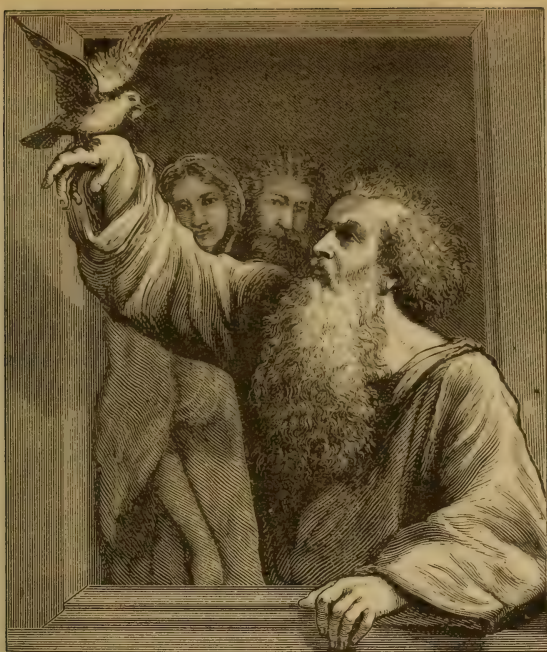
Besides this species, another Cuckoo inhabits Palestine, and



THE GREAT SPOTTED CUCKOO.

is much more common. This is the GREAT SPOTTED CUCKOO (*Oxylophus glandarius*). The birds belonging to this genus have been separated from the other Cuckoos because the feathers on the head are formed into a bold crest, in some species, such as Le Vaillant's Cuckoo, reminding the observer of the crest of the cockatoo. This fine bird measures nearly sixteen inches in length, and can be distinguished, not only by the crested head, but by the reddish grey of the throat and chest, and the white tips of the wing and tail feathers.

This species lays its eggs in the nests of comparatively large birds, such as the rooks, crows, and magpies;



NOAH RECEIVES THE DOVE.

THE DOVE.

Parallel between the lamb and the Dove—The Dove and the olive branch—Abram's sacrifice, and its acceptance—The Dove-sellers of the Temple—The Rock Dove and its multitudes.

IN giving the Scriptural history of the Doves and Pigeons, we shall find ourselves rather perplexed in compressing the needful information into a reasonable space. There is no bird which plays a more important part, both in the Old and the New Testaments, or which is employed so largely in metaphor and symbol.

The Doves and Pigeons were to the birds what were the sheep and lambs to the animals, and, like them, derived their chief interest from their use in sacrifice. Both the lamb and the young pigeon being emblems of innocence, both were used on similar occasions, the latter being in many instances permitted when the former were too expensive for the means of the offerer. As to the rendering of the Hebrew words which have been translated as Pigeon, Dove, and Turtle Dove, there has never

been any discussion. The Hebrew word *yonáh* has always been acknowledged to signify the Dove or Pigeon, and the word *tôr* to signify the Turtle Dove. Generally, the two words are used in combination, so that *tor-yonáh* signifies the Turtle Dove.

Though the interpretation of the word *yonáh* is universally accepted, there is a little difficulty about its derivation, and its signification apart from the bird. Some have thought that it is derived from a root signifying warmth, in allusion to the warmth of its affection, the Dove having from time immemorial been selected as the type of conjugal love. Others, among whom is Buxtorf, derive it from a word which signifies oppression, because the gentle nature of the Dove, together with its inability to defend itself, cause it to be oppressed, not only by man, but by many rapacious birds.

THE first passage in which we hear of the Dove occurs in the earlier part of Genesis. Indeed, the Dove and the raven are the first two creatures that are mentioned by any definite names, the word *nachosh*, which is translated as "serpent" in Gen. iii. 1, being a collective word signifying any kind of serpent, whether venomous or otherwise, and not used for the purpose of designating any particular species.

Turning to Gen. viii. 8, we come to the first mention of the Dove. The whole passage is too familiar to need quoting, and it is only needful to say that the Dove was sent out of the ark in order that Noah might learn whether the floods had subsided, and that, after she had returned once, he sent her out again seven days afterwards, and that she returned, bearing an olive-branch (or leaf, in the Jewish Bible). Seven days afterwards he sent the Dove for the third time, but she had found rest on the earth, and returned no more.

It is not within the province of this work to treat, except in the most superficial manner, of the metaphorical signification of the Scriptures. I shall, therefore, allude but very slightly to the metaphorical sense of the passages which record the exit from the ark and the sacrifice of Noah. Suffice it to say that, putting entirely aside all metaphor, the characters of the raven and the Dove are well contrasted. The one went out, and, though the trees were at that time submerged, it trusted in its strong wings, and hovered above the watery expanse until the flood had sub-

sided. The Dove, on the contrary, fond of the society of man, and having none of the wild, predatorial habits which distinguish the raven, twice returned to its place of refuge, before it was finally able to find a resting-place for its foot.

After this, we hear nothing of the Dove until the time of Abraham, some four hundred years afterwards, when the covenant was made between the Lord and Abram, when "he believed in the Lord, and it was counted to him for righteousness." In order to ratify this covenant he was ordered to offer a sacrifice, which consisted of a young heifer, a she-goat, a ram, a turtle-dove, and a young dove or pigeon. The larger animals were severed in two, but the birds were not divided, and between the portions of the sacrifice there passed a lamp of fire as a symbol of the Divine presence.

In after days, when the promise that the seed of Abram should be as the stars of heaven for multitude had been amply fulfilled, together with the prophecy that they should be "strangers in a land that was not theirs," and should be in slavery and under oppression for many years, the Dove was specially mentioned in the new law as one of the creatures that were to be sacrificed on certain defined occasions.

Even the particular mode of offering the Dove was strictly defined. See Lev. i. 14—17: "If the burnt sacrifice for his offering to the Lord be of fowls, then he shall bring his offering of turtle-doves, or of young pigeons.

"And the priest shall bring it unto the altar, and wring off his head, and burn it on the altar; and the blood thereof shall be wrung out at the side of the altar.

"And he shall pluck away his crop with his feathers, and cast it beside the altar, on the east part, by the place of the ashes.

"And he shall cleave it with the wings thereof, but shall not divide it asunder: and the priest shall burn it upon the altar, upon the wood that is upon the fire."

Here we have a repetition not only of the sacrifice of Abram, but of the mode in which it was offered, care being taken that the body of the bird should not be divided. There is a slight, though not very important variation in one or two portions of this passage. For example, the wringing off the head of the bird is, literally, pinching off, and had to be done with the thumb nail; and the passage which is by some translators ren-

dered as the crop and the feathers, is by others translated as the crop and its contents—a reading which seems to be more consonant with the usual ceremonial of sacrifice than the other.

As a general rule, the pigeon was only sanctioned as a sacrificial animal in case one of more value could not be afforded; and so much care was taken in this respect, that with the exception of the two “sparrows” (*tzipporim*) that were enjoined as part of the sacrifice by which the cleansed leper was received back among the people (Lev. xiv. 4), no bird might be offered in sacrifice unless it belonged to the tribe of pigeons.

It was in consequence of the poverty of the family that the Virgin Mary brought two young pigeons when she came to present her new-born Son in the Temple. For those who were able to afford it, the required sacrifice was a lamb of the first year for a burnt-offering, and a young pigeon or Turtle Dove for a sin-offering. But “if she be not able to bring a lamb, then she shall bring two turtles, or two young pigeons, the one for the burnt-offering and the other for a sin-offering.” The extraordinary value which all Israelites set upon the first-born son is well known, both parents even changing their own names, and being called respectively the father and mother of Elias, or Joseph, as the case may be. If the parents who had thus attained the summit of their wishes possessed a lamb, or could have obtained one, they would most certainly have offered it in the fulness of their joy, particularly when, as in the case of Mary, there was such cause for rejoicing; and the fact that they were forced to substitute a second pigeon for the lamb is a proof of their extreme poverty.

While the Israelites were comparatively a small and compact nation, dwelling around their tabernacle, the worshippers could easily offer their sacrifices, bringing them from their homes to the altar. But in process of time, when the nation had become a large and scattered one, its members residing at great distances, and only coming to the Temple once or twice in the year to offer their sacrifices, they would have found that for even the poor to carry their pigeons with them would have greatly increased the trouble, and in many cases have been almost impossible.

For the sake of convenience, therefore, a number of dealers established themselves in the outer courts of the Temple, for

the purpose of selling Doves to those who came to sacrifice. Sheep and oxen were also sold for the same purpose, and, as offerings of money could only be made in the Jewish coinage, money-changers established themselves for the purpose of exchanging foreign money brought from a distance for the legal Jewish shekel. That these people exceeded their object, and endeavoured to overreach the foreign Jews who were ignorant of the comparative value of money and goods, is evident from the



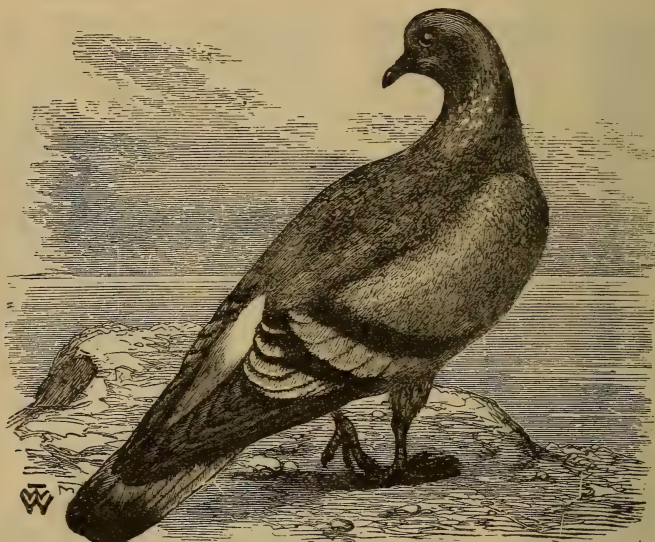
JESUS DRIVES OUT OF THE TEMPLE THE MONEY-CHANGERS AND THOSE WHO SOLD DOVES.

fact of their expulsion by our Lord, and the epithets which were applied to them.

According to some old writers, the Dove was considered as having a superiority over other birds in the instinctive certainty with which it finds its way from one place to another. At the present time, our familiarity with the variety of pigeon known as the Carrier has taught us that the eye is the real means employed by the pigeon for the direction of its flight. Those who fly pigeons for long distances always take them several times over the same ground, carrying them to an in-

creasing distance at every journey, so that the birds shall be able to note certain objects which serve them as landmarks.

Bees and wasps have recourse to a similar plan. When a young wasp leaves its nest for the first time, it does not fly away at once, but hovers in front of the entrance for some time, getting farther and farther away from the nest until it has learned the aspect of surrounding objects. The pigeon acts in precisely the same manner, and so completely does it depend upon eyesight



THE ROCK DOVE.

that, if a heavy fog should come on, the best-trained pigeon will lose its way.

The old writers, however, made up their minds that the pigeon found its way by scent, which sense alone, according to their ideas, could guide it across the sea. They were not aware of the power possessed by birds of making their eyes telescopic at will, or of the enormous increase of range which the sight obtains by elevation. A pigeon at the elevation of several hundred yards can see to an astonishing distance, and there is no need of imagining one sense to receive a peculiar development when the ordinary powers of another are sufficient to obtain the object.

That dove-cotes were in use among the earlier Jews is well known. An allusion to the custom of keeping pigeons in cotes



BLUE ROCK PIGEONS.

is seen in Isa. lx. 8: "Who are these that fly as a cloud, and as the doves to their windows?" or, as the Jewish Bible translates the passage, "as the doves to their apertures?" In this passage the sacred writer utters a prophecy concerning the coming of the world to the Messiah, the Gentiles flocking to Him as the clouds of pigeons fly homeward to their cotes.

The practice of pigeon-keeping has survived to the present day, the houses of wealthy men being furnished with separate pigeon-houses for the protection and shelter of these popular birds.

In the Holy Land are found all the species of Pigeons with which we are familiar, together with one or two others. First, there is the Rock Pigeon, or Blue Rock Dove, which is acknowledged to be the origin of our domestic breeds of Pigeons, with all their infinite variety of colour and plumage. This species, though plentiful in Palestine, is not spread over the whole of the land, but lives chiefly on the coast and in the higher

parts of the country. In these places it multiplies in amazing numbers, its increase being almost wholly unchecked by man, on account of the inaccessible cliffs in which it lays its eggs and nurtures its young, its only enemies being a few of the birds and beasts of prey, which can exercise but a trifling influence on these prolific birds.

Mr. Tristram, while visiting the Wady (or Valley) Seimûn, which lies near the Lake of Gennesaret, witnessed an amusing example of the vast number of these Pigeons.

"No description can give an adequate idea of the myriads of rock pigeons. In absolute clouds they dashed to and fro in the ravine, whirling round with a rush and a whirr that could be felt like a gust of wind. It was amusing to watch them upset the dignity and the equilibrium of the majestic griffon as they swept past him. This enormous bird, quietly sailing along, was quite turned on his back by the sudden rush of wings and wind."

In Palestine these birds are taken in nets, into which they are decoyed by a very effective though cruel device.

When one of these birds is trapped or snared, it is seized by its capturers, who spare its life for the sake of using it as a decoy. They blind it by sewing its eyelids together, and then fasten it to a perch among trees. The miserable bird utters plaintive cries, and continually flaps its wings, thus attracting others of its kind, who settle on the surrounding branches and are easily taken, their whole attention being occupied by the cries of their distressed companion.

We now come to the Turtle Doves, several of which inhabit the Holy Land; but, as they are similar in habits, we will confine ourselves to the common species, with which we are so familiar in this country. Its migratory habits are noticed in the sacred writings. See the following passage in the Song of Solomon:

"Lo, the winter is past, the rain is over and gone; the flowers appear on the earth; the time of the singing of birds is come, and the voice of the turtle is heard in our land" (Cant. ii. 11, 12). The prophet Jeremiah also refers to the migration of this bird: "Yea, the stork in the heaven knoweth her appointed times; and the turtle, and the crane, and the swallow observe the time of their coming; but my people know not the judgment of the Lord" (viii. 7).

Beside this species, there is the Collared Turtle Dove, one variety of which is known as the Barbary Dove. It is a large species,



THE TURTLE DOVE.

measuring more than a foot in length. Another species is the Palm Turtle, so called from its habit of nesting on palm-trees, when it is obliged to build at a distance from the habitations of man. It is a gregarious bird, several nests being generally found on one tree, and even, when it cannot find a palm, it will build among the thorns in multitudes. Like the common Dove, it is fond of the society of man, and is sure to make its nest among human habitations, secure in its knowledge that it will not be disturbed.

It is rather a small bird, being barely ten inches in length, and having no "collar" on the neck, like the two preceding species.



POULTRY.

Poultry plentiful in Palestine at the present day—The Domestic Fowl unknown in the early times of Israel—The eating and gathering of eggs—References to Poultry in the New Testament—The egg and the scorpion—The fatted fowl of Solomon—The hen brooding over her eggs—Poultry prohibited within Jerusalem—The cock-crowing.

At the present day, poultry are plentiful both in Palestine and Syria, and that they were bred in the time of the Apostles is evident from one or two references which are made by our Lord. How long the Domestic Fowl had been known to the Jews is extremely uncertain, and we have very little to guide us in our search.

That it was unknown to the Jews during the earlier period of their history is evident from the utter silence of the Old Testament on the subject. A bird so conspicuous and so plentiful would certainly have been mentioned in the Law of Moses had it been known to the Israelites; but, in all its minute and detailed provisions, the Law is silent on the subject.

Neither the bird itself nor its eggs are mentioned, although there are a few references to eggs, without signifying the bird

which laid them. The humane provision in Deut. xxii. 6, 7, refers not to a domesticated, but to a wild bird: "If a bird's nest chance to be before thee in any tree, or on the ground, whether they be young ones, or eggs, and the dams sitting upon the young, or upon the eggs, thou shalt not take the dam with the young: but thou shalt in any wise let the dam go, and take the young to thee; that it may be well with thee, that thou mayest prolong thy days."



THE DOMESTIC FOWL.

There is but one passage in the Old Testament which has ever been conjectured to refer to the Domestic Fowl. It occurs in 1 Kings iv. 22, 23: "And Solomon's provision for one day was thirty measures of fine flour, and threescore measures of meal,

"Ten fat oxen, and twenty oxen out of the pastures, and an hundred sheep, besides harts, and roebucks, and fallow-deer, and fatted fowl."

Many persons think that the fatted fowl mentioned in the above-quoted passage were really Domestic Fowl, which Solomon had introduced into Palestine, together with various other birds and animals, by means of his fleet. There may be truth in this conjecture, but, as there can be no certainty, we will pass from the Old Testament to the New.

We are all familiar with the passages in which the Domestic Fowl is mentioned in the New Testament. There is, for example, that touching image employed by our Lord when lamenting over Jerusalem: "O Jerusalem, Jerusalem, thou that killest the prophets, and stonest them that are sent unto thee; how often would I have gathered thy children together, as a hen doth gather her brood under her wings, and ye would not!" The reference is evidently made to the Domesticated Fowl, which in the time of our Lord was largely bred in the Holy Land.

Some writers have taken objection to this statement in consequence of a Rabbinical law which prohibited poultry from being kept within the walls of Jerusalem, lest in their search for food they should scratch up any impurity which had been buried, and so defile the holy city. But it must be remembered that in the time of Christ Jerusalem belonged practically to the Romans, who held it with a garrison, and who, together with other foreigners, would not trouble themselves about any such prohibition, which would seem to them, as it does to us, exceedingly puerile, not to say unjustifiable.

That the bird was common in the days of our Lord is evident from the reference to the "cock-crowing" as a measure of time.





THE PEACOCK.

The foreign curiosities imported by Solomon—The word *Tucciyim* and its various interpretations—Identity of the word with the Cingalese name of the Peacock—Reasons why the Peacock should have been brought to Solomon—Its subsequent neglect and extirpation.

AMONG the many foreign objects which were imported by Solomon into Palestine, we find that the Peacock is specially mentioned. (See a passage which has already been mentioned in connexion with ivory and apes.) The sacred historian, after mentioning the ivory throne, the golden shields and targets, that all the vessels in Solomon's house were of gold, and that silver was so common as to be of no account, proceeds to give the reason for this profuse magnificence. "For the king had at sea a navy of Tharshish with the navy of Hiram: once in three years came the navy of Tharshish, bringing gold, and silver, ivory, and apes, and peacocks" (1 Kings x. 22).

That this magnificent bird should have been one of those creatures that were imported by Solomon is almost certain. It would be imported for the same reason as the apes; namely, for the purpose of adding to the glories of Solomon's house, and no bird could have been selected which would have a more magnificent effect than the Peacock. Moreover, although unknown in Palestine, it is extremely plentiful in India and Ceylon, inhabiting the jungle by thousands, and, by a curious coincidence, being invariably most plentiful in those spots which are most frequented by tigers. In many parts of the country, great numbers of Peacocks frequent the temples, and live amicably with the sacred monkeys, passing their lives in absolute security, protected by the sanctity of the place.

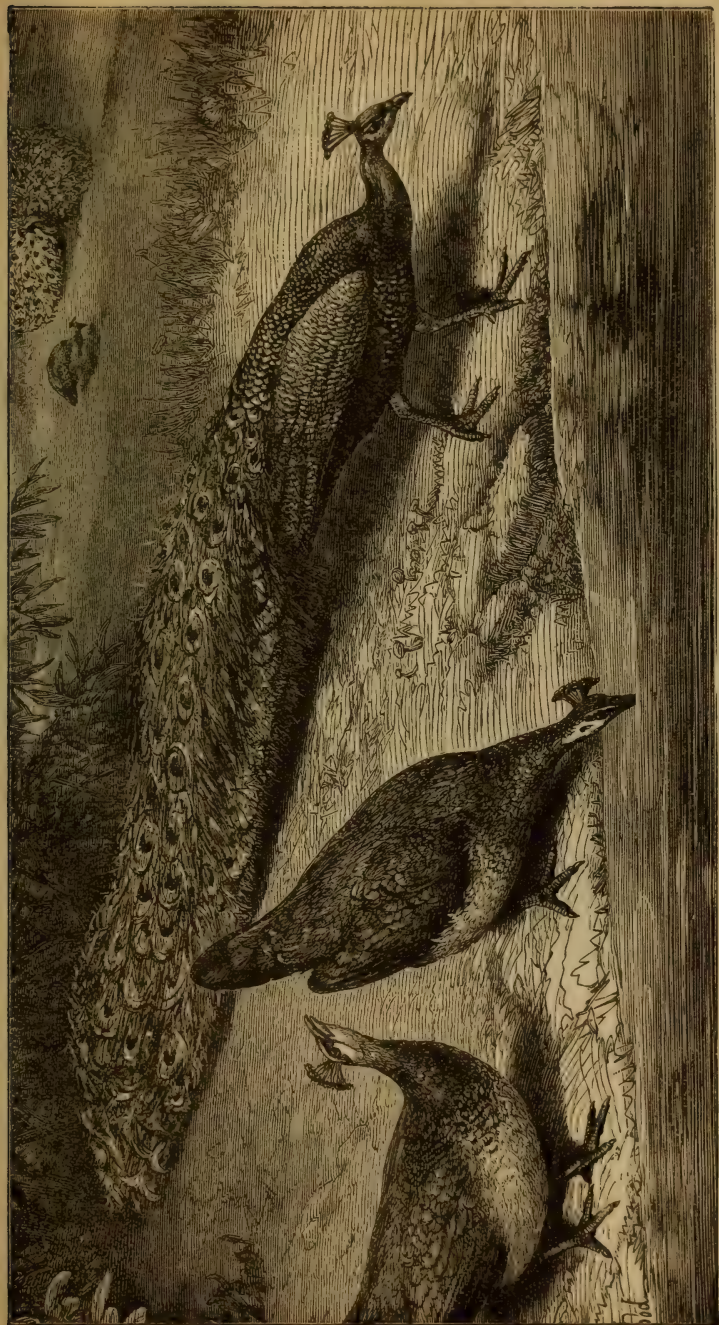
Their numbers, therefore, would render them easily accessible to Solomon's envoys, who would purchase them at a cheap rate from the native dealers, while their surpassing beauty would render them sure of a sale on their arrival in Jerusalem. Indeed, their beauty made so great an impression that they are separately mentioned by the sacred chronicler, the Peacock and the ape being the only two animals that are thought worthy of enumeration.

The Peacock may safely be termed one of the most beautiful of the feathered tribe, and may even lay a well-founded claim to the chief rank among birds, in splendour of plumage and effulgence of colouring.

We are so familiar with the Peacock that we think little of its real splendour; but if one of these birds was brought to this country for the first time, it would create a greater sensation than many animals which are now viewed in menageries with the greatest curiosity and interest.

The train of the male Peacock is the most remarkable feature of this beautiful bird; the feathers composing it are very long, and are coloured with green, purple, bronze, gold, and blue in such a manner as to form distinct "eyes."

On the head is a tuft of upright feathers, blackish upon their shafts, and rich golden green, shot with blue, on their expanded tips. The top of the head, the throat, and neck are the most refulgent blue, changing in different lights to gold and green. The wings are darker than the rest of the plumage, the abdomen blackish, and the feathers of the thighs are fawn.

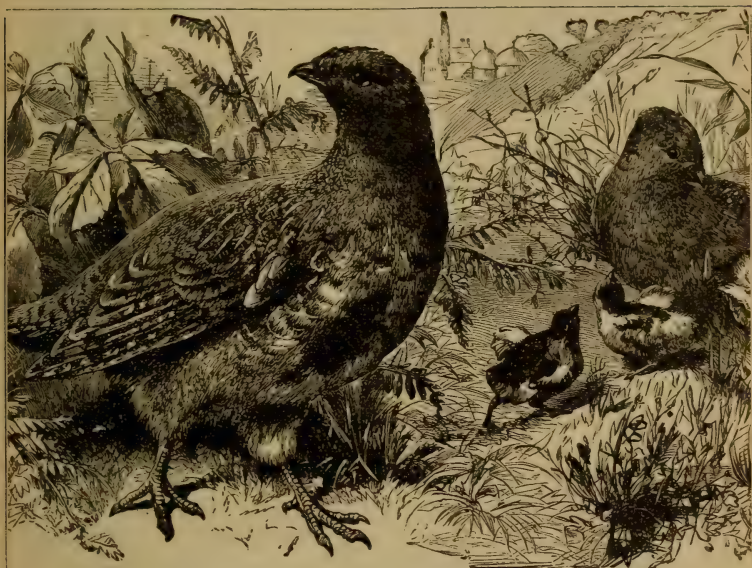


THE PEACOCK.

The female is much smaller than her mate, and not nearly so beautiful, the train being almost wanting, and the colour ashy-brown, with the exception of the throat and neck, which are green.

It seems that after Solomon's death the breed of Peafowl was not kept up, owing in all probability to the troubles which beset the throne after that magnificent monarch died.





THE PARTRIDGE.

The word *Kore* and its signification—The Partridge upon the mountains—David's simile—The Desert Partridge and its habits—Hunting the Partridge with sticks—Eggs of the Partridge—Egg-hunting in Palestine—The various species of Partridge.

THERE is a bird mentioned in the Old Testament, which, although its name is only given twice, is a very interesting bird to all students of the Scriptures, both passages giving an insight into

the manners and customs of the scarcely changing East. This is the bird called in the Hebrew *Kore*, a word which has been generally accepted as signifying some kind of Partridge. There is no doubt that, like most other Hebrew names of animated beings, the word is a collective one, signifying a considerable number of species.

The first passage occurs in 1 Sam. xxvi. 20. When David was being pursued by Saul, and had been forced to escape from the city and hide himself in the rocky valleys, he compared himself to the Partridge, which frequented exactly the same places: "The king of Israel is come out to seek a flea, as when one doth hunt a partridge upon the mountains."

The appositeness of this simile is perfect. The bird to which David alluded was in all probability the Desert Partridge (*Ammoperdix Heyii*), a species which especially haunts rocky and desert places, and even at the present day is exceedingly plentiful about the Cave of Adullam. The males, when they think themselves unobserved, are fond of challenging, or calling to each other in a loud ringing note, a peculiarity that has earned for the bird the Hebrew name of *Kore*, or "the caller."

It is a very active bird, not taking to flight if it can escape by means of its legs, and, when pursued or disturbed, running with great swiftness to some rocky cleft in which it may hide itself, taking care to interpose, as it runs, stones or other obstacles between itself and the object of its alarm. Thus, then, it will be seen how close was the parallel between this bird and David, who was forced, like the Partridge, to seek for refuge in the rocky caves.

But the parallel becomes even closer when we come to examine the full meaning of the passage. The Partridge is at the present day hunted on the mountains exactly as was the case in the time of David. The usual hunters are boys, who provide themselves with a supply of stout sticks about eighteen inches in length, and, armed with these, they chase the birds, hurling the sticks one after the other along the ground, so as to strike the Partridge as it runs. Generally, several hunters chase the same bird, some of them throwing the sticks along the ground, while others hurl them just above the bird, so that if it should take to flight, it may be struck as it rises into the air. By pertinaciously

chasing an individual bird, the hunters tire it, and contrive to come so close that they are certain to strike it.



THE GREEK PARTRIDGE.

The reader will now see how perfect is the image. Driven from the city, David was forced to wander, together with the Desert Partridge, upon the hill-sides, and, like that bird, his final refuge is the rock. Then came the hunters and pursued him, driving him from place to place, as the boys hunt the Partridge, until he was weary of his life, and exclaimed in his despair, "I shall now perish one day by the hand of Saul."

The Partridges of Palestine are, like those of our own land, exceedingly prolific birds, laying a wonderful number of eggs, more than twenty being sometimes found in a single nest. These eggs are used for food, and the consumption of them is very great, so that many a Partridge has been deprived of her expected family: she has sat upon eggs, and hatched them not.

Just as hunting the Partridge is an acknowledged sport among the inhabitants of the uncultivated parts of Palestine, so is search-

ing for the eggs of the bird a regular business at the proper time of year.

Of these birds several species inhabit Palestine. There is, for example, the Desert Partridge, which has already been



PARTRIDGES AND THEIR YOUNG.

mentioned. It is beautifully, though not brilliantly coloured, and may be known by the white spot behind the eye, the purple and chestnut streaks on the sides, and the orange bill and legs. These, however, soon lose their colour after death.



EASTERN QUAIL.

THE QUAIL.

Migration of the Quail—Modes of catching the Quail in the East—The Quail-hunters of Northern Africa—Quarrelsome nature of the bird—Quail-fighting in the East—How the Quails were brought to the Israelites.

IN one or two parts of the Old Testament is found a word which has been translated in the Authorized Version of the Bible as QUAIL.

The word is *selâv*, and in every case where it is mentioned it is used with reference to the same occurrence; namely, the providing of flesh-meat in the wilderness, where the people could find no food. As the passages remarkably bear upon each other, it will be advisable to quote them in the order in which they come.

The first mention of the *Selâv* occurs in Exod. xvi. Only a few days after the Israelites had passed the Red Sea, they began to complain of the desert land into which Moses had led them, and openly said that they wished they had never left the land of their slavery, where they had plenty to eat. According to His custom, pitying their narrow-minded and short-sighted folly,

the natural result of the long servitude to which they had been subject, the Lord promised to send both bread and flesh-meat.

“And the Lord spake unto Moses, saying,

“I have heard the murmurings of the children of Israel: speak unto them, saying, At even ye shall eat flesh, and in the



THE QUAIL.

morning ye shall be filled with bread; and ye shall know that I am the Lord your God.

“And it came to pass, that at even the quails came up, and covered the camp” (ver. 11-13).

The next passage records a similar circumstance, which occurred about a year afterwards, when the Israelites were tired of eating nothing but the manna, and again wished themselves back in Egypt. “And there went forth a wind from the Lord, and brought quails from the sea, and let them fall by the camp

as it were a day's journey on this side, and as it were a day's journey on the other side, round about the camp, and as it were two cubits high upon the face of the earth.

"And the people stood up all that day, and all that night, and all the next day, and they gathered the quails: he that gathered least gathered ten homers; and they spread them all abroad for themselves round about the camp" (Numb. xi. 31, 32).

The last passage in which Quails are mentioned occurs in the Psalms. In Ps. cv. are enumerated the various wonders done on behalf of the Israelites, and among them is specially mentioned this gift of the Quails and manna. "The people asked, and He brought quails, and satisfied them with the bread of heaven" (ver. 40).

"He had commanded the clouds from above, and opened the doors of heaven,

"And had rained down manna upon them to eat, and had given them of the corn of heaven.

"Man did eat angels' food: He sent them meat to the full.

"He caused an east wind to blow in the heaven; and by His power He brought in the south wind.

"He rained flesh also upon them as dust, and feathered fowls like as the sand of the sea" (Ps. lxxviii. 23—27).

If the ordinary interpretation of *selâv* by "Quail" be accepted, the description is exactly correct. The Quails fly in vast flocks, and, being weak-winged birds, never fly against the direction of the wind. They will wait for days until the wind blows in the required direction, and will then take wing in countless multitudes; so that in an hour or two a spot on which not a Quail could be seen is covered with them.

On account of their short wings, they never rise to any great height, even when crossing the sea, while on land they fly at a very low elevation, merely skimming over the ground, barely a yard or "two cubits high upon the face of the earth."

Moreover, the flesh of the Quail is peculiarly excellent, and would be a great temptation to men who had passed so long a time without eating animal food. Another corroboration of the identity of the Quail and the *Selâv* is to be found in the mode in which the flesh is prepared at the present day. As soon as the birds have arrived, they are captured in vast multitudes, on

account of their weariness. Many are consumed at once, but great numbers are preserved for future use by being split and laid out to dry in the sun, precisely as the Israelites are said to have spread out the Selavim "all abroad for themselves round about the camp."

Accepting, therefore, the Selâv and Quail to be identical, we may proceed to the description of the bird.

It is small, plump, and round-bodied, with the head set closely on the shoulders. Owing to this peculiarity of form, it has its Arab name, which signifies plumpness or fatness. The wings are pressed closely to the body, and the tail is pointed, very short, and directed downwards, so that it almost appears to be absent, and the bird seems to be even more plump than really is the case.

Several modes of capturing these birds are still practised in the East, and were probably employed, not only on the two occasions mentioned in Exodus and Numbers, but on many others of which the Scriptural narrative takes no notice. One very simple plan is, for the hunters to select a spot on which the birds are assembled, and to ride or walk round them in a large circle, or rather in a constantly diminishing spiral. The birds are by this process driven closer and closer together, until at the last they are packed in such masses that a net can be thrown over them, and a great number captured in it.

Sometimes a party of hunters unite to take the Quails, and employ a similar manœuvre, except that, instead of merely walking round the Quails, they approach simultaneously from opposite points, and then circle round them until the birds are supposed to be sufficiently packed. At a given signal they all converge upon the terrified birds, and take them by thousands at a time.

In Northern Africa these birds are captured in a very similar fashion. As soon as notice is given that a flight of Quails has settled, all the men of the village turn out with their great burnouses or cloaks. Making choice of some spot as a centre, where a quantity of brushwood grows or is laid down, the men surround it on all sides, and move slowly towards it, spreading their cloaks in their outstretched hands, and flapping them like the wings of huge birds. Indeed, when a man is seen from a

little distance performing this act, he looks more like a huge bat than a human being.

As the men gradually converge upon the brushwood, the Quails naturally run towards it for shelter, and at last they all creep under the treacherous shade. Still holding their outspread cloaks in their extended hands, the hunters suddenly run to the brushwood, fling their cloaks over it, and so enclose the birds in a trap from which they cannot escape. Much care is required in this method of hunting, lest the birds should take to flight, and so escape. The circle is therefore made of very great size, and the men who compose it advance so slowly that the Quails prefer to use their legs rather than their wings, and do not think of flight until their enemies are so close upon them that their safest course appears to be to take refuge in the brushwood.

Boys catch the Quails in various traps and springes, the most ingenious of which is a kind of trap, the door of which overbalances itself by the weight of the bird.

By reason of the colour of the Quail, and its inveterate habit of keeping close to the ground, it easily escapes observation, and even the most practised eye can scarcely distinguish a single bird, though there may be hundreds within a very small compass. Fortunately for the hunters, and unfortunately for itself, it betrays itself by its shrill whistling note, which it frequently emits, and which is so peculiar that it will at once direct the hunter to his prey.

This note is at the same time the call of the male to the female and a challenge to its own sex. Like all the birds of its group, the Quail is very combative, and generally fights a battle for the possession of each of its many mates. It is not gifted with such weapons of offence as some of its kinsfolk, but it is none the less quarrelsome, and fights in its own way as desperately as the game-cock of our own country.

Indeed, in the East, it is used for exactly the same purpose as the game-cock. Battles between birds and beasts, not to say men, are the common amusement with Oriental potentates, and, when they are tired of watching the combats of the larger animals, they have Quail-fights in their own chambers. The birds are selected for this purpose, and are intentionally furnished with stimulating food, so as to render them even more

quarrelsome than they would be by nature. Partridges are employed for the same cruel purpose; and as both these birds are easily obtained, and are very pugnacious, they are especially suited for the sport.

Two passages occur in the Scriptures which exactly explain the mode in which the Quails were sent to the Israelites. The first is in Ps. lxxviii. 26. The Psalmist mentions that the Lord "caused an east wind to blow in the heaven, and by His power He brought in the south wind." Here, on examining the geographical position of the Israelites, we see exactly how the south-east wind would bring the Quails.

The Israelites had just passed the Red Sea, and had begun to experience a foretaste of the privations which they were to expect in the desert through which they had to pass. Passing northwards in their usual migrations, the birds would come to the coast of the Red Sea, and there would wait until a favourable wind enabled them to cross the water. The south-east wind afforded them just the very assistance which they needed, and they would naturally take advantage of it.

It is remarkable how closely the Scriptural narrative agrees with the habits of the Quail, the various passages, when compared together, precisely coinciding with the character of the bird. In Exod. xvi. 13 it is mentioned that "at even the quails came up and covered the camp." Nocturnal flight is one of the characteristics of the Quail. When possible, they invariably fly by night, and in this manner escape many of the foes which would make great havoc among their helpless columns if they were to fly by day.

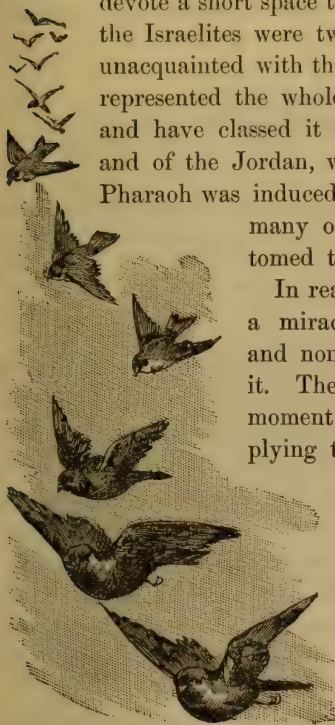
The identity of the *Selâv* with the common Quail is now seen to be established. In the first place, we have the name still surviving in the Arabic language. Next, the various details of the Scriptural narrative point so conclusively to the bird, that even if we were to put aside the etymological corroboration, we could have but little doubt on the subject. There is not a detail which is not correct. The gregarious instinct of the bird, which induces it to congregate in vast numbers; its habit of migration; its inability to fly against the wind, and the necessity for it to await a favourable breeze; its practice of flying by night, and its custom of merely skimming over the surface of the ground; the ease with which it is captured; the mode of preserving by

drying in the sun, and the proverbial delicacy of its flesh, are characteristics which all unite in the Quail.

BEFORE closing our account of the Quail, it will be as well to devote a short space to the nature of the mode by which the Israelites were twice fed. Commentators who were unacquainted with the natural history of the bird have represented the whole occurrence as a miraculous one, and have classed it with the division of the Red Sea and of the Jordan, with the various plagues by which Pharaoh was induced to release the Israelites, and with many other events which we are accustomed to call miracles.

In reality, there is scarcely anything of a miraculous character about the event, and none seems to have been claimed for it. The Quails were not created at the moment expressly for the purpose of supplying the people with food, nor were they even brought from any great distance. They were merely assisted in the business on which they were engaged—namely, their migration or customary travel from south to north, and waiting on the opposite side of the narrow sea for a south-east wind. That such a wind should blow was no

miracle. The Quails expected it to blow, and without it they could not have crossed the sea. That it was made to blow earlier than might have been the case is likely enough, but that is the extent of the miraculous character of the event.



THE RAVEN.

The Raven tribe plentiful in Palestine—The Raven and the Dove—Elijah and the Ravens—Desert-loving habits of the Raven—Notions of the old commentators—Ceremonial use of the Raven—Return of the Ravens—Cunning of the bird—Nesting-places of the Raven—The magpie and its character—The starling—Its introduction into Palestine.

It is more than probable that, while the Hebrew word *oreb* primarily signifies the bird which is so familiar to us under the name of RAVEN, it was also used by the Jews in a much looser sense, and served to designate any of the Corvidæ, or Crow tribe, such as the raven itself, the crow, the rook, the jackdaw, and the like. We will first take the word in its restricted sense, and then devote a brief space to its more extended signification.

As might be expected from the cosmopolitan nature of the Raven, it is very plentiful in Palestine, and even at the present time is apparently as firmly established as it was in the days when the various Scriptural books were written.

There are few birds which are more distinctly mentioned in the Holy Scriptures than the Raven, though the passages in which its name occurs are comparatively few. It is the first bird which is mentioned in the Scriptures, its name occurring in Gen. viii. 7: "And it came to pass at the end of forty days that Noah opened the window of the ark which he had made ;

"And he sent forth a raven, which went forth to and fro until the waters were dried up from off the earth."

Here we have, at the very outset, a characteristic account of the bird. It left the ark, and flew to and fro, evidently for the purpose of seeking food. The dove, which immediately followed the Raven, acted in a different manner. She flew from the ark in search of food, and, finding none, was forced to return again.

The Raven, on the contrary, would find plenty of food in the bodies of the various animals that had been drowned, and were floating on the surface of the waters, and, therefore, needed not to enter again into the ark. The context shows that it made the ark a resting-place, and that it "went forth to and fro," or, as



THE RAVEN.

the Hebrew Bible renders the passage, "in going and returning," until the waters had subsided. Here, then, is boldly drawn the distinction between the two birds, the carrion-eater and the feeder on vegetable substances—a distinction to which allusion has already been made in the history of the dove.

Passing over the declaration in Lev. xi. 15 and Deut. xiv. 14, that every Raven (*i.e.* the Raven and all its tribe) is unclean, we

come to the next historical mention of the bird. This occurs in 1 Kings xvii. When Elijah had excited the anger of Ahab by prophesying three years of drought, he was divinely ordered to take refuge by the brook Cherith, one of the tributaries of the Jordan. "And it shall be, that thou shalt drink of the brook; and I have commanded the ravens [*orebim*] to feed thee there.



ELIJAH FED BY THE RAVENS.

"So he went and did according unto the word of the Lord: for he went and dwelt by the brook Cherith, that is before Jordan.

"And the ravens brought him bread and flesh in the morning, and bread and flesh in the evening, and he drank of the brook."

In this passage we have a history of a purely miraculous

character. It is not one that can be explained away. Some have tried to do so by saying that the banished prophet found the nests of the Ravens, and took from them daily a supply of food for his sustenance. The repetition of the words "bread and flesh" shows that the sacred writer had no intention of signifying a mere casual finding of food which the Ravens brought for their young, but that the prophet was furnished with a constant and regular supply of bread and meat twice in the day. It is a statement which, if it be not accepted as the account of a miracle, must be rejected altogether.

The desert-loving habit of the Raven is noticed in Isa. xxxiv. 11: "The cormorant and the bittern shall possess it; the owl also and the raven shall dwell in it: and He shall stretch out upon it the line of confusion, and the stones of emptiness."

WE will now pass to the notices of the Raven as given by the writers and commentators of the Talmud.

Being an unclean bird, and one of ill omen, it was not permitted to perch on the roof of the Temple. According to some writers, it was kept off by means of scarecrows, and according to others, by long and sharp iron spikes set so closely together that there was no room for the bird to pass between them. The latter is by far the more probable account, as the Raven is much too cunning a bird to be deceived by a scarecrow for any length of time. It might be alarmed at the first sight of a strange object, but in a very short time it would hold all scarecrows in supreme contempt.

Its carrion-eating propensities were well known to the ancient writers, who must have had many opportunities of seeing the Raven unite with the vultures in consuming the bodies, not only of dead animals, but of warriors killed in battle. So fond was the Raven of this food that, according to those writers, the very smell of human blood attracted the bird; and, if a man accidentally cut himself, or if he were bled for some illness, the odour of the blood would bring round the spot all the Ravens of the place.

The punctuality with which the Raven, in common with all its kin, returns to its roosting-place, was also familiar to the Talmudists, who made rather an ingenious use of this habit. The ceremonial law of the Jews required the greatest care in

observing certain hours, and it was especially necessary to know the precise time which marked the separation of one day from another. This was ascertained easily enough as long as the day was clear, but in case of a dull, murky day, when the course of the sun could not be traced, some other plan was needed.

In the olden times, no artificial means of measuring time were known, and the devout Jew was consequently fearful lest he might unwittingly break the law by doing on one day an act which ought to have been done on another. A convenient method for ascertaining the time was, however, employed, and, as soon as the Ravens, rooks, and similar birds were seen returning to their homes, the sun was supposed to be setting.

This habit of returning regularly at the same time is mentioned by Mr. Tristram in his "Land of Israel:"—

"Of all the birds of Jerusalem, the raven is decidedly the most characteristic and conspicuous. It is present everywhere to eye and ear, and the odours that float around remind us of its use. On the evening of our arrival we were perplexed by a call-note, quite new to us, mingling with the old familiar croak, and soon ascertained that there must be a second species of raven along with the common *Corvus corax*. This was the African species (*Corvus umbrinus*, Hed.), the ashy-necked raven, a little smaller than the world-wide raven, and here more abundant in individuals.

"Beside these, the rook (*Corvus agricola*, Trist.), the common grey, or hooded crow (*Corvus cornix*, L.), and the jackdaw (*Corvus monedula*, L.), roost by hundreds in the sanctuary. We used to watch them in long lines passing over our tents every morning at daybreak, and returning in the evening, the rooks in solid phalanx leading the way, and the ravens in loose order bringing up the rear, generally far out of shot. Before retiring for the night, popular assemblies of the most uproarious character were held together in the trees of the Kedron and Mount Olivet, and not until sunset did they withdraw in silence, mingled indiscriminately, to their roosting-places on the walls.

"My companions were very anxious to obtain specimens of these Jerusalem birds, which could only be approached as they settled for the night; but we were warned by the Consul that shooting them so close to the mosque might be deemed a sacrilege by the Moslems, and provoke an attack by the guardians of the

Haram and the boys of the neighbourhood. They finally determined, nevertheless, to run the risk ; and stationing themselves just before sunset in convenient hiding-places near the walls, at a given signal they fired simultaneously, and, hastily gathering up the spoils, had retreated out of reach, and were hurrying to the tents before an alarm could be raised. The discharge of ten barrels had obtained fourteen specimens, comprising five species.



RAVENS' ROOSTING-PLACE.

“The same manœuvre was repeated with equal success on another evening ; but on the third occasion the ravens had learned wisdom by experience, and, sweeping round Siloam, chose another route to their dormitory.”

Those who have tried to come within gunshot of a Raven,



can appreciate this anecdote, and can understand how the Raven would ever afterwards keep clear of the spot where the flash and smoke of fire-arms had twice appeared. In a large garden in which the sparrows used to congregate, it was a custom of the owner to lay a train of corn for the sparrows to eat, and then to rake the whole line with a discharge from a gun concealed in an outhouse. A tame Raven lived about the premises, and as soon as it saw any one carrying a gun towards the fatal outhouse, it became much alarmed, and hurried off to hide itself. As soon as the gun was fired, out came the Raven from its place of concealment, pounced on one of the dead sparrows, carried it off, and ate it in its private haunt.

The nest to which the Raven returns with such punctuality is placed in some spot where it is safe from ordinary intruders. The tops of lofty trees are favoured localities for the nest, and so are old towers, the interior of caves, and clefts in lofty precipices.

THE OSTRICH.

Hebrew words designating the Ostrich—Description of the bird in the Book of Job—Ancient use of Ostrich plumes—Supposed heedlessness of eggs and young—Mode of depositing the eggs—Hatching them in the sand—Natural enemies of the Ostrich—Anecdote of Ostriches and their young—Alleged stupidity of the Ostrich—Methods of hunting and snaring the bird—The Ostrich in domestication—Speed of the Ostrich—The flesh of the bird prohibited to the Jews—Ostrich eggs and their uses—Food of the Ostrich—Mode of drinking—Cry of the Ostrich, and reference made to it in Micah.

THERE is rather a peculiarity about the manner in which this bird is mentioned in the Authorized Version of the Scriptures, and, unless we go to the original Hebrew, we shall be greatly misled. In that version the Ostrich is mentioned only three times, but in the Hebrew it occurs eight times.

The Hebrew word *bath-haya'nah*, which is translated in the Authorized Version as “owl,” ought really to be rendered as “Ostrich.” Taking this to be the case, we find that there are several passages in the Scriptures in which the word has been used in the wrong sense.

In those places, instead of rendering the word as “owl,” we ought to read it as “Ostrich.”

The first mention of this bird occurs in Lev. xi. 16, and the parallel passage of Deut. xiv., in which the Ostrich is reckoned among the unclean birds, without any notice being given of its appearance or habits.

In the Book of Job, however, we have the Ostrich mentioned with that preciseness and fulness of description which is so often the case when the writer of that wonderful poem treats of living creatures.

“Gavest thou the goodly wings unto the peacocks? or wings and feathers unto the ostrich?”

“Who leaveth her eggs in the earth, and warmeth them in the dust,

"And forgetteth that the foot may crush them, or that the wild beast may break them.

"She is hardened against her young ones, as though they were not hers: her labour is in vain without fear;

"Because God hath deprived her of wisdom, neither hath He imparted to her understanding.

"What time she lifteth up herself on high, she scorneth the horse and his rider." (Job xxxix. 13—19.)

There is rather a peculiarity in the translation of this passage, wherein the word which has been translated as "peacock" is now allowed to be properly rendered as "Ostrich," while the word which is translated as "Ostrich" ought to have been given as "feathers." The marginal translation gives the last words of ver. 13 in a rather different manner, and renders it thus:—"Gavest thou the goodly wings unto the peacocks, or the feathers of the stork and ostrich?" The Hebrew Bible renders the next verses as follows:—

"She would yet leave her eggs on the earth, and warm them in dust; and forget that the foot may crush them, or that the beast of the field may break them.

"She is hardened against her young ones, for those not hers; being careless, her labour is in vain."

In the same Book, chap. xxx., is another passage wherein this bird is mentioned. "I went mourning without the sun: I stood up, and I cried in the congregation.

"I am a brother to dragons, and a companion to owls," or Ostriches, in the marginal and correct reading. The Jewish Bible also translates the word as Ostriches, but the word which the Authorized Version renders as "dragons" it translates as "jackals." Of this point we shall have something to say on a future page. A somewhat similar passage occurs in Isa. xliii. 20: "The beast of the field shall honour me, the dragons and the owls" (Ostriches in marginal reading), "because I give waters in the wilderness, and rivers in the desert, to give drink to My people, My chosen." The Jewish Bible retains the same reading, except that the word "dragons" is given with the mark of doubt.

Accepting, therefore, the rendering of the Hebrew as Ostriches, let us see how far the passages of Scripture agree with the appearance and habits of the bird.

Here I may observe that, although in the Scriptures frequent allusions are made to the habits of animals, we are not to look for scientific exactness to the Scriptures. Among much that is strictly and completely true, there are occasional errors, to which a most needless attention has been drawn by a certain school of critics, who point to them as invalidating the truth of Scripture in general. The real fact is, that they have no bearing whatever on the truth or falsehood of the Scriptural teachings.

The Scriptures were written at various times, for instruction in spiritual and not in temporal matters, and were never intended for scientific treatises on astronomy, mathematics, zoology, or any such branch of knowledge. The references which are made to the last-mentioned subject are in no case of a scientific nature, but are always employed by way of metaphor or simile, as the reader must have seen in the previous pages. No point of doctrine is taught by them, and none depends on them.

The Spirit which conveyed religious instruction to the people could only use the means that existed, and could no more employ the scientific knowledge of the present time than use as metaphors the dress, arms, and inventions of the present day. The Scriptures were written in Eastern lands for Orientals by Orientals, and were consequently adapted to Oriental ideas; and it would be as absurd to look for scientific zoology in the writings of an ancient Oriental, as for descriptions of the printing-press, the steam-engine, the photographic camera, or the electric telegraph.

So, when we remember that only a few years ago the real history of the Ostrich was unknown to those who had made zoology the study of their lives, we cannot wonder that it was also unknown to those who lived many centuries ago, and who had not the least idea of zoology, or any kindred science.

Still, even with these drawbacks, it is wonderful how accurate in many instances were the writers of the Scriptures, and the more so when we remember the character of the Oriental mind, with its love of metaphor, its disregard of arithmetical precision, and its poetical style of thought.

We will now take the passage in Job xxxix. In ver. 13 reference is made to the wings and feathers of the Ostrich. If the reader will refer to page 310, he will see that the feathers of the Ostrich were formerly used as the emblem of rank. In this

case, they are shown as fastened to the heads of the horses, and also in the form of a plume, fixed to the end of a staff, and appended to a chariot, as emblematical of the princely rank of the occupier. In the ancient Egyptian monuments these Ostrich plumes are repeatedly shown, and in every case denote very high rank. These plumes were therefore held in high estimation at the time in which the Book of Job was written, and it is evidently in allusion to this fact that the sacred writer has mentioned so prominently the white plumes of the Ostrich.

Passing the next portion of the description, we find that the Ostrich is mentioned as a bird that is careless of its eggs, and leaves them "in the earth, and warmeth them in the dust, and forgetteth that the foot may crush them, or that the wild beast may break them."

Now it is true that the Ostrich is often known to take the greatest care of its eggs, the male collecting and sitting on them, and watching them with loving assiduity, and by some persons this fact has been brought forward as a proof that the writer of the Book of Job was mistaken in his statements. A further acquaintance with the habits of the bird tells us, however, that in those parts of the world which were known to the writer of that book the Ostrich does behave in precisely the manner which is described by the sacred writer.

Several females lay their eggs in the same nest, if the title of nest can be rightly applied to a mere hollow scooped in the sand, and, at least during the daytime, when the sun is shining, they simply cover the eggs with sand, so as to conceal them from ordinary enemies, and leave them to be hatched by the warm sunbeams. They are buried to the depth of about a foot, so that they receive the benefit of a tolerably equable warmth. So much, then, for the assertion that the Ostrich leaves her eggs "in the earth, and warmeth them in the dust."

We next come to the statement that she forgets that "the foot may crush them, or that the wild beast may break them." It is evident from the preceding description that eggs which are buried a foot deep in the sand could not be crushed by the foot, even were they of a fragile character, instead of being defended by a shell as thick, and nearly as hard, as an ordinary earthenware plate. Neither would the wild beast be likely to discover much less to break them.

A more intimate acquaintance with the history of the Ostrich shows that, even in this particular, the sacred writer was perfectly correct. Besides the eggs which are intended to be hatched, and which are hidden beneath the sand to be hatched,



OSTRICH AND NEST.

a number of supplementary eggs are laid which are not meant to be hatched, and are evidently intended as food for the young until they are able to forage for themselves. These are left carelessly on the surface of the ground, and may easily be crushed by the hoof of a horse, if not by the foot of man. We meet, however, with another statement,—namely, that they may be broken by the wild beasts. Here we have reference to another fact in the history of the Ostrich. The scattered eggs,

to which allusion is made, are often eaten, not only by beasts, but also by birds of prey; the former breaking the shells by knocking them against each other, and the latter by picking up large stones in their claws, rising above the eggs, and dropping the stones on them. The bird would like to seize the egg, rise with it in the air, and drop it on a stone, as mentioned on page 414, but the round, smooth surface of the egg defies the grasp of talons, and, instead of dropping the egg upon a stone, it is obliged to drop a stone upon the egg.

Up to the present point, therefore, the writer of the Book of Job is shown to be perfectly correct in his statements. We will now proceed to verse 16: "She is hardened against her young ones, as though they were not hers." Now in the Jewish Bible the passage is rendered rather differently: "She is hardened against her young ones, for those not hers;" and, as we shall presently see, the reading perfectly agrees with the character of the Ostrich.

There has long existed a belief that the Ostrich, contrary to the character of all other birds, is careless of her young, neglects them, and is even cruel to them. That this notion was shared by the writer of the Book of Job is evident from the preceding passage. It also prevailed for at least a thousand years after the Book of Job was written. See Lam. iv. 3: "Even the sea monsters draw out the breast, they give suck to their young ones: the daughter of my people is become cruel, like the ostriches in the wilderness."

It is probable that this idea respecting the cruelty of the Ostrich towards its young is derived from the fact that if a flock of Ostriches be chased, and among them there be some very young birds, the latter are left behind by their parents, and fall a prey to the hunters. But, in reality, the Ostrich has no choice in the matter. The wide sandy desert affords no place of concealment in which it might hide its young. Nature has not furnished it with weapons by means of which it can fight for them; and consequently it is forced to use the only means of escape by which it can avoid sacrificing its own life, as well as the lives of the young.

It does not, however, leave the young until it has tried, by all means in its power, to save them. For example, it sometimes has recourse to the manœuvre with which we are so familiar in

the case of the lapwing, and pretends to be wounded or lamed, in order to draw the attention of its pursuers, while its young escape in another direction. An instance of this practice is given by Mr. Andersson in his "Lake Ngami." "When we had proceeded little more than half the distance, and in a part of the plain entirely destitute of vegetation, we discovered a male and female ostrich, with a brood of young ones, about the size of ordinary barn-yard fowls. We forthwith dismounted from our oxen, and gave chase, which proved of no ordinary interest.

"The moment the parent birds became aware of our intention, they set off at full speed—the female leading the way, and the cock, though at some little distance, bringing up the rear of the family party. It was very touching to observe the anxiety the birds evinced for the safety of their progeny. Finding that we were quickly gaining upon them, the male at once slackened his pace and diverged somewhat from his course; but, seeing that we were not to be diverted from our purpose, he again increased his speed, and, with wings drooping so as almost to touch the ground, he hovered round us, now in wide circles, and then decreasing the circumference until he came almost within pistol-shot, when he abruptly threw himself on the ground, and struggled desperately to regain his legs, as it appeared, like a bird that has been badly wounded.

"Having previously fired at him, I really thought he was disabled, and made quickly towards him. But this was only a ruse on his part, for, on my nearer approach, he slowly rose, and began to run in a different direction to that of the female, who by this time was considerably ahead with her charge." Nor is this a solitary instance of the care which the Ostrich will take of her young. Thunberg mentions that on one occasion, when he happened to ride near a place where an Ostrich was sitting on the eggs, the bird jumped up and pursued him, evidently with the object of distracting his attention from the eggs. When he faced her, she retreated; but as soon as he turned his horse, she pursued him afresh.

The care of the mother for the young is perhaps less needed with the Ostrich than with most birds. The young are able to run with such speed that ordinary animals are not able to overtake them, and, besides, they are protected by their colour as long as they are comparatively helpless. Their downy plumage

harmonizes completely with the sandy and stony ground, even when they run, and when they crouch to the earth, as is their manner when alarmed, even the most practised eye can scarcely see them. Mr. Andersson, an experienced hunter, states that when the Ostrich chicks were crouching almost under his feet, he had the greatest difficulty in distinguishing their forms.

Owing to the great number of the eggs that are laid, the young are often very numerous, between thirty and forty chicks sometimes belonging to one brood. In the Ostrich chase which has already been described, the brood were eighteen in number, and so great was their speed that, in spite of their youth and diminutive size, Mr. Andersson only succeeded in capturing nine of them after an hour's severe chase.

We find, therefore, that we must acquit the Ostrich of neglecting its young, much more of cruelty towards them; and we will now turn to the next charge against the bird, that of stupidity.

In one sense, the bird certainly may be considered stupid. Like nearly all wild creatures which live on large plains, it always runs against the wind, so as to perceive by scent if any enemies are approaching. Its nostrils are very sensitive, and can detect a human being at a very great distance. So fastidious is it in this respect, that no hunter who knows his business ever attempts to approach the Ostrich except from leeward. If a nest is found, and the discoverer wishes the birds to continue laying in it, he approaches on the leeward side, and rakes out the eggs with a long stick.

The little Bushman, who kills so many of these birds with his tiny bow and arrow, makes use of this instinct when he goes to shoot the Ostrich, disguised in a skin of one of the birds. Should an Ostrich attack him, as is sometimes the case, he only shifts his position to windward, so as to allow the birds to catch the scent of a human being, when they instantly make off in terror.

When, therefore, the Ostriches are alarmed, they always run to windward, instinctively knowing that, if an enemy should approach in that direction, their powers of scent will inform them of the danger. Being aware of this habit, the hunters manage so that while one of them goes round by a long detour to frighten the game, the others are in waiting at a considerable distance to windward, but well on one side, so that no indication

of their presence may reach the sensitive nostrils of the birds. As soon as the concealed hunters see the Ostriches fairly settled down to their course, they dash off at right angles to the line which the birds are taking, and in this way come near enough to use their weapons. The antelopes of the same country have a similar instinct, and are hunted in precisely the same manner.

Thus, then, in one sense the Ostrich may be considered as open to the charge of stupidity, inasmuch as it pursues a course which can be anticipated by enemies who would otherwise be unable to overtake it. But it must be remembered that instinct cannot be expected to prove a match for reason, and that, although its human enemies are able to overreach it, no others can do so, the instinct of running against the wind serving to guard it from any foe which it is likely to meet in the desert.

When captured alive and tamed, it certainly displays no particular amount of intellect. The Arabs often keep tame Ostriches about their tents, the birds being as much accustomed to their quarters as the horses. In all probability they did so in ancient times, and the author of the Book of Job was likely to be familiar with tame Ostriches, as well as with the wild bird.

Stupidity is probably attributed to the tame bird in consequence of the habit possessed by the Ostrich of picking up and eating substances which cannot be used as food. For example, it will eat knives, bits of bone or metal, and has even been known to swallow bullets hot from the mould. On dissecting the digestive organs of an Ostrich, I have found a large quantity of stones, pieces of brick, and scraps of wood. These articles are, however, not intended to serve as food, but simply to aid digestion, and the bird eats them just as domestic fowls pick up gravel, and smaller birds grains of sand. In swallowing them, therefore, the Ostrich does not display any stupidity, but merely obeys a natural instinct.

Lastly, we come to the speed of the Ostrich: "What time she lifteth up herself on high, she scorneth the horse and his rider."

This statement is literally true. When the Ostrich puts forth its full speed, there is no horse that can catch it in a fair chase. It may be killed by the ruse which has already been described, but an adult Ostrich can run away from the swiftest horse. When it runs at full speed, it moves its long legs with astonishing

rapidity, covering at each stride an average of twenty-four feet, a fact from which its rate of speed may be deduced. In consequence of this width of stride, and the small impression made in the sand by the two-toed foot, the track of a running Ostrich is very obscure. Perhaps no better proof of the swiftness of the bird can be given than the extreme value set upon it by the Arabs. Although they are bred to the desert as much as the Ostrich itself, and are mounted on horses whose swiftness and endurance are proverbial, they set a very high value on the Ostrich, and to have captured one of these birds establishes an Arab's fame as a hunter.

Sometimes the Arabs employ the plan of cutting across the course of the bird, but at others they pursue it in fair chase, training their horses and themselves specially for the occasion. They furnish themselves with a supply of water, and then start in pursuit of the first flock of Ostriches they find. They take care not to alarm the birds, lest they should put out their full speed and run away out of sight, but just keep sufficiently near to force the birds to be continually on the move. They will sometimes continue this chase for several days, not allowing their game time to eat or rest, until at last it is so tired that it yields itself an easy prey.

In Southern Africa, snares are used for taking the Ostrich. They are in fact ordinary springes, but of strength suitable to the size of the bird. The cord is made fast to a sapling, which is bent down by main strength, and the other end is then formed into a noose and fastened down with a trigger. Sometimes the bird is enticed towards the snare by means of a bait, and sometimes it is driven over it by the huntsmen. In either case, as soon as the Ostrich puts its foot within the fatal noose, the trigger is loosed, the sapling is released, and, with a violent jerk, the Ostrich is caught by the leg and suspended in the air.

Why the flesh of the Ostrich should have been prohibited to the Jews is rather a mystery. It is much valued by most natives, though some of the Arab tribes still adhere to the Jewish prohibition, and those Europeans who have tried it pronounce it to be excellent when the bird is young and tender, but to be unpleasantly tough when it is old. Mr. Andersson says that its flesh resembles that of the zebra, and mentions that the fat and blood are in great request, being mixed together by



ARABS HUNTING THE OSTRICH.

cutting the throat of the bird, passing a ligature round the neck just below the incision, and then shaking and dragging the bird about for some time. Nearly twenty pounds of this substance are obtained from a single Ostrich.

The ancient Romans valued exceedingly the flesh of this bird. We are told that Heliogabalus once had a dish served at his table containing six hundred Ostrich brains, and that another emperor ate a whole Ostrich at a meal. As an adult Ostrich weighs some three hundred and fifty pounds, we may presume that the bird in question was a young one.

The eggs are most valuable articles of food, both on account of their excellent flavour and their enormous size. It is calculated that one Ostrich egg contains as much as twenty-five ordinary hen's eggs. Cooking the Ostrich egg is easily performed. A hole is made in the upper part of the egg, and the lower end is set on the fire. A forked stick is then introduced into the egg, and twirled between the hands, so as to beat up the whole of the interior. Europeans usually add pepper and salt, and say that this simple mode of cooking produces an excellent omelette.

The ordinary food of the Ostrich consists of the seeds, buds, and tops of various plants. It seems strange, however, that in the deserts, where there is so little vegetation, the bird should be able to procure sufficient food to maintain its enormous body. Each of the specimens which are kept at the Zoological Gardens eats on an average a pint of barley, the same quantity of oats, four pounds' weight of cabbage, and half a gallon of chaff, beside the buns, bread, and other articles of food which are given to them by visitors.

Although the Ostrich, like many other inhabitants of the desert, can live for a long time without water, yet it is forced to drink, and like the camel, which it resembles in so many of its ways, drinks enormously, taking in the water by a succession of gulps. When the weather has been exceptionally hot, the Ostrich visits the water-springs daily, and is so occupied in quenching its thirst that it will allow the hunter to come within a very short distance. It appears, indeed, to be almost intoxicated with its draught, and, even when it does take the alarm, it only retreats step by step, instead of scudding off with its usually rapid strides.

The camel-like appearance of the Ostrich has already been mentioned. In the Arabic language the Ostrich is called by a name which signifies camel-bird, and many of the people have an idea that it was originally a cross between a bird and a camel.

The cry of the Ostrich is a deep bellow, which, according to travellers in Southern Africa, so resembles the roar of the lion that even the practised ears of the natives can scarcely distinguish the roar of the animal from the cry of the bird. The resemblance is increased by the fact that both the lion and Ostrich utter their cry by night. It is evidently to this cry that the prophet Micah alludes: "Therefore I will wail and howl, I will go stripped and naked: I will make a wailing like the dragons, and mourning as the owls" (*Ostriches in marginal reading*). The cry of the variety of Ostrich which inhabits Northern Africa is said to bear more resemblance to the lowing of an ox than the roar of the lion; but as the bird is smaller than its southern relative, the difference is probably accounted for.

It has been mentioned that the Ostrich has no weapons wherewith to fight for its young; still, though it be destitute of actual weapons, such as the spur of the gamecock or the beak and talons of the eagle, it is not entirely defenceless. Its long and powerful legs can be employed as weapons, and it can kick with such force that a man would go down before the blow, and probably, if struck on the leg or arm, have the limb broken. The blow is never delivered backward, as is the kick of the horse, but forward, like that of the kangaroo. The natives of the countries where it resides say that it is able to kill by its kick the jackal that comes to steal its eggs, and that even the hyæna and the leopard are repelled by the gigantic bird.



THE BITTERN.

The Bittern and its general appearance—The bird of solitude—Difficulty of detecting the Bittern in its haunts—Mudie's description of the Bittern and its home—Nest of the Bittern—Scarcity of the bird at the present day—Food of the Bittern.

The Bittern belongs to the same family as the herons, the cranes, and the storks, and has many of the habits common to them all. It is, however, essentially a bird of solitude, hating the vicinity of man, and living in the most retired spots of marshy ground. As it sits among the reeds and rushes, though it is a large bird, it is scarcely visible even to a practised eye, its mottled plumage harmonizing with surrounding objects in such a way that the feathers of the bird can scarcely be distinguished from the sticks, stones, and grass tufts among which it sits. The ground colour of the plumage is dark buff, upon which are sprinkled mottlings and streaks of black, chestnut, grey, and brown. These mottled marks harmonize with the stones and tufts of withered grass, while the longitudinal dashes of buff and black on the neck and breast correspond with the sticks and reeds.

In a similar manner the tiger, though so large an animal, can lie in a very small covert of reeds without being detected, its striped fur corresponding with the reeds themselves and the shadows thrown by them; and the leopard can remain hidden

among the boughs of a tree, its spotted coat harmonizing with the broken light and shade of the foliage.

The following powerful description of the Bittern's home is given by Mudie: "It is a bird of rude nature, where the land knows no character save that which the untrained working of the elements impresses upon it; so that when any locality is in



THE BITTERN

the course of being won to usefulness, the bittern is the first to depart, and when any one is abandoned, it is the last to return. 'The bittern shall dwell there' is the final curse, and implies that the place is to become uninhabited and uninhabitable. It hears not the whistle of the ploughman, nor the sound of the mattock; and the tinkle of the sheep-bell, or the lowing of the ox 'although the latter bears so much resemblance to its own

hollow and dismal voice, that it has given foundation to the name), is a signal for it to be gone.

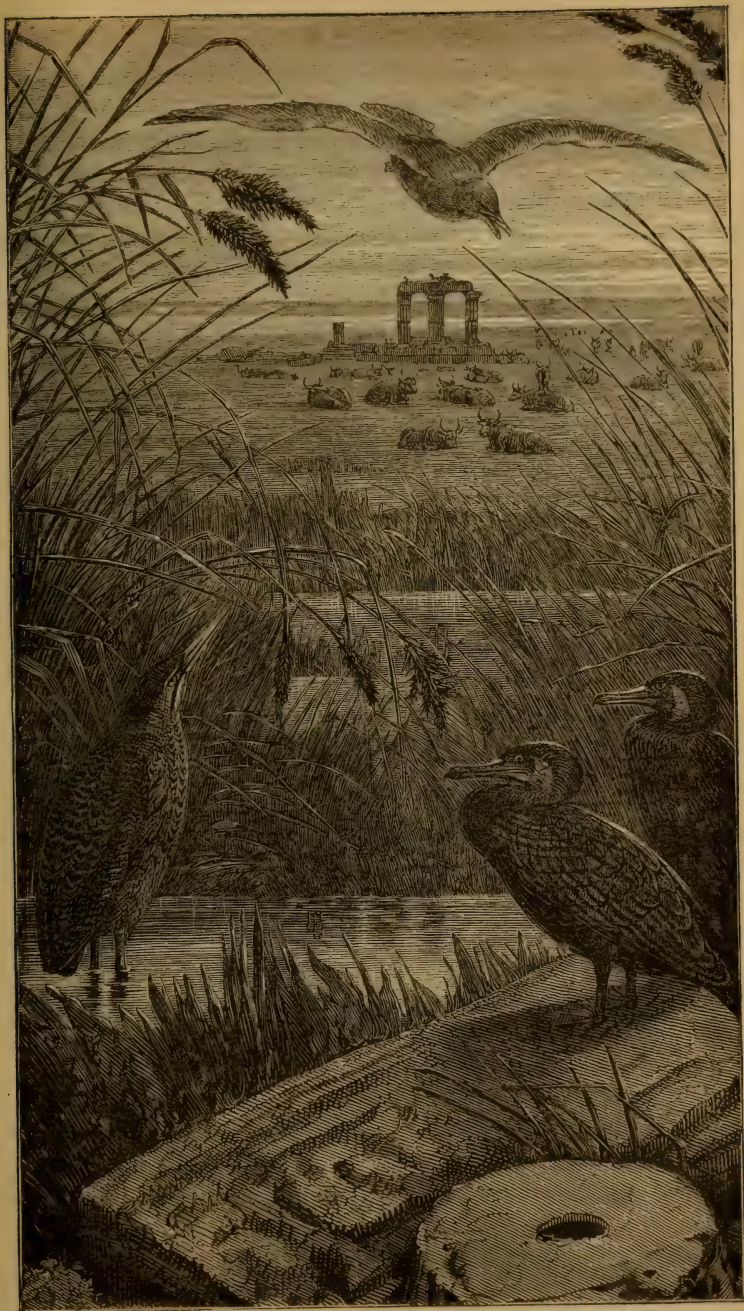
“Extensive and dingy pools—if moderately upland, so much the better—which lie in the hollows, catching, like so many traps, the lighter and more fertile mould which the rains wash and the winds blow from the naked heights around, and converting it into harsh and dingy vegetation, and the pasture of those loathsome things which wriggle in the ooze, or crawl and swim in the putrid and mantling waters, are the habitation of the bittern.

“Places which scatter blight and mildew over every herb which is more delicate than a sedge, a carex, or a rush, and consume every wooded plant that is taller than the sapless and tasteless cranberry or the weeping upland willow; which shed murrain over the quadrupeds, chills which eat the flesh off their bones, and which, if man ventures there, consume him by putrid fever in the hot and dry season, and shake him to pieces with ague when the weather is cold and humid.

“Places from which the heath and the lichen stand aloof, and where even the raven, lover of disease, and battener upon all that expires miserably and exhausted, comes rarely and with more than wonted caution, lest that death which he comes to seal and riot upon in others should unawares come upon himself. The raven loves carrion on the dry and unpoisoning moor, scents it from afar, and hastens to it upon his best and boldest wing; but ‘the reek o’ the rotten fen’ is loathsome to the sense of even the raven, and it is hunger’s last pinch ere he come nigh to the chosen habitation, the only loved abode, of the bittern.”

Secure in its retreat, the Bittern keeps its place even if a sportsman should pass by the spot on which it crouches. It will not be tempted to leave its retreat by noise, or even by stone throwing, for it knows instinctively that the quaking bogland which it selects as its home is unsafe for the step of man.

The very cry of the Bittern adds to this atmosphere of desolation. By day the bird is silent, but after the sun has gone down it utters its strange wild cry, a sound which exactly suits the localities in which it loves to make its habitation. During part of the year it only emits a sharp, harsh cry as it rises on the wing, but during the breeding season it utters the cry by which it summons its mate, one of the strangest love-calls that



BITTERN.

CORMORANT.

can be imagined. It is something between the neighing of a horse, the bellow of a bull, and a shriek of savage laughter. It is very loud and deep, so that it seems to shake the loose and marshy ground. There was formerly an idea that, when the Bittern uttered this booming cry, it thrust its bill into the soft ground, and so caused it to shake. In reality, the cry is uttered on the wing, the bird wheeling in a spiral flight, and modulating its voice in accordance with the curves which it describes in the air. This strange sound is only uttered by the male bird.

Like most of the long-legged wading birds, the Bittern is able to change its shape, and apparently to alter its size, in an astonishing manner. When it is walking over the ground, with head erect and eye glanced vigilantly at surrounding objects, it looks a large, bold, vigorous, and active bird. Next minute it will sink its head in its shoulders, so that the long beak seems to project from them, and the neck totally disappears, the feathers enveloping each other as perfectly and smoothly as if it never had had a neck. In this attitude it will stand for an hour at a time on one leg, with the other drawn close to its body, looking as dull, inert, and sluggish a bird as can well be imagined, and reduced apparently to one half of its former size. The Bittern is represented in one of its extraordinary attitudes on the plate which illustrates the cormorant.

The nest of the Bittern is placed on the ground, and near the water, though the bird always takes care to build it on an elevated spot which will not be flooded if the water should rise by reason of a severe rain. There is, however, but little reason for the Bittern to fear a flood, as at the time of year which is chosen for nest-building the floods are generally out, and the water higher than is likely to be the case for the rest of the year. The materials of the nest are found in marshes, and consist of leaves, reeds, and rushes.

As if to add to the general effect of its character, it is essentially a solitary bird, and in this characteristic entirely unlike its relatives the heron and the stork, which are peculiarly sociable, and love to gather themselves together in multitudes. But the Bittern is never found except alone, or at the most accompanied for a time by its mate and one or two young ones.

The localities in which it resides are sufficient evidence of the nature of its food. Frogs appear to be its favourite diet, but

it also feeds on various fish, insects, molluscs, worms, and similar creatures. Dull and apathetic as it appears to be, it can display sufficient energy to capture tolerably large fish. Though the Bittern is only about two feet in total length, one of these birds was killed, in the stomach of which were found one perfect rudd eight inches in length and two in depth, together with the remains of another fish, of a full-grown frog, and of an aquatic insect. In another instance, a Bittern had contrived to swallow an eel as long as itself; while in many cases the remains of five or six full-grown frogs have been found in the interior of the bird, some just swallowed, and others in various stages of digestion.





THE HERON.

THE HERON.

The Heron mentioned as an unclean bird—Nesting of the Heron—The papyrus marshes and their dangers—Description of the papyrus—Vessels of bulrushes.

THE name of the Heron is only mentioned twice in the Scriptures—namely, in the two parallel passages of Lev. xi. 19 and Deut. xiv. 18; in both of which places the Heron is ranked among the unclean birds that might not be eaten.

In some of the cases where beasts or birds are prohibited as food, the prohibition seems scarcely needed. To us of the present day this seems to be the case with the Heron, as it is never brought to table. The reason for this disuse of the Heron as food is not that it is unfit for the table, but that it has become so scarce by the spread of cultivation and house-building, that it has been gradually abandoned as a practically unattainable article of diet. The flesh of the Heron, like that of the bittern, is remarkably excellent, and in the former days, when it was comparatively plentiful, and falconry was the ordinary amusement of the rich, the Heron formed a very important dish at every great banquet.

The bird, however, must be eaten when young. A gentleman who liked to try experiments for himself in the matter of food, found that, if young Herons were properly cooked, they formed a most excellent dish, equal, in his opinion, to grouse. Wishing



THE HERON.

to have his own judgment confirmed by that of others, he had several of them trussed and dressed like wild geese, and served up at table under that name. The guests approved greatly of the bird, and compared it to hare, the resemblance being further increased by the dark colour of the flesh. There was not the slightest fishy flavour about the bird. This, however, is apt to be found in the older birds, but can be removed

by burying them in the earth for several days, just as is done with the solan goose and one or two other sea-birds.

The abundance of birds belonging to the Heron tribe is well shown by some of the paintings and carvings on Egyptian monuments, in which various species of Herons and other water-birds are depicted as living among the papyrus reeds, exactly the locality in which they are most plentiful at the present day.

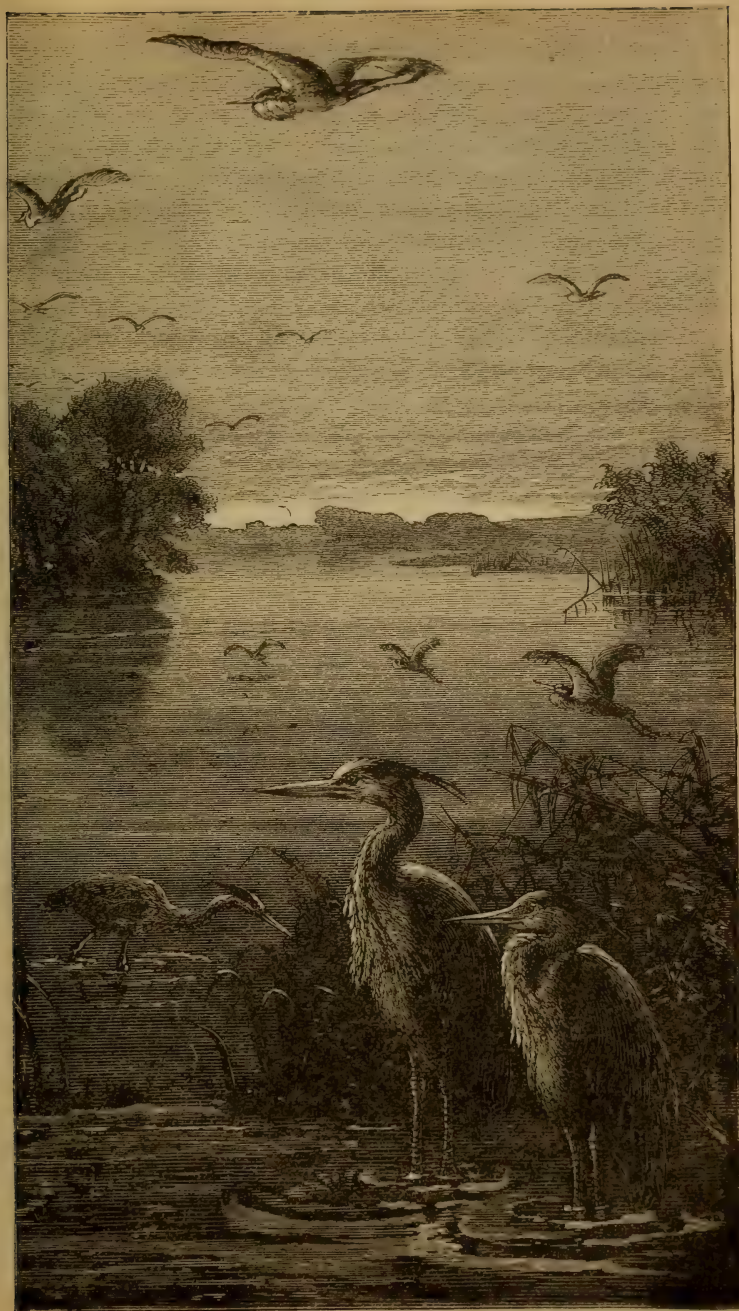
Unlike the bittern, the Heron is a most sociable bird, and loves not only to live, but even to feed, in company with others of its own species.

I have watched the Herons feeding in close proximity to each other. The birds were fond of wading stealthily along the edge of the lake until they came to a suitable spot, where they would stand immersed in the water up to the thighs, waiting patiently for their prey. They stood as still as if they were carved out of wood, the ripples of the lake reflected on their plumage as the breeze ruffled the surface of the water. Suddenly there would be a quick dive of the beak, either among the reeds or in the water, and each stroke signified that the Heron had caught its prey.

Frogs and small fishes are the usual food of the Heron, though it often grapples with larger prey, having been seen to capture an eel of considerable size in its beak. Under such circumstances it leaves the water, with the fish in its mouth, and beats it violently against a stone so as to kill it. Now and then the bird is vanquished in the struggle by the fish, several instances being known in which an eel, in its endeavours to escape, has twisted itself so tightly round the neck of the bird that both have been found lying dead on the shore.

In one such case the Heron's beak had struck through the eyes of the eel, so that the bird could not disengage itself. In another the Heron had tried to swallow an eel which was much too large for it, and had been nearly choked by its meal. The eel must necessarily have been a very large one, as the Heron has a wonderful capacity for devouring fish. Even when quite young, it can swallow a fish as large as a herring, and when it is full grown it will eat four or five large herrings at a meal.

Now when we remember that a man of average appetite



THE HOME OF THE HERON.

finds one herring to form a very sufficient breakfast, we can easily imagine what must be the digestive power of a bird which, though very inferior to man in point of bulk, can eat four times as much at a meal. Even though the fish be much larger in diameter than the neck of the bird, the Heron can swallow it as easily as a small snake swallows a large frog. The neck merely seems to expand as if it were made of Indiarubber, the fish slips down, and the bird is ready for another.

Generally the Herons feed after sunset, but I have frequently seen them busily engaged in catching their prey in full daylight, when the sunbeams were playing in the water so as to produce the beautiful rippling effect on the Heron's plumage which has already been mentioned.

The Heron does not restrict itself to fishes or reptiles, but, like the bittern, feeds on almost any kind of aquatic animal which comes within its reach. When it lives near tidal rivers, it feeds largely on the shrimps, prawns, green crabs, and various other crustacea; and when it lives far inland, it still makes prey of the fresh-water shrimps, the water-beetles, and the boat-flies, and similar aquatic creatures. In fact, it acts much after the fashion of the lions, tigers, and leopards, which put up with locusts and beetles when they can find no larger prey.

The long beak of the Heron is not merely an instrument by which it can obtain food, but is also a weapon of considerable power. When attacked, it aims a blow at the eye of its opponent, and makes the stroke with such rapidity that the foe is generally blinded before perceiving the danger. When domesticated, it has been known to keep possession of the enclosure in which it lived, and soon to drive away dogs by the power of its beak. When it is young, it is quite helpless, its very long legs being unable to support its body, which is entirely bare of plumage, and has a very unprepossessing appearance.

The flight of the Heron is very powerful, its wings being very large in proportion to its slender body. Sometimes the bird takes to ascending in a spiral line, and then the flight is as beautiful as it is strong. When chased by the falcon it mostly ascends in this manner, each of the two birds trying to rise above the other.

The nest of the Heron is always made on the top of some lofty tree, whenever the bird builds in places where trees can be found; and as the bird is an eminently sociable one, a single nest is very seldom found, the Heron being as fond of society as the rook. In some parts of Palestine, however, where trees are very scarce, the Heron is obliged to choose some other locality for its nest, and in that case prefers the great thickets of papyrus reeds which are found in the marshes, and which are even more inaccessible than the tops of trees.

One of these marshes is well described by Mr. Tristram in his "Land of Israel." "The whole marsh is marked in the map as impassable; and most truly it is so. I never anywhere have met with a swamp so vast and utterly impenetrable.

"The papyrus extends right across to the east side. A false step off its roots will take the intruder over head in suffocating peat-mud. We spent a long time in attempting to effect an entrance, and at last gave it up, satisfied that the marsh birds were not to be had. In fact, the whole is simply a floating bog of several miles square; a very thin crust of vegetation covers an unknown depth of water; and, if the explorer breaks through this, suffocation is imminent. Some of the Arabs, who were tilling the plain for cotton, assured us that even a wild boar never got through it. We shot two bitterns, but in endeavouring to retrieve them I slipped from the root on which I was standing, and was drawn down in a moment, only saving myself from drowning by my gun, which had providentially caught across a papyrus stem."

It may here be mentioned that the bulrush of Scripture is undoubtedly the papyrus. The ark or basket of bulrushes, lined with slime and pitch, in which Moses was laid, was made of the papyrus, which at the present day is used for the manufacture of baskets, mats, sandals, and for the thatching of houses. Many tribes which inhabit the banks of the Nile make simple boats, or rather rafts, of the papyrus, which they cut and tie in bundles; and it is worthy of notice that the Australian native makes a reed boat in almost exactly the same manner.

Compare Is. xviii. 1, 2: "Woe to the land shadowing with wings, which is beyond the rivers of Ethiopia.

"That sendeth ambassadors by the sea, even in vessels of bulrushes." Did we not know that vessels are actually made of

bulrushes at the present day, a custom which has survived from very ancient times, we might find a difficulty in understanding this passage, while the meaning is intelligible enough when it is viewed by the light of the knowledge that the Ethiopian of the present day takes gold, and ivory, and other merchandise down the Nile in his boat of papyrus (or bulrush) reeds tied together.

The papyrus runs from ten to fifteen or sixteen feet in height, so that the Herons are at no loss for suitable spots whereon to place their nests. From the name "papyrus" our word paper is derived. The stems of the plant, after having been split into



THE PAPYRUS PLANT.

thin slices, joined together, and brought to a smooth surface, formed the paper upon which the ancient Egyptians wrote.

THE Egrets, which are probably included under the generic title of Anâphah, are birds of passage, and at the proper season are plentiful in Palestine. These pretty birds much resemble the heron in general form, and in general habits both birds are very much alike, haunting the marshes and edges of lakes and streams, and feeding upon the frogs and other inhabitants of the water. In countries where rice is cultivated, the Egret may generally be seen in the artificial swamps in which that plant is sown. The colour of the Egret is pure white, with the exception of the train. This consists of a great number of long slender feathers of a delicate straw colour. Like those which form the train of the peacock, they fall over the feathers of the tail, and entirely conceal them.

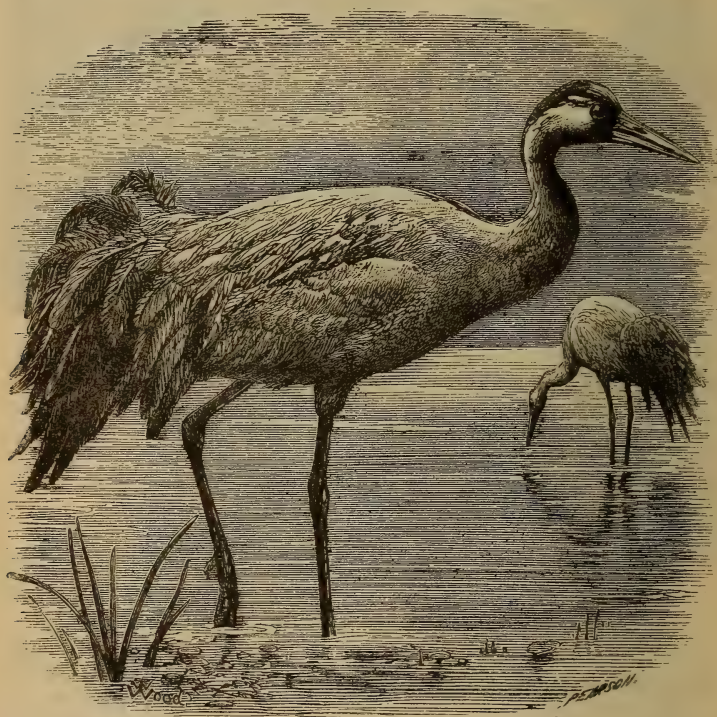


THE CRANE.

Various passages in which the Crane is mentioned—Its migratory habits, and loud voice—Geographical range of the Crane—Its favourite roosting-places—Size of the Crane, and measurement of the wings—The Crane once used as food—Plumes of the Crane and their use—Structure of the vocal organs—Nest and eggs of the Crane.

IN the description of the dove and the swallow two passages have been quoted in which the name of the CRANE is mentioned, one referring to its voice, and the other to its migratory instinct. The first passage occurs in Isa. xxxviii. 14: "Like a crane or swallow, so did I chatter;" and the other in Jer. viii. 7: "The turtle and the crane and the swallow observe the time of their coming."

It is rather remarkable that in both these cases the word "Crane" is used in connexion with the swallow, or rather the swift, and that in both instances the names of the birds should have been interchanged. If we refer to the original of these



THE CRANE.

passages, we shall find that the former of them would run thus, "Like a *sis* or an *agur*," and the latter thus, "The turtle and the *sis* and the *agur*." That in these passages the interpretation of the words *sis* and *agur* have been interchanged has already been mentioned, and, as the former has been described under the name of swallow or swift, we shall now treat of the latter under the title of Crane.

The species here mentioned is the common Crane, a bird which has a very wide range, and which seeks a warm climate on the approach of winter.

The Crane performs its annual migrations in company, vast flocks of many thousand individuals passing like great clouds at an immense height, whence their trumpet-like cry is audible for a great distance round, and attracts the ear if not the eye to them. Thus we have at a glance both the characteristics to which reference is made in the Scriptures, namely, the noisy cry and the habit of migration.

It is a very gregarious bird, associating with its comrades in flocks, just as do the starlings and rooks of our own country, and, like these birds, has favourite roosting-places in which it passes the night. When evening approaches, the Cranes may be seen in large flocks passing to their roosting-places, and, on account of their great size, having a very strange effect. A fair-sized Crane will measure seven feet across the expanded wings, so that even a solitary bird has a very imposing effect when flying, while that of a large flock of Cranes on the wing is simply magnificent.

The spots which the Crane selects for its roosting-places are generally of the same character. Being in some respects a wary bird, though it is curiously indifferent in others, it will not roost in any place near bushes, rocks, or other spots which might serve to conceal an enemy. The locality most favoured by the Crane is a large, smooth, sloping bank, far from any spot wherein an enemy may be concealed. The birds keep a careful watch during the night, and it is impossible for any foe to approach them without being discovered. The Crane is noisy on the wing, and, whether it be soaring high over head on its long migratory journeys, or be merely flying at dusk to its roosting-place, it continually utters its loud, clangorous cry.

The food of the Crane is much like that of the heron, but in addition to the frogs, fish, worms, and insects, it eats vegetable substances. Sometimes it is apt to get into cultivated grounds, and then does much damage to the crops, pecking up the ground with its long beak, partly for the sake of the worms, grubs, and other creatures, and partly for the sake of the sprouting seeds.

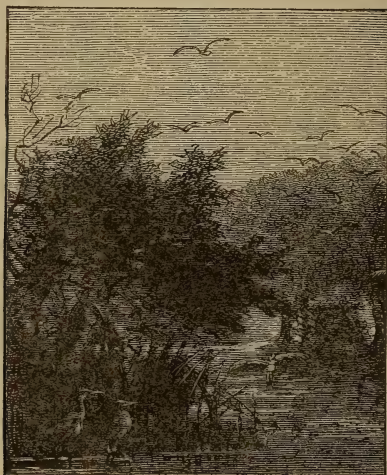
Although by reason of its scarcity the Crane has been

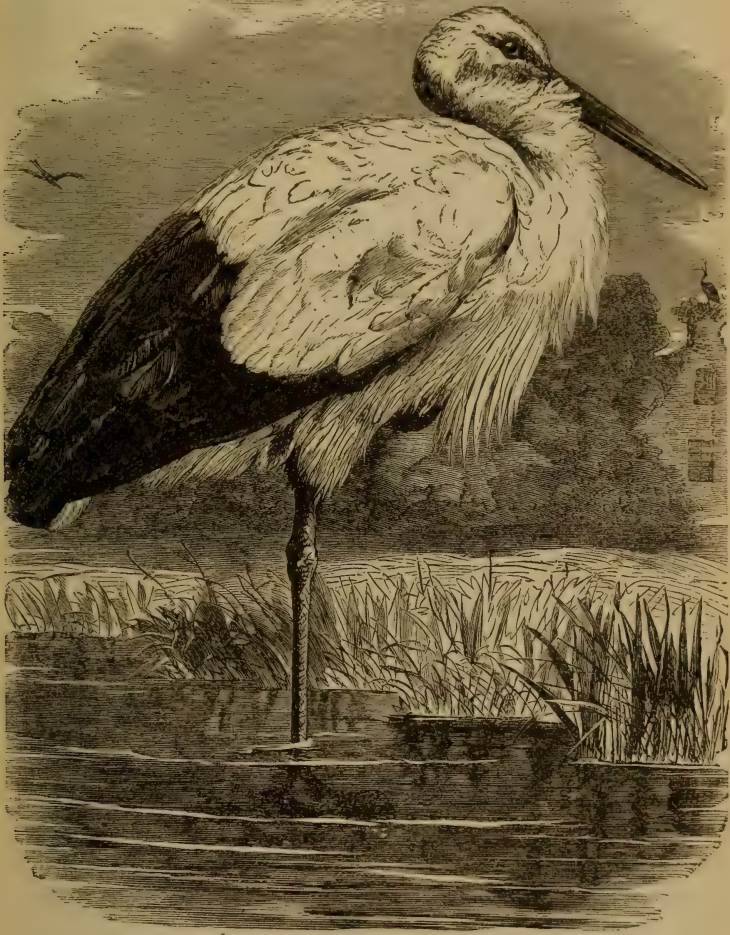
abandoned as food, its flesh is really excellent, and in former days was valued very highly.

Like the egret, the Crane is remarkable for the flowing plumes of the back, which fall over the tail feathers, and form a train. These feathers are much used as plumes, both for purposes of dress and as brushes or flappers wherewith to drive off the flies. By reason of this conformation, some systematic zoologists have thought that it has some affinity to the ostrich, the rhœa, and similar birds, and that the resemblance is strengthened by the structure of the digestive organs, which are suited to vegetable as well as animal substances, the stomach being strong and muscular.

The peculiar voice of the Crane, which it is so fond of using, and to which reference is made in the Scriptures, is caused by a peculiar structure of the windpipe, which is exceedingly long, and, instead of going straight to the lungs, undergoes several convolutions about the breast-bone, and then proceeds to the lungs.

The Crane makes its nest on low ground, generally among osiers or reeds, and it lays only two eggs, pale olive in colour, dashed profusely with black and brown streaks.





THE STORK.

Signification of the Hebrew word *Chasidah*—Various passages in which it is mentioned—The Chasidah therefore a large, wide-winged, migratory bird—Its identification with the Stork—The Stork always protected.

In the Old Testament there are several passages wherein is mentioned the word *Chasidah*

The Authorized Version invariably renders the word *Chasidah* as "Stork," and is undoubtedly right.

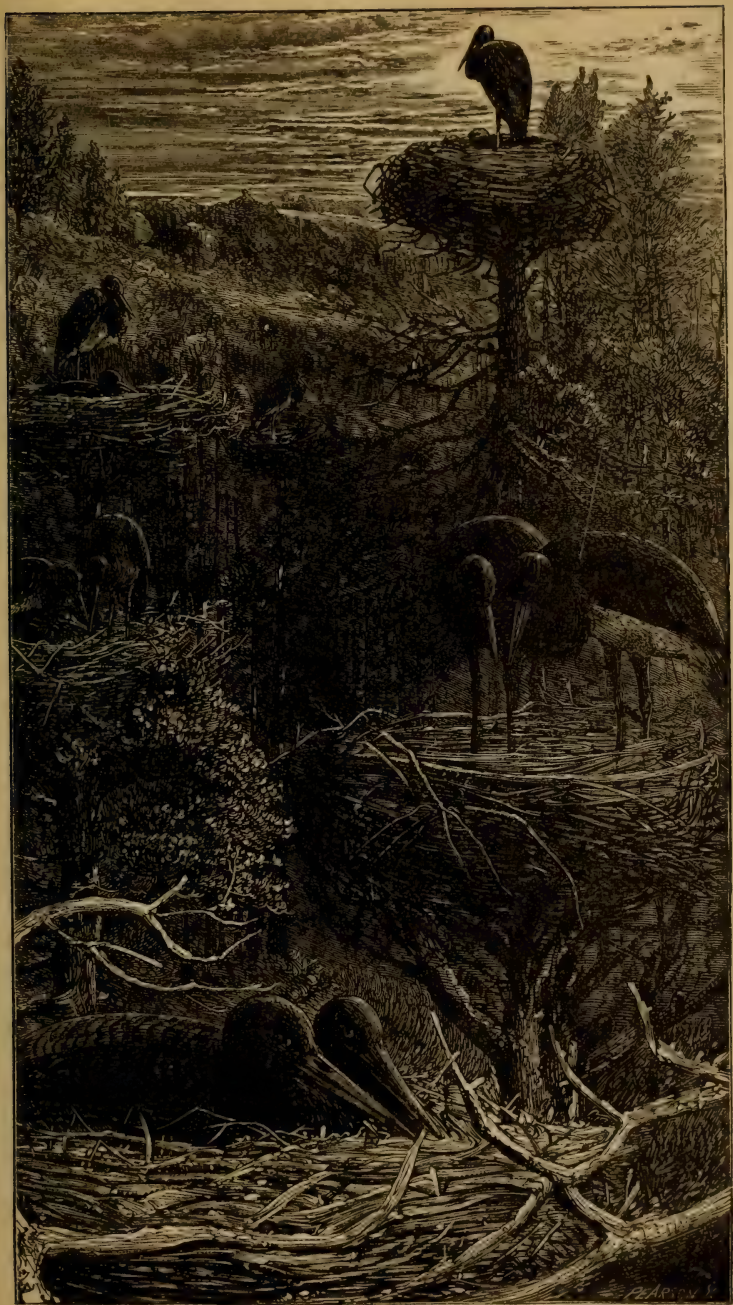
In Buxtorf's Lexicon there is a curious derivation of the word. He says that the word *Chasidah* is derived from *chesed*, a word that signifies benevolence.

According to some writers, the name was given to the Stork because it was supposed to be a bird remarkable for its filial piety; "for the storks in their turn support their parents in their old age: they allow them to rest their necks on their bodies during migration, and, if the elders are tired, the young ones take them on their backs." According to others, the name is given to the Stork because it exercises kindness towards its companions in bringing them food; but in all cases the derivation of the word is acknowledged to be the same.

Partly in consequence of this idea, which is a very old and almost universal one, and partly on account of the great services rendered by the bird in clearing the ground of snakes, insects, and garbage, the Stork has always been protected through the East, as it is to the present day in several parts of Europe. The slaughter of a Stork, or even the destruction of its eggs, would be punished with a heavy fine; and in consequence of the immunity which it enjoys, it loves to haunt the habitations of mankind.

In many of the Continental towns, where sanitary regulations are not enforced, the Stork serves the purpose of a scavenger, and may be seen walking about the market-place, waiting for the offal of fish, fowls, and the like, which are simply thrown on the ground for the Storks to eat. In Eastern lands the Stork enjoys similar privileges, and we may infer that the bird was perfectly familiar both to the writers of the various Scriptural books in which it was mentioned, and to the people for whom these books were intended.

When they settle upon a tract of ground, the Storks divide it among themselves in a manner that seems to have a sort of system in it, spreading themselves over it with wonderful regularity, each bird appearing to take possession of a definite amount of ground. By this mode of proceeding, the ground is rapidly cleared of all vermin; the Storks examining their allotted space with the keenest scrutiny, and devouring every reptile, mouse, worm, grub, or insect that they can find on it. Sometimes they



STORKS AND THEIR NESTS.

will spread themselves in this manner over a vast extent of country, arriving suddenly, remaining for several months, and departing without giving any sign of their intention to move.

The wings of the Stork, which are mentioned in Holy Writ, are very conspicuous, and are well calculated to strike an imaginative mind. The general colour of the bird is white, while the quill feathers of the wings are black; so that the effect of the spread wings is very striking, an adult bird measuring about seven feet across, when flying. As the body, large though it may be, is comparatively light when compared with the extent of wing, the flight is both lofty and sustained, the bird flying a very great height, and, when migrating, is literally the "stork in the heavens."

Next we come to the migratory habits of the Stork.

Like the swallow, the Stork resorts year after year to the same spots; and when it has once fixed on a locality for its nest, that place will be assuredly taken as regularly as the breeding-season comes round. The same pair are sure to return to their well-known home, notwithstanding the vast distances over which they pass, and the many lands in which they sojourn. Should one of the pair die, the other finds a mate in a very short time, and thus the same home is kept up by successive generations of Storks, much as among men one ancestral mansion is inhabited by a series of members of the same family.

So well is this known, that when a pair of Storks have made their nest in a human habitation their return is always expected, and when they arrive the absentees are welcomed on all sides. In many countries breeding-places are specially provided for the Storks; and when one of them is occupied for the first time, the owner of the house looks upon it as a fortunate omen.

The localities chosen by the Stork for its nest vary according to the surrounding conditions. The foundation which a Stork requires is a firm platform, the more elevated the better, but the bird seems to care little whether this platform be on rocks, buildings, or trees. If, for example, it builds its nest in craggy places, far from the habitations of man, it selects some flat ledge for the purpose, preferring those that are at the extreme tops of the rocks. The summit of a natural pinnacle is a favourite spot with the Stork.

In many cases the Stork breeds among old ruins, and under

such circumstances it is fond of building its nest on the tops of pillars or towers, the summits of arches, and similar localities. When it takes up its abode among mankind, it generally selects the breeding-places which have been built for it by those who know its taste, but it frequently chooses the top of a chimney, or some such locality.

Sometimes, however, it is obliged to build in spots where it can find neither rocks nor buildings, and in such cases it builds on trees, and, like the heron, is sociable in its nesting, a whole community residing in a clump of trees. It is not very particular about the kind of tree, provided that it be tolerably tall, and strong enough to bear the weight of its enormous nest; and the reader will at once see that the fir-trees are peculiarly fitted to be the houses for the Stork.

As may be expected from the localities chosen by the Stork for its breeding-place, its nest is very large and heavy. It is constructed with very little skill, and is scarcely more than a huge quantity of sticks, reeds, and similar substances, heaped together, and having in the middle a slight depression in which the eggs are laid. These eggs are usually three, or perhaps four in number, and now and then a fifth is seen, and are of a very pale buff or cream colour.

As is the case with the heron, the young of the Stork are quite helpless when hatched, and are most ungainly little beings, with their long legs doubled under them, unable to sustain their round and almost naked bodies, while their large beaks are ever gaping for food. Those of my readers who have had young birds of any kind must have noticed the extremely grotesque appearance which they possess when they hold up their heads and cry for food, with their bills open to an almost incredible extent. In such birds as the Stork, the heron, and others of the tribe, the grotesque appearance is exaggerated in proportion to the length and gape of the bill.

The Stork is noted for being a peculiarly kind and loving parent to its young, in that point fully deserving the derivation of its Hebrew name, though its love manifests itself towards the young, and not towards the parent.

The Rev. H. B. Tristram mentions from personal experience an instance of the watchful care exercised by the Stork over its young. "The writer was once in camp near an old ruined

tower in the plains of Zana, south of the Atlas, where a pair of storks had their nest. The four young might often be seen from a little distance, surveying the prospect from their lonely height, but whenever any of the human party happened to stroll near the tower, one of the old storks, invisible before, would instantly appear, and, lighting on the nest, put its feet gently on the necks of all the young, so as to hold them down out of sight till the stranger had passed, snapping its bill meanwhile, and assuming a grotesque air of indifference, as if unconscious of there being anything under its charge."

The snapping noise which is here mentioned is the only sound produced by the Stork, which is an absolutely silent bird, as far as voice is concerned.

THERE is another species of Stork found in Palestine, to which the fir-trees are especially a home. This is the Black Stork (*Ciconia nigra*), which in some parts of the country is even more plentiful than its white relative, which it resembles in almost every particular, except that it has a dark head and back, the feathers being glossed with purple and green like those of the magpie. This species, which is undoubtedly included in the Hebrew word *chasidah*, always makes its nest on trees whenever it can find them, and in some of the more densely wooded parts of Palestine is in consequence plentiful, placing its nest in the deepest parts of the forests. When it cannot obtain trees, it will build its nest on rocky ledges. It lays two or three eggs of a greenish white colour.

Like the preceding species, the Black Stork is easily domesticated. Colonel Montague kept one which was very tame, and would follow its keeper like a dog. Its tameness enabled its proceedings to be closely watched, and its mode of feeding was thereby investigated. It was fond of examining the rank grass and mud for food, and while doing so always kept its bill a little open, so as to pounce down at once on any insect or reptile that it might disturb.

Eels were its favourite food, and it was such an adept at catching them that it was never seen to miss one, no matter how small or quick it might be. As soon as it had caught one of these active fish, it went to some dry place, and then disabled its prey by shaking and beating it against the ground before

swallowing it, whereas many birds that feed on fish swallow their prey as soon as it is caught. The Stork was never seen to swim as the heron sometimes does, but it would wade as long as it could place its feet on the bed of the stream, and would strain its head and the whole of its neck under water in searching for fish.

It was of a mild and peaceable disposition, and, even if angered, did not attempt to bite or strike with its beak, but only denoted its displeasure by blowing the air sharply from its lungs, and nodding its head repeatedly. After the manner of Storks, it always chose an elevated spot on which to repose,



A NEST OF THE WHITE STORK.

and took its rest standing on one leg, with its head so sunk among the feathers of its shoulders that scarcely any part of it was visible, the hinder part of the head resting on the back, and the bill lying on the fore-part of the neck.

Though the bird is so capable of domestication, it does not of its own accord haunt the dwellings of men, like the White Stork, but avoids the neighbourhood of houses, and lives in the most retired places it can find.

THE SWAN.

Signification of the word *Tinshemeth*—The Gallinule and the Ibis—Appearance and habits of the Hyacinthine Gallinule—A strange use for the bird—The White or Sacred Ibis

IN the two parallel chapters of Lev. xi. 18 and Deut. xiv. 16, the Hebrew word *tinshemeth* is found, and evidently signifies some kind of bird which was forbidden as food. After stating (Lev. xi. 13) that "these are they which ye shall have in abomination among the fowls; they shall not be eaten, they are an abomination," the sacred lawgiver proceeds to enumerate a number of birds, nearly all of which have already been described. Among them occurs the name of *tinshemeth*, between the great owl and the pelican.

What was the precise species of bird which was signified by this name it is impossible to say, but there is no doubt that it could not have been the Swan, according to the rendering of the Authorized Version. The Swan is far too rare a bird in Palestine to have been specially mentioned in the law of Moses, and in all probability it was totally unknown to the generality of the Israelites. Even had it been known to them, and tolerably common, there seems to be no reason why it should have been reckoned among the list of unclean birds.

On turning to the Hebrew Bible, we find that the word is left untranslated, and simply given in its Hebrew form, thereby signifying that the translators could form no opinion whatever of the proper rendering of the word. The Septuagint translates the *Tinshemeth* as the *Porphyrio* or Ibis, and the Vulgate follows the same rendering. Later naturalists have agreed that the Septuagint and Vulgate have the far more probable reading; and, as two birds are there mentioned, they will be both described.

THE first is the *Porphyrio*, by which we may understand the HYACINTHINE GALLINULE (*Porphyrio veterum*). All the birds of this group are remarkable for the enormous length of their toes, by means of which they are enabled to walk upon the loose



IDIS AND GALLINULE (SWAN OF SCRIPTURE).

herbage that floats on the surface of the water as firmly as if they were treading on land. Their feet are also used, like those of the parrots, in conveying food to the mouth. We have in England a very familiar example of the Gallinules in the common water-hen, or moor-hen, the toes of which are of great proportionate length, though not so long as those of the Purple Gallinule, which almost rivals in this respect the jacanas of South

America and China. The water-rail, and cornerake or land-rail, are also allied to the Gallinules.

The Hyacinthine Gallinule derives its name from its colour, which is a rich and variable blue, taking a turquoise hue on the head, neck, throat, and breast, and deep indigo on the back. The large bill and the legs are red. Like many other birds, however, it varies much in colour according to age.

It has a very wide geographical range, being found in many parts of Europe, Asia, and Africa, and is common in the marshy districts of Palestine, where its rich blue plumage and its large size, equalling that of a duck, render it very conspicuous. The large and powerful bill of this bird betokens the nature of its food, which consists almost entirely of hard vegetable substances, the seeds of aquatic herbage forming a large portion of its diet. When it searches for food on the seashore, it eats the marine vegetation, mixing with this diet other articles of an animal nature, such as molluscs and small reptiles.

Though apparently a clumsy bird, it moves with wonderful speed, running not only swiftly but gracefully, its large feet being no hindrance to the rapidity of its movements. It is mostly found in shallow marshes, where the construction of its feet enables it to traverse both the soft muddy ground and the patches of firm earth with equal ease. Its wings, however, are by no means equal to its legs either in power or activity; and, like most of the rail tribe, it never takes to the air unless absolutely obliged to do so.

The nest of the Hyacinthine Gallinule is made on the sedge-patches which dot the marshes, much like that of the coot. The nest, too, resembles that of the coot, being composed of reeds, sedges, and other aquatic plants. The eggs are three or four in number, white in colour, and nearly spherical in form.

As the Ibis has an equal claim to the title of *Tinshemeth*, we will devote a few lines to a description of the bird. The particular species which would be signified by the word *tinshemeth* would undoubtedly be the WHITE or SACRED IBIS (*Ibis religiosa*), a bird which derives its name of Sacred from the reverence with which it was held by the ancient Egyptians, and the frequency with which its figure occurs in the monumental sculptures. It was also thought worthy of being embalmed, and many mummies of the Ibis have been found in the

old Egyptian burial-places, having been preserved for some three thousand years.

It is about as large as an ordinary hen, and, as its name imports, has the greater part of its plumage white, the ends of the wing-feathers and the coverts being black, with violet reflections. The long neck is black and bare, and has a most curious aspect, looking as if it were made of an old black kid glove, very much crumpled, but still retaining its gloss.

The reason for the extreme veneration with which the bird was regarded by the ancient Egyptians seems rather obscure. It is probable, however, that the partial migration of the bird was connected in their minds with the rise of the Nile, a river as sacred to the old Egyptians as the Ganges to the modern Hindoo. As soon as the water begins to rise, the Ibis makes its appearance, sometimes alone, and sometimes in small troops. It haunts the banks of the river, and marshy places in general, diligently searching for food by the aid of its long bill. It can fly well and strongly, and it utters at intervals a rather loud cry, dipping its head at every utterance.

THE CORMORANT.

The word *Shâlâk* and its signification—Habits of the Cormorant—The bird trained to catch fish—Mode of securing its prey—Nests and eggs of the Cormorant—Nesting in fir-trees—Flesh of the bird.

ALTHOUGH in the Authorized Version of the Scriptures the word Cormorant occurs three times, there is no doubt that in two of the passages the Hebrew word ought to have been rendered as Pelican, as we shall see when we come presently to the description of that bird.

In the two parallel passages, Lev. xi. 17 and Deut. xiv. 17, a creature called the *Shâlâk* is mentioned in the list of prohibited meats. That the *Shâlâk* must be a bird is evident from the context, and we are therefore only left to discover what sort of bird it may be. On looking at the etymology of the word we

find that it is derived from a root which signifies hurling or casting down, and we may therefore presume that the bird is one which plunges or sweeps down upon its prey.

Weighing, carefully, the opinions of the various Hebraists and naturalists, we may safely determine that the word *shálák* has been rightly translated in the Authorized Version. The Hebrew Bible gives the same reading, and does not affix the mark of doubt to the word, though there are very few of the long list of animals in Lev. xi. and Deut. xiv. which are not either distinguished by the mark of doubt, or, like the *Tinshemeth*, are left untranslated.

The Cormorant belongs to the family of the pelicans, the relationship between them being evident to the most unpractised eye; and the whole structure of the bird shows its admirable adaptation for the life which it leads.

Its long beak enables it to seize even a large fish, while the hook at the end prevents the slippery prey from escaping. The long snake-like neck gives the bird the power of darting its beak with great rapidity, and at the same time allows it to seize prey immediately to the right or left of its course. Its strong, closely-feathered wings enable it to fly with tolerable speed, while at the same time they can be closed so tightly to the body that they do not hinder the progress of the bird through the water; while the tail serves equally when spread to direct its course through the air, and when partially or entirely closed to act as a rudder in the water. Lastly, its short powerful legs, with their broadly-webbed feet, act as paddles, by which the bird urges itself through the water with such wonderful speed that it can overtake and secure the fishes even in their own element. Besides these outward characteristics, we find that the bird is able to make a very long stay under water, the lungs being adapted so as to contain a wonderful amount of air.

The Cormorant has been trained to play the same part in the water as the falcon in the air, and has been taught to catch fish, and bring them ashore for its master. So adroit are they, that if one of them should catch a fish which is too heavy for it, another bird will come to its assistance, and the two together will bring the struggling prey to land. Trained birds of this description have been employed in China from time immemorial.

In order to prevent it from swallowing the fish which it takes, each bird has a ring or ligature passed round its neck.

The Cormorant is a most voracious bird, swallowing a considerable weight of fish at a meal, and digesting them so rapidly that it is soon ready for another supply. Although it is essentially a marine bird, hunger often takes it inland, especially to places where there are lakes or large rivers.

While the ducks and teal and widgeons may be stationary on the pool, the cormorant is seen swimming to and fro, as if in quest of something. First raising his body nearly perpendicular, down he plunges into the deep, and, after staying there a considerable time, he is sure to bring up a fish, which he invariably swallows head foremost. Sometimes half an hour elapses before he can manage to accommodate a large eel quietly in his stomach.

You see him straining violently with repeated efforts to gulp it; and when you fancy that the slippery mouthful is successfully disposed of, all on a sudden the eel retrogrades upwards from its dismal sepulchre, struggling violently to escape. The cormorant swallows it again, and up again it comes, and shows its tail a foot or more out of its destroyer's mouth. At length, worn out with ineffectual writhings and slidings, the eel is gulped down into the cormorant's stomach for the last time, there to meet its dreaded and inevitable fate.

Mr. Fortune gives a very interesting account of the feeding of tame Cormorants in China. The birds preferred eels to all other food, and, in spite of the difficulty in swallowing the slippery and active creature, would not touch another fish as long as an eel was left. The bird is so completely at home in the water that it does not need, like the heron and other aquatic birds, to bring its prey ashore in order to swallow it, but can eat fish in the water as well as catch them. It always seizes the fish crosswise, and is therefore obliged to turn it before it can swallow the prey with the head downwards. Sometimes it contrives to turn the fish while still under water, but, if it should fail in so doing, it brings its prey to the surface, and shifts it about in its bill, making a series of little snatches at it until the head is in the right direction. When it seizes a very large fish, the bird shakes its prey just as a dog shakes a rat, and so disables it. It is said to eat its own weight of fish in a single day.

Sometimes, when it has been very successful or exceptionally hungry, it loads itself with food to such an extent that it becomes almost insensible during the process of digestion, and, although naturally a keen-eyed and wary bird, allows itself to be captured by hand.

The nest of the Cormorant is always upon a rocky ledge, and generally on a spot which is inaccessible except by practised climbers furnished with ropes, poles, hooks, and other appurtenances. Mr. Waterton mentions that when he descended the Raincliff, a precipice some four hundred feet in height, he saw numbers of the nests and eggs, but could not get at them except by swinging himself boldly off the face of the cliff, so as to be brought by the return swing into the recesses chosen by the birds.

The nests are mostly placed in close proximity to each other, and are made of sticks and seaweeds, and, as is usual with such nests, are very inartificially constructed. The eggs are of a greenish white on the outside, and green on the inside. When found in the nest, they are covered with a sort of chalky crust, so that the true colour is not perceptible until the crust is scraped off. Two to four eggs are generally laid in, or rather on, each nest. As may be imagined from the character of the birds' food, the odour of the nesting-place is most horrible.

Sometimes, when rocks cannot be found, the Cormorant is obliged to select other spots for its nest. It is mentioned in the "Proceedings of the Zoological Society," that upon an island in the midst of a large lake there were a number of Scotch fir-trees, upon the branches of which were about eighty nests of the Cormorant.

The flesh of the Cormorant is very seldom eaten, as it has a fishy flavour which is far from agreeable. To eat an old Cormorant is indeed almost impossible, but the young birds may be rendered edible by taking them as soon as killed, skinning them, removing the whole of the interior, wrapping them in cloths, and burying them for some time in the ground.

THE PELICAN.

The Pelican of the wilderness—Attitudes of the bird—Its love of solitude—Mode of feeding the young—Fables regarding the Pelican—Breeding-places of the bird—The object of its wide wings and large pouch—Colour of the Pelican.

It has been mentioned that in two passages of Scripture, the word which is translated in the Authorized Version as *Cormorant*, ought to have been rendered as *PELICAN*. These, however, are not the first passages in which we meet with the word *kaath*. The name occurs in the two parallel passages of Lev. xi. and Deut. xiv. among the list of birds which are proscribed as food. Passing over them, we next come to Ps. cii. 6. In this passage, the sacred writer is lamenting his misery: "By reason of the voice of my groaning my bones cleave to my skin.

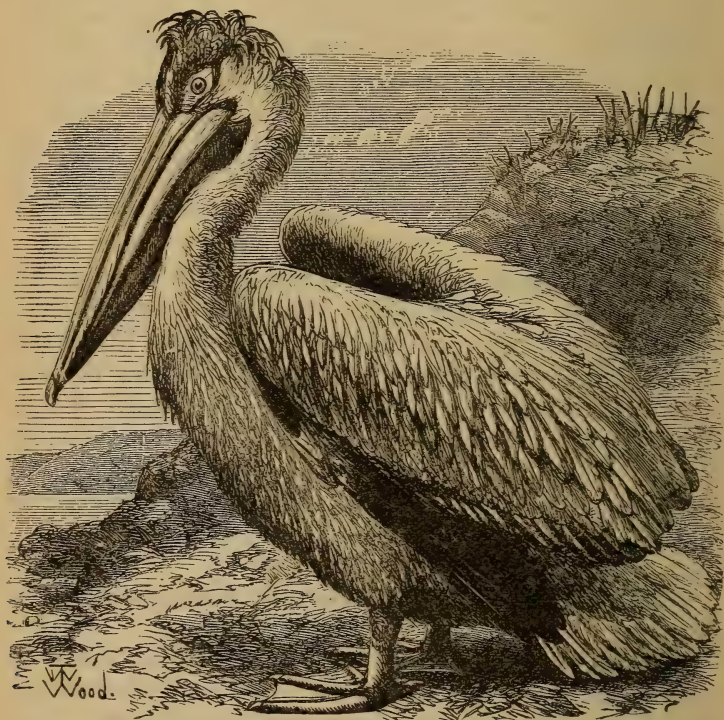
"I am like a pelican of the wilderness: I am like an owl of the desert."

In these sentences, we see that the *Kaath* was a bird of solitude that was to be found in the "wilderness," *i.e.* far from the habitations of man. This is one of the characteristics of the Pelican, which loves not the neighbourhood of human beings, and is fond of resorting to broad, uncultivated lands, where it will not be disturbed.

In them it makes its nest and hatches its young, and to them it retires after feeding, in order to digest in quiet the ample meal which it has made. Mr. Tristram well suggests that the metaphor of the Psalmist may allude to the habit common to the Pelican and its kin, of sitting motionless for hours after it has gorged itself with food, its head sunk on its shoulders, and its bill resting on its breast.

This is but one of the singular, and often grotesque, attitudes in which the Pelican is in the habit of indulging.

There are before me a number of sketches made of the Pelicans at the Zoological Gardens, and in no two cases does one attitude in the least resemble another. In one sketch the



THE PELICAN.

bird is sitting in the attitude which has just been described. In another it is walking, or rather staggering, along, with its head on one side, and its beak so closed that hardly a vestige of its enormous pouch can be seen. Another sketch shows the same bird as it appeared when angry with a companion, and scolding its foe in impotent rage; while another shows it basking in the

sun, with its magnificent wings spread and shaking in the warm beams, and its pouch hanging in folds from its chin.

One of the most curious of these sketches shows the bird squatting on the ground, with its head drawn back as far as possible, and sunk so far among the feathers of the back and shoulders that only a portion of the head itself can be seen, while the long beak is hidden, except an inch or two of the end. In this attitude it might easily be mistaken at a little distance for an oval white stone.

The derivation of the Hebrew word *kaath* is a very curious one. It is taken from a verb signifying "to vomit," and this derivation has been explained in different ways.

The early writers, who were comparatively ignorant of natural history, thought that the Pelican lived chiefly on molluscs, and that, after digesting the animals, it rejected their shells, just as the owl and the hawk reject the bones, fur, and feathers of their prey.

They thought that the Pelican was a bird of a hot temperament, and that the molluscs were quickly digested by the heat of the stomach.

At the present day, however, knowing as we do the habits of the Pelican, we find that, although the reasons just given are faulty, and that the Pelican lives essentially on fish, and not on molluscs, the derivation of the word is really a good one, and that those who gave the bird the name of *Kaath*, or the vomiter, were well acquainted with its habits.

The bird certainly does eat molluscs, but the principal part of its diet is composed of fish, which it catches dexterously by a sort of sidelong snatch of its enormous bill. The skin under the lower part of the beak is so modified that it can form, when distended, an enormous pouch, capable of holding a great quantity of fish, though, as long as it is not wanted, the pouch is so contracted into longitudinal folds as to be scarcely perceptible. When it has filled the pouch, it usually retires from the water, and flies to a retired spot, often many miles inland, where it can sit and digest at its ease the enormous meal which it has made.

As it often chooses its breeding-places in similar spots, far from the water, it has to carry the food with which it nourishes its young for many miles. For this purpose it is furnished, not

only with the pouch which has been just mentioned, but with long, wide, and very powerful wings, often measuring from twelve to thirteen feet from tip to tip. No one, on looking at a Pelican as it waddles about or sits at rest, would imagine the gigantic dimensions of the wings, which seem, as the bird spreads them, to have almost as unlimited a power of expansion as the pouch.

In these two points the true Pelicans present a strong contrast to the cormorants, though birds closely allied. The cormorant has its home close by the sea, and therefore needs not to carry its food for any distance. Consequently, it needs no pouch, and has none. Neither does it require the great expanse of wing which is needful for the Pelican, that has to carry such a weight of fish through the air. Accordingly, the wings, though strong enough to enable the bird to carry for a short distance a single fish of somewhat large size, are comparatively short and closely feathered, and the flight of the cormorant possesses neither the grace nor the power which distinguishes that of the Pelican.

When the Pelican feeds its young, it does so by pressing its beak against its breast, so as to force out of it the enclosed fish. Now the tip of the beak is armed, like that of the cormorant, with a sharply-curved hook, only, in the case of the Pelican, the hook is of a bright scarlet colour, looking, when the bird presses the beak against the white feathers of the breast, like a large drop of blood. Hence arose the curious legend respecting the Pelican, which represented it as feeding its young with its own blood, and tearing open its breast with its hooked bill. We find that this legend is exemplified by the oft-recurring symbol of the "Pelican feeding its young" in ecclesiastical art, as an emblem of Divine love.

This is one of the many instances in which the inventive, poetical, inaccurate Oriental mind has seized some peculiarity of form, and based upon it a whole series of fabulous legends. As long as they restricted themselves to the appearance and habits of the animals with which they were familiarly acquainted, the old writers were curiously full, exact, and precise in their details. But as soon as they came to any creature of whose mode of life they were entirely or partially ignorant, they allowed their inventive faculties full scope, and put forward as zoological facts statements which were the mere creation of their own fancy.

We have already seen several examples of this propensity, and shall find more as we proceed with the zoology of the Scriptures.

The fabulous legends of the Pelican are too numerous to be even mentioned, but there is one which deserves notice, because it is made the basis of an old Persian fable.

The writer of the legend evidently had some partial knowledge of the bird. He knew that it had a large pouch which could hold fish and water; that it had large and powerful wings; and that it was in the habit of flying far inland, either for the purpose of digesting its food or nourishing its young. Knowing that the Pelican is in the habit of choosing solitary spots in which it may bring up its young in safety, but not knowing the precise mode of its nesting, the writer in question has trusted to his imagination, and put forward his theories as facts.

Knowing that the bird dwells in "the wilderness," he has assumed that the wilderness in question is a sandy, arid desert, far from water, and consequently from vegetation. Such being the case, the nurture of the Pelican's young is evidently a difficult question. Being aquatic birds, the young must needs require water for drink and bathing, as well as fish for food; and, though a supply of both these necessities could be brought in the ample pouches of the parents, they would be wasted unless some mode of storing were employed.

Accordingly, the parent birds were said to make their nest in a hollow tree, and to line it with clay, or to build it altogether of clay, so as to leave a deep basin. This basin the parent birds were said to use as a sort of store-pond, bringing home supplies of fish and water in their pouches, and pouring them into the pond. The wild beasts who lived in the desert were said to be acquainted with these nests, and to resort to them daily in order to quench their thirst, repaying their entertainers by protecting their homes.

In real fact, the Pelican mostly breeds near water, and is fond of selecting little rocky islands where it cannot be approached without danger. The nest is made on the ground, and is formed in a most inartificial manner of reeds and grass, the general mass of the nest being made of the reeds, and the lining being formed of grass. The eggs are white, of nearly the same shape at both ends, and are from two to five in number. On an average, however, each nest will contain about two eggs.

The parent birds are very energetic in defence of their eggs or young, and, according to Le Vaillant, when approached they are "like furious harpies let loose against us, and their cries rendered us almost deaf. They often flew so near us that they flapped their wings in our faces, and, though we fired our pieces repeatedly, we were not able to frighten them." When the well-known naturalist Sonnerat tried to drive a female Pelican from her nest, she appeared not to be frightened, but angry. She would not move from her nest, and when he tried to push her off, she struck at him with her long bill and uttered cries of rage.

In order to aid the bird in carrying the heavy weights with which it loads itself, the whole skeleton is permeated with air, and is exceedingly light. Beside this, the whole cellular system of the bird is honeycombed with air-cells, so that the bulk of the bird can be greatly increased, while its weight remains practically unaltered, and the Pelican becomes a sort of living balloon.

The habit of conveying its food inland before eating it is so characteristic of the Pelican that other birds take advantage of it. In some countries there is a large hawk which robs the Pelican, just as the bald-headed eagle of America robs the osprey. Knowing instinctively that when a Pelican is flying inland slowly and heavily and with a distended pouch it is carrying a supply of food to its home, the hawk dashes at it, and frightens it so that the poor bird opens its beak, and gives up to the assailant the fish which it was bearing homewards.

It is evident that the wings which are needed for supporting such weights, and which, as we have seen, exceed twelve feet in length from tip to tip, would be useless in the water, and would hinder rather than aid the bird if it attempted to dive as the close-winged cormorant does. Accordingly, we find that the Pelican is not a diver, and, instead of chasing its finny prey under water, after the manner of the cormorant, it contents itself with scooping up in its beak the fishes which come to the surface of the water. The very buoyancy of its body would prevent it from diving as does the cormorant, and, although it often plunges into the water so fairly as to be for a moment submerged, it almost immediately rises, and pursues its course on the surface of the water, and not beneath it. Like the

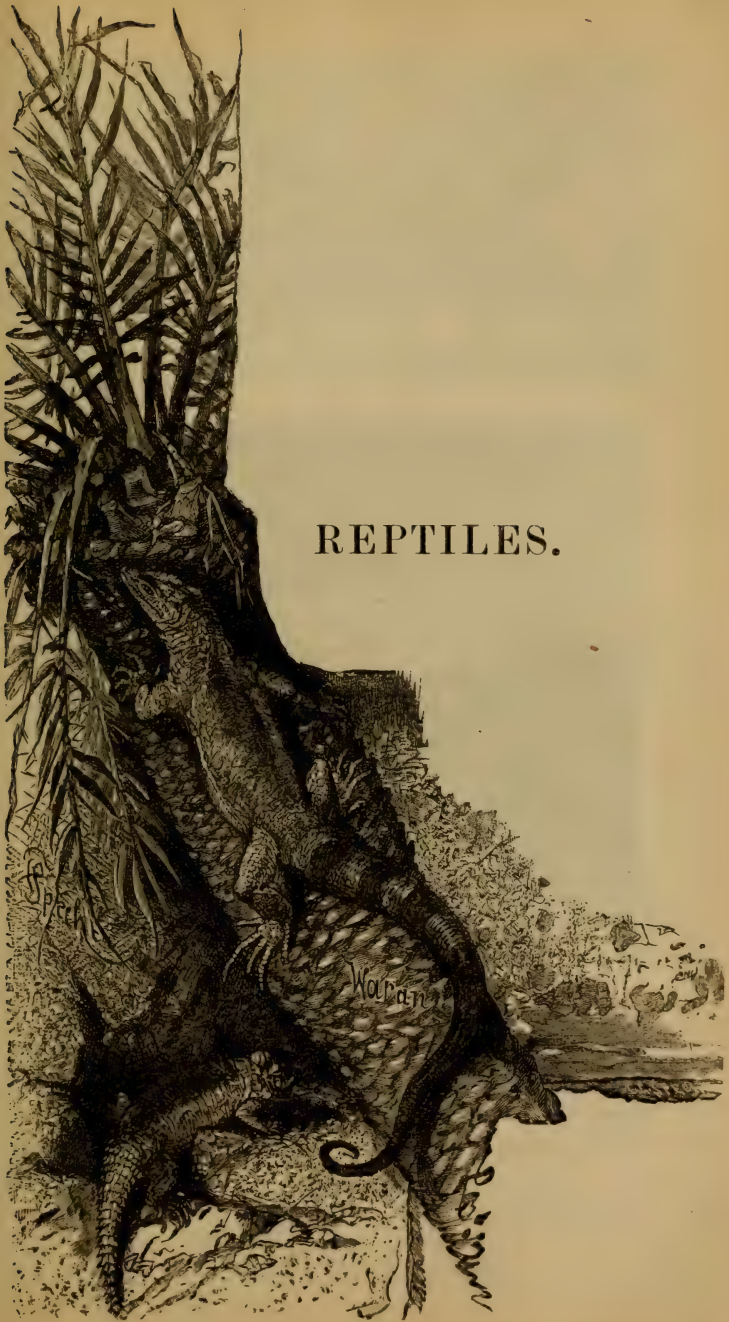
cormorant, the Pelican can perch on trees, though it does not select such spots for its roosting-places, and prefers rocks to branches. In one case, however, when some young Pelicans had been captured and tied to a stake, their mother used to bring them food during the day, and at night was accustomed to roost in the branches of a tree above them.

Though under some circumstances a thoroughly social bird, it is yet fond of retiring to the most solitary spots in order to consume at peace the prey that it has captured ; and, as it sits motionless and alone for hours, more like a white stone than a bird, it may well be accepted as a type of solitude and desolation.

The colour of the common Pelican is white, with a very slight pinky tinge, which is most conspicuous in the breeding season. The feathers of the crest are yellow, and the quill feathers of the wings are jetty black, contrasting well with the white plumage of the body. The pouch is yellow, and the upper part of the beak bluish grey, with a red line running across the middle, and a bright red hook at the tip. This plumage belongs only to the adult bird, that of the young being ashen grey, and four or five years are required before the bird puts on its full beauty. There is no difference in the appearance of the sexes. The illustration represents a fine old male Crested Pelican. The general colour is a greyish white, with a slight yellowish tint on the breast. The pouch is bright orange, and the crest is formed of curling feathers.



REPTILES.







THE TORTOISE.

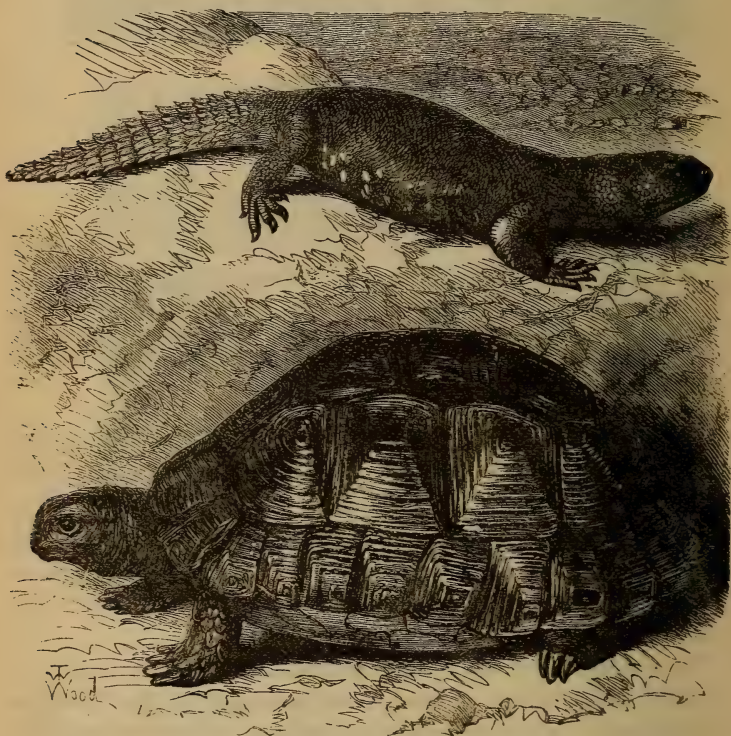
The Tzab of the Scriptures, translated as Tortoise—Flesh and eggs of the Tortoise—Its slow movements—Hibernation dependent on temperature—The Water-Tortoises—Their food and voracity—Their eggs—Their odour terrifying the horses—The Dhubb lizard and its legends—Its food, and localities which it prefers.

WE now come to a different class of animated beings. In Levit. xi. 29, there occurs among the list of unclean beasts a word which is translated in the Authorized Version as "tortoise." The word is *Tzab*, and is rendered in the Hebrew Bible as "lizard," but with the mark of doubt affixed to it. As the correct translation of the word is very dubious, we shall examine it in both these senses.

The common Tortoise is very common in Palestine, and is so plentiful that it would certainly have been used by the Israelites as food, had it not been prohibited by law. At the present day it is cooked and eaten by the inhabitants of the country who are not Jews, and its eggs are in as great request as those of the fowl.

These eggs are hard, nearly spherical, thick-shelled, and covered with minute punctures, giving them a roughness like that of a file. In captivity the Tortoise is very careless about the mode in which they are deposited, and I have seen a large

yard almost covered with eggs laid by Tortoises and abandoned. The white or albumen of the egg is so stiff and gelatinous that to empty one of them without breaking the shell is a difficult task, and the yolk is very dark, and covered with minute spots of black. When fresh the eggs are as good as those of the fowl, and many persons even think them better; the only drawback being that their small size and thick shell cause considerable trouble in eating them.



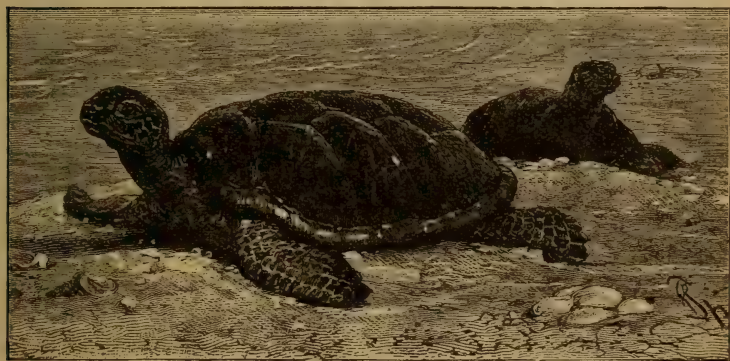
THE DHUBB OR LIZARD AND THE TORTOISE.

The flesh of the Tortoise is eaten, not only by human beings, but by birds, such as the *lämmergeier*. In order to get at the flesh of the Tortoise, they carry it high in the air and drop it on the ground so as to break the shell to pieces, should the reptile fall on a stone or rock. If, as is not often the case in such a

rocky land as that of Palestine, it should fall on a soft spot, the bird picks it up, soars aloft, and drops it again.

The Tortoises have no teeth, but yet are able to crop the herbage with perfect ease. In lieu of teeth the edges of the jaws are sharp-edged and very hard, so that they cut anything that comes between them like a pair of shears. Leaves that are pulpy and crisp are bitten through at once, but those that are thin, tough, and fibrous are rather torn than bitten, the Tortoise placing its feet upon them, and dragging them to pieces with its jaws. The carnivorous Tortoises have a similar habit, as we shall presently see.

This is the species from whose deliberate and slow movements the familiar metaphor of "slow as a Tortoise" was derived, and it is this species which is the hero of the popular fable of the



WATER TORTOISE.

"Hare and the Tortoise." Many of the reptiles are very slow in some things and astonishingly quick in others. Some of the lizards, for example, will at one time remain motionless for many hours together, or creep about with a slow and snail-like progress, while at others they dart from spot to spot with such rapidity that the eye can scarcely follow their movements. This however is not the case with the Tortoise, which is always slow, and, but for the defensive armour in which it is encased, would long ago have been extirpated.

During the whole of the summer months it may be seen crawling deliberately among the herbage, eating in the same

deliberate style which characterises all its movements, and occasionally resting in the same spot for many hours together, apparently enjoying the warm beams of the sunshine.

As winter approaches, it slowly scrapes a deep hole in the ground, and buries itself until the following spring awakes it once more to active life. The depth of its burrow depends on the severity of the winter, for, as the cold increases, the Tortoise sinks itself more deeply into the earth.

MENTION has been made of a species of Tortoise that inhabits the water. This is the CASPIAN EYMS (*Emys caspica*), a small species, measuring about six inches in length. It belongs to the large family of the Terrapins, several of which are so well known in America, and has a long, retractile neck, very sharp jaws, and webbed feet, and a well-developed tail.

The body is flattish, and the colour is olive, with lines of yellow edged with black, and the head is marked with longitudinal streaks of bright yellow. After the death of the creature these yellow streaks fade away gradually, and at last become nearly black. The skin of the head is thin, but very hard. In general appearance it is not unlike the chicken Tortoise of America, a species which is often brought to England and kept in captivity, on account of its hardy nature and the little trouble which is needed for keeping it in health.

I have kept specimens of the Caspian Emys for some time, and found them to be more interesting animals than they at first promised to be. They were active, swimming with considerable speed, and snatching quickly at anything which they fancied might be food.

They were exceedingly voracious, consuming daily a quantity of meat apparently disproportioned to their size, and eating it in a manner that strongly reminded me of the mole when engaged on a piece of meat or the body of a bird or mouse. The Tortoise would plant its fore-paws firmly at each side of the meat, seize a mouthful in its jaws, and, by retracting its head violently, would tear away the piece which it had grasped.

They are most destructive among fish, and are apt to rise quietly underneath a fish as it basks near the surface of the water, grasp it beneath with its sharp-edged jaws, and tear away the piece, leaving the fish to die. It is rather remarkable that

the *Lepidosiren*, or mud-fish of the Gambia, destroys fish in a precisely similar manner, though, as its jaws are much sharper than those of the *Emys*, it does not need the aid of fore-paws in biting out its mouthful of flesh.

Like the land Tortoise, it is one of the hibernators, and during the winter months buries itself deeply in the earth, choosing for this purpose the soft, muddy bed or bank of the pond in which it lives.

Its eggs are white, and hard-shelled, but are more oval than those of the land Tortoise, and both ends are nearly alike. In fact, its egg might well be mistaken for that of a small pigeon. The shell has a porcelain-like look, and is very liable to crack, so that the resemblance is increased.

There is one drawback to these reptiles when kept as pets. They give out a very unpleasant odour, which is disagreeable to human nostrils, but is absolutely terrifying to many animals. The monkey tribe have the strongest objection to these aquatic Tortoises. I once held one of them towards a very tame chimpanzee, much to his discomfiture. He muttered and remonstrated, and retreated as far as he could, pushing out his lips in a funnel-like form, and showing his repugnance to the reptile in a manner that could not be mistaken.

Horses seem to be driven almost frantic with terror, not only by the sight, but by the odour of these Tortoises. In Southern Africa there are Tortoises closely allied to the Caspian *Emys*, and having the same power of frightening horses.

I have read an account of an adventure there with one of those Tortoises, which I will give. This variety is described as being of an olive colour. When adult, there is a slight depression on either side of the vertebral line.

"Some very awkward accidents have occurred to parties from the terror caused by the fresh-water turtle (*Pelamedusa subrufa*). Carts have been smashed to fragments, riders thrown, and the utmost confusion caused by them. It is their smell, and it is certainly very disagreeable.

"My first acquaintance with the fact was in this wise. I was out shooting with two young ladies who had volunteered as markers; and, as you know, all our shooting is done from horseback. I had jumped off for a shot at some francolins near a knill, or water-hole, and, after picking up my birds, was

coming round the knoll to windward of the horses. In my path scrambled a turtle. I called out to my young friends, and told them of my find, on which one of them, in a hasty voice, said, 'Oh, please, Mr. L., don't touch it; you will frighten the horses!'

"Of course I laughed at the idea, and picked up the reptile, which instantly emitted its pungent odour—its means of defence. Though a long way off, the moment the horses caught the scent, away they flew, showing terror in every action. The girls, luckily splendid riders, tugged in vain at the reins; away they went over the Veldt, leaving me in mortal fear that the yawning 'aard-vark' holes (*Orycteropus capensis*) would break their necks. My own horse, which I had hitched to a bush, tore away his bridle, and with the ends streaming in the wind and the stirrups clashing about him, sped off home at full gallop, and was only recovered after a severe chase by my gallant young Amazons, who, after a race of some miles, succeeded in checking their affrighted steeds and in securing my runaway. But for some hours after, if I ventured to windward, there were wild-looking eyes and cocked ears—the smell of the reptile clung to me."

Should any of my readers keep any of those water Tortoises, they will do well to supply them plentifully with food, to give them an elevated rocky perch on which they can scramble, and on which they will sit for hours so motionless that at a little distance they can scarcely be distinguished from the stone on which they rest. They should also be weighed at regular intervals, as decrease of weight is a sure sign that something is wrong, and, as a general rule, is an almost certain precursor of death.

This little reptile is not without its legends. According to the old writers on natural history, it is of exceeding use to vine-growers in the season when there is excess of rain or hail. Whenever the owner of a vineyard sees a black cloud approaching, all he has to do is, to take one of these Tortoises, lay it on its back, and carry it round the vineyard. He must then go into the middle of the ground and lay the reptile on the earth, still on its back; and the effect of this proceeding would be that the cloud would pass aside from a place so well protected.

"But," proceeds the narrator, not wishing to be responsible

for the statement, "such diabolical and foolish observations were not so much to be remembered in this place, were it not for their silliness, that by knowing them men might learn the weakness of human wisdom when it erreth from the fountain of all science and true knowledge (which is Divinity), and the most approved assertions of nature. And so I will say no more in this place of the sweet-water tortoise."

THE DHUBB.

WE now come to the second animal, which may probably be the Tzab of the Old Testament.

This creature is one of the lizards, and is a very odd-looking creature. It is certainly not so attractive in appearance that the Jews might be supposed to desire it as food; but it often happens that, as is the case with the turtle and iguana, from the most ungainly, in the latter animal even repulsive, forms are produced the most delicate meats.

The DHUBB, or EGYPTIAN MASTIGURE, as the lizard is indifferently called, grows to a considerable size, measuring when adult three feet in length. Its colour is green, variegated with brown, and is slightly changeable, though not to the extent that distinguishes the chameleon. The chief peculiarity of this lizard consists in its tail, which is covered with a series of whorls or circles of long, sharply-pointed, hard-edged scales. The very appearance of this tail suggests its use as a weapon of defence, and it is said that even the dreaded cerastes is conquered by it, when the lizard and the snake happen to find themselves occupants of the same hole.

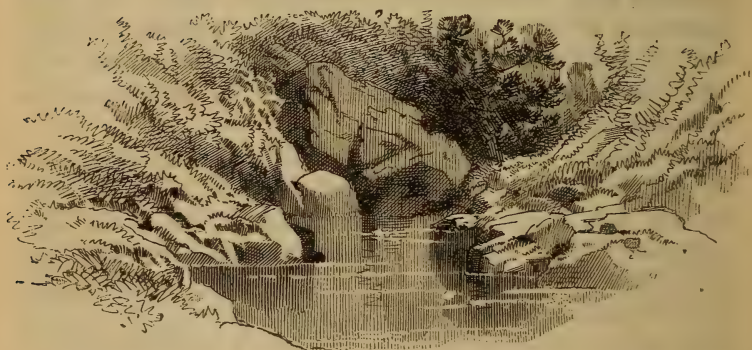
The ancients had a very amusing notion respecting the use of the spiny tail possessed by the Dhubb and its kin. They had an idea that, comparatively small though it was, it fed upon cattle, and that it was able to take them from the herd and drive them to its home. For this purpose, when it had selected an ox, it jumped on its back, and by the pricking of its sharp claws drove the animal to gallop in hope of ridding himself of his tormentor. In order to guide him in the direction of its home, it made use of its tail, lashing the ox "to make him go with his rider to the place of his most fit execution, free from

all rescue of his herdsman, or pastor, or the annoyance of passengers, where, in most cruel and savage manner, he teareth the limbs and parts one from another till he be devoured."

This very absurd account is headed by an illustration, which, though bad in drawing and rude in execution, is yet so bold and truthful that there is no doubt that it was sketched from the living animal.

As it haunts sandy downs, rocky spots, and similar localities, it is well adapted for the Holy Land, which is the home of a vast number of reptiles, especially of those belonging to the lizards. In the summer time they have the full enjoyment of the hot sunbeams, in which they delight, and which seem to rouse these cold-blooded creatures to action, while they deprive the higher animals of all spirit and energy. In the winter time these very spots afford localities wherein the lizards can hibernate until the following spring, and in such a case they furnish the reptiles with secure hiding-places.

Although the Dhubb does not destroy and tear to pieces oxen and other cattle, it is yet a rather bloodthirsty reptile, and will kill and devour birds as large as the domestic fowl. Usually, however, its food consists of beetles and other insects, which it takes deliberately.



THE LEVIATHAN OR CROCODILE.

Signification of the word *Leviathan*—Description in the Book of Job—Structure and general habits of the Crocodile—The throat-valve and its use—Position of the nostrils—Worship of the Crocodile—The reptile known in the Holy Land—Two legends respecting its presence there—Mode of taking prey—Cunning of the Crocodile—The baboons and the Crocodile—Speed of the reptile—Eggs and young of the Crocodile, and their enemies—Curious story of the ichneumon and ibis—Modes of capturing the Crocodile—Analysis of Job's description—The Crocodile also signified by the word *Tannin*. Aaron's rod changed into a Tannin—Various passages in which the word occurs—Use of the word by the prophet Jeremiah.

THE word *Leviathan* is used in a rather loose manner in the Old Testament, in some places representing a mammalian of the sea, and in others signifying a reptile inhabiting the rivers. As in the most important of these passages the Crocodile is evidently signified, we will accept that rendering, and consider the Crocodile as being the Leviathan of Scripture. The Jewish Bible accepts the word Crocodile, and does not add the mark of doubt.

The fullest account of the Leviathan occurs in Job xli., the whole of which chapter is given to the description of the terrible reptile. As the translation of the Jewish Bible differs in some points from that of the Authorized Version, I shall here give the former, so that the reader may be able to compare them with each other.

“Canst thou draw out a crocodile with a hook, or his tongue with a cord which thou lettest down?

“Canst thou put a reed into his nose, or bore his jaw through with a thorn?

“Will he make many supplications unto thee? will he speak soft words unto thee?

“Will he make a covenant with thee? wilt thou take him as a servant for ever?

“Wilt thou play with him as with a bird, or wilt thou bind him for thy maidens?

“Shall the companions make a banquet of him? shall they part him among the merchants?

"Canst thou fill his skin with barbed irons, or his head with fish-spears?

"Lay thine hand upon him, thou wilt no more remember the battle.

"Behold, the hope of him is in vain; shall not one be cast down at the sight of him?

"None is so fierce that dare stir him up; who then is able to stand before Me?

"Who hath forestalled Me that I should repay him? whatsoever is under the whole heaven is Mine.

"I will not be silent of his parts, nor of the matter of his power, nor of his comely proportion.

"Who can uncover the face of his garment? who would enter the double row in his jaw?

"Who can open the doors of his face? his teeth are terrible round about.

"The strength of his shields are his pride, shut up together as with a close seal.

"One is so near to another that no air can come between them.

"They are joined one to another, they stick together that they cannot be sundered.

"His snortings make light to shine, and his eyes are like the eyelids of the morning dawn.

"Out of his nostrils goeth smoke, as out of a seething pot or caldron.

"His breath kindleth live coals, and a flame goeth out of his mouth.

"In his neck abideth strength, and before him danceth terror.

"The flakes of his flesh are joined together, they are firm in themselves; yea, as hard as nether millstone.

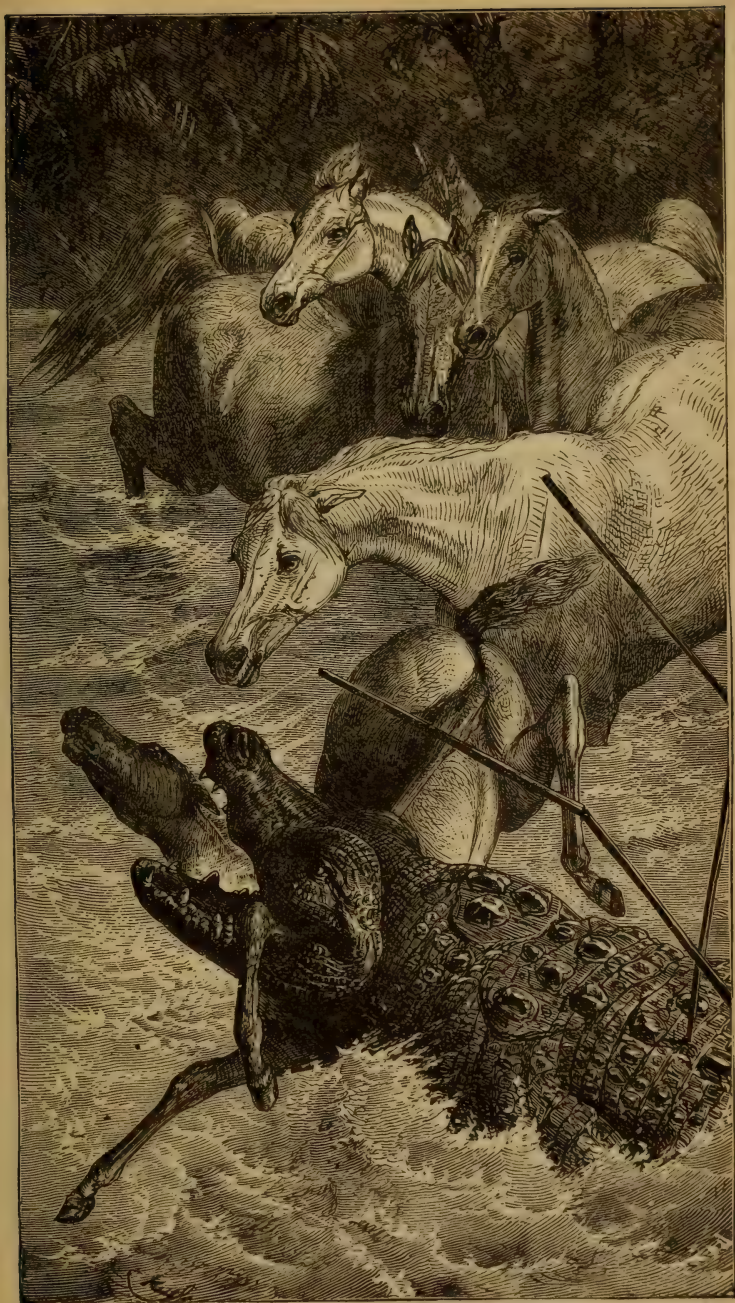
"When he raiseth himself up, the mighty are afraid; by reason of breakings they lose themselves.

"The sword of him that layeth at him cannot hold: the spear, the dart, nor the habergeon.

"He esteemeth iron as straw, and copper as rotten wood.

"The arrow cannot make him flee: sling-stones are turned with him into stubble.

"Clubs are counted as stubble; he laugheth at the shaking of a spear.



CROCODILE ATTACKING HORSES.

"His under parts are like sharp points of potsherd; he speaketh sharp points upon the mire.

"He maketh the deep to boil like a pot; he maketh the sea like a pot of ointment.

"He maketh a path to shine after him; one would think the deep to be hoary.

"Upon earth there is not his like, who is made without fear.

"He beholdeth all high things; he is a king over all the children of pride."

This splendid description points as clearly to the Crocodile as the description of the Behemoth which immediately precedes it does to the hippopotamus, and it is tolerably evident that the sacred poet who wrote these passages must have been personally acquainted with both the Crocodile and the hippopotamus. In both descriptions there are a few exaggerations, or rather, poetical licences. For example, the bones of the hippopotamus are said to be iron and copper, and the Crocodile is said to kindle live coals with his breath. These, however, are but the natural imagery of an Oriental poet, and, considering the subject, we may rather wonder that the writer has not introduced even more fanciful metaphors.

DESCRIPTION OF THE CROCODILE.

THERE are several species of Crocodile in different parts of the world, ten species at least being known to science.

Some inhabit India, some tropical America, some Asia, and some Africa, so that the genus is represented in nearly all the warmer parts of the world.

They are all known by the formation of the teeth, the lower canines fitting each into a notch on the side of the upper jaw. The feet are webbed to the tips, and though the reptile mostly propels itself through the water by means of its tail, it can also paddle itself gently along by means of its feet.

The teeth are all made for snatching and tearing, but not for masticating, the Crocodile swallowing its prey entire when possible; and when the animal is too large to be eaten entire, the reptile tears it to pieces, and swallows the fragments without attempting to masticate them.

In order to enable it to open its mouth under water, the back

of its throat is furnished with a very simple but beautiful contrivance, whereby the water is received on a membranous valve, and, in proportion to its pressure, closes the orifice of the throat. As the Crocodiles mostly seize their prey in their open jaws and hold it under water until drowned, it is evident that without such a structure as has been described the Crocodile would be as likely to drown itself as its prey. But the throat-valve enables it to keep its mouth open while the water is effectually prevented from running down its throat, and the nostrils, placed at the end of the snout, enable it to breathe at its ease, while the unfortunate animal which it has captured is being drowned beneath the surface of the water.

This position of the nostrils serves another purpose, and enables the Crocodile to breathe while the whole of its body is under the water, and only an inch or two of the very end of the snout is above the surface. As, moreover, the Crocodile, as is the case with most reptiles, is able to exist for a considerable time without breathing, it only needs to protrude its nostrils for a few moments, and can then sink entirely beneath the water. In this way the reptile is able to conceal itself in case it should suspect danger; and as, in such instances, it dives under the herbage of the river, and merely thrusts its nose into the air among the reeds and rushes, it is evident that, in spite of its enormous size, it baffles the observation of almost every foe.

Among reptiles, the mailed Crocodiles may be mentioned as most formidable foes to man. Vast in bulk, yet grovelling with the belly on the earth; clad in bony plates with sharp ridges; green eyes with a peculiar fiery stare, gleaming out from below projecting orbits; lips altogether wanting, displaying the long rows of interlocking teeth even when the mouth is closed, so that, even when quiet, the monster seems to be grinning with rage,—it is no wonder that the Crocodile should be, in all the countries which it inhabits, viewed with dread.

Nor is this terror groundless. The Crocodiles, both of the Nile and of the Indian rivers, are well known to make man their victim, and scarcely can a more terrible fate be imagined than that of falling into the jaws of this gigantic reptile. Strange as it may appear, the Crocodile is one of the many animals to which divine honours were paid by the ancient Egyptians. This we learn from several sources. Herodotus, for example, in “*Euterpe*,”

chapter 69, writes as follows : “ Those who dwell about Thebes and Lake Moëris, consider them to be very sacred ; and they each of



A CROCODILE POOL OF ANCIENT EGYPT.

them train up a Crocodile, which is taught to be quite tame ; and they put crystal and gold ear-rings into their ears, and bracelets on their fore-paws ; and they give them appointed and sacred food, and treat them as well as possible while alive, and when dead, they embalm them, and bury them in sacred vaults.”

The reasons for this worship are several. At the root of them all lies the tendency of man to respect that which he fears

rather than that which he loves ; and the nearer the man approaches the savage state, the more is this feeling developed. By this tendency his worship is regulated, and it will be found that when man is sufficiently advanced to be capable of worship at all, his reverence is invariably paid to the object which has the greatest terrors for him. The Crocodile, therefore, being the animal that was most dreaded by the ancient Egyptians, was accepted as the natural type of divinity.



CROCODILES OF THE UPPER NILE.

OWING to the accuracy of the description in the Book of Job, which is evidently written by one who was personally acquainted with the Crocodile, it is thought by many commentators that the writer must have been acquainted with the Nile, in which river both the Crocodile and hippopotamus are found at the present day.

It is possible, however, that the hippopotamus and the Crocodile have had at one time a much wider range than they at present enjoy. Even within the memory of man the hippopotamus has been driven further and further up the Nile by

the encroachments of man. It has long been said that even at the present day the Crocodile exists in Palestine in the river which is called "Nhar Zurka," which flows from Samaria through the plains of Sharon. Several of the older writers have mentioned its existence in this river, and, since this work was commenced, the long-vexed question has been set at rest; a Crocodile, eight feet in length, having been captured in the Nhar Zurka.

No description of the Crocodile would be complete without allusion to the mode in which it seizes its prey. It does not attack it openly, neither, as some have said, does it go on shore for that purpose. It watches to see whether any animal comes to drink, and then, sinking beneath the surface of the water, dives rapidly, rises unexpectedly beneath the unsuspecting victim, seizes it with a sudden snap of its huge jaws, and drags it beneath the water. Should the intended prey be too far from the water to be reached by the mouth, or so large that it may offer a successful resistance, the Crocodile strikes it a tremendous blow with its tail, and knocks it into the water. The dwellers on the Nile bank say that a large Crocodile will with a single blow of its tail break all the four legs of an ox or a horse.

These cunning reptiles even contrive to catch birds as they come for water. On the banks of the Nile the smaller birds drink in a very peculiar manner. They settle in numbers on the flexible branches that overhang the stream, and when, by their weight, the branch bends downwards, they dip their beaks in the water. The Crocodile sees afar off a branch thus loaded, swims as near as possible, and then dives until it can see the birds immediately above it, when it rises suddenly, and with a snap of its jaws secures a whole mouthful of the unsuspecting birds.

Sir S. Baker, in his travels on the Nile, gave much attention to the Crocodile, and has collected a great amount of interesting information about the reptile, much of which is peculiarly valuable, inasmuch as it illustrates the Scriptural notices of the creature. He states that it is a very crafty animal, and that its usual mode of attack is by first showing itself, then swimming slowly away to a considerable distance, so as to make its intended victim think that danger is over, and then returning under water. It is by means of this manœuvre that it captures the little birds. It first makes a dash at them, open-mouthed,

causing them to take to flight in terror. It then sails slowly away as if it were so baffled that it did not intend to renew the attack. When it is at a considerable distance, the birds think that their enemy has departed, and return to the branch, which they crowd more than ever, and in a minute or two several dozen of them are engulfed in the mouth of the Crocodile, which has swiftly dived under them.

On one occasion, Sir S. Baker was walking near the edge of the river, when he heard a great shrieking of women on the opposite bank. It turned out that a number of women had been filling their "gerbas" (water-skins), when one of them was suddenly attacked by a large Crocodile. She sprang back, and the reptile, mistaking the filled gerba for a woman, seized it, and gave the owner time to escape. It then dashed at the rest of the women, but only succeeded in seizing another gerba.

A short time previously a Crocodile, thought by the natives to be the same individual, had seized a woman and carried her off; and another had made an attack on a man in a very curious manner. A number of men were swimming across the river, supported, after their custom, on gerbas inflated with air, when one of them felt himself seized by the leg by a Crocodile, which tried to drag him under water. He, however, retained his hold on the skin, and his companions also grasped his arms and hair with one hand, while with the other they struck with their spears at the Crocodile. At last they succeeded in driving the reptile away, and got their unfortunate companion to land, where they found that the whole of the flesh was stripped from the leg from the knee downwards. The poor man died shortly afterwards.

Another traveller relates that three young men who were obliged to cross a branch of a river in their route, being unable to procure a boat, endeavoured to swim their horses to the opposite shore. Two of them had reached the bank in safety, but the third loitered so long on the brink as only to have just entered the water at the moment his comrades had reached the opposite side. When he was nearly half-way across, they saw a large Crocodile, which was known to infest this pass, issuing from under the reeds. They instantly warned their companion of his danger; but it was too late for him to turn back. When the Crocodile was so close as to be on the point of seizing him, he threw his saddle-bag to

it. The ravenous animal immediately caught the whole bundle in its jaws, and disappeared for a few moments, but soon discovered its mistake, and rose in front of the horse, which, then seeing it for the first time, reared and threw its rider. He was an excellent swimmer, and had nearly escaped by diving towards the bank; but, on rising for breath, his pursuer also rose, and seized him by the middle. This dreadful scene, which passed before the eyes of his companions, without the least possibility of their rendering any assistance, was terminated by the Crocodile, having previously drowned the unfortunate man, appearing on an opposite sand-bank with the body, and there devouring it.

The crafty Crocodile tries to catch the baboons by lying in wait for them at their drinking places; but the baboons are generally more than a match for the Crocodile in point of cunning and quickness of sight. Sir S. Baker witnessed an amusing example of such an attempt and its failure.

"The large tamarind-trees on the opposite bank are generally full of the dog-faced baboons (*Cynocephalus*) at their drinking hour. I watched a large Crocodile creep slyly out of the water and lie in waiting among the rocks at the usual drinking place before they arrived, but the baboons were too wide awake to be taken in so easily.

"A young fellow was the first to discover the enemy. He had accompanied several wise and experienced old hands to the extremity of a bough that at a considerable height overhung the river; from this post they had a bird's eye view, and reconnoitred before one of the numerous party descended to drink. The sharp eyes of the young one at once detected the Crocodile, who matched in colour so well with the rocks that most probably a man would not have noticed it until too late.

"At once the young one commenced shaking the bough and screaming with all his might, to attract the attention of the Crocodile and to induce it to move. In this he was immediately joined by the whole party, who yelled in chorus, while the large old males bellowed defiance, and descended to the lowest branches within eight or ten feet of the Crocodile. It was of no use—the pretender never stirred, and I watched it until dark. It remained still in the same place, waiting for some unfortunate baboon whose thirst might provoke his fate, but not one was

sufficiently foolish, although the perpendicular bank prevented them from drinking except at that particular spot."

It may be imagined that if the Crocodile were to depend entirely for its food upon the animals that it catches on the bank or in the river, it would run a risk of starving. The fact is, that its principal food consists of fish, which it can chase in the water. The great speed at which the Crocodile darts through the water is not owing to its webbed feet, but to its powerful tail, which is swept from side to side, and thus propels the reptile after the manner of a man "sculling" a boat with a single oar in the stern. The whales and the fishes have a similar mode of propulsion.

On land, the tail is the Crocodile's most formidable weapon. It is one mass of muscle and sinew, and the force of its lateral stroke is terrible, sweeping away every living thing that it may meet. Fortunately for its antagonists, the Crocodile can turn but very slowly, so that, although it can scramble along at a much faster pace than its appearance indicates, there is no great difficulty in escaping, provided that the sweep of its tail be avoided. As the Crocodile of the Nile attains when adult a length of thirty feet, one moiety of which is taken up by the tail, it may easily be imagined that the power of this weapon can scarcely be exaggerated.

As if to add to the terrors of the animal, its head, back, and tail are shielded by a series of horny scales, which are set so closely together that the sharpest spear can seldom find its way through them, and even the rifle ball glances off, if it strikes them obliquely. Like many other reptiles, the Crocodile is hatched from eggs which are laid on shore and vivified by the warmth of the sun.

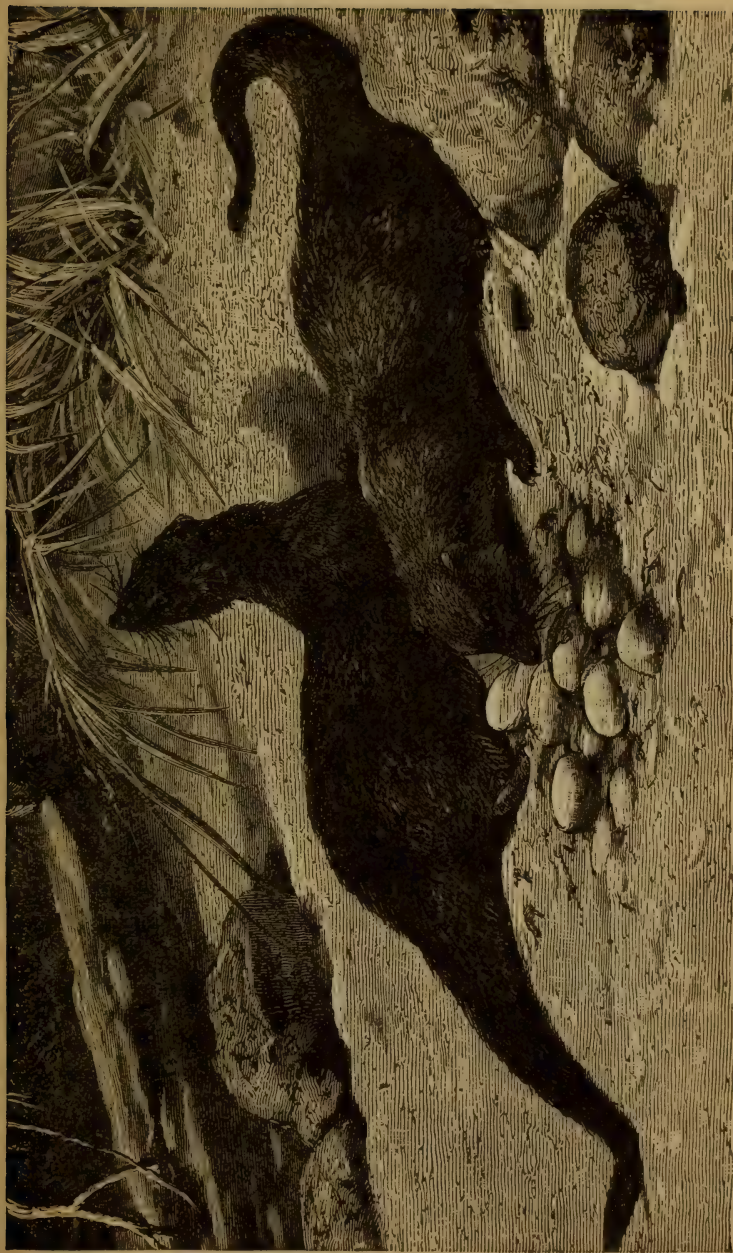
These eggs are exceedingly small when compared with the gigantic lizard which deposited them, scarcely equalling in dimensions those of the goose. There is now before me an egg of the cayman of South America, a fresh-water lizard but little smaller than the Crocodile of the Nile, and this is barely equal in size to an ordinary hen's egg. It is longer in proportion to its width, but the contents of the two eggs would be as nearly as possible of the same bulk. On the exterior it is very rough, having a granulated appearance, not unlike that of dried shark-skin, and the shell is exceedingly thin and brittle. The lining

membrane, however, is singularly thick and tough, so that the egg is tolerably well defended against fracture.

When first hatched, the young Crocodile is scarcely larger than a common newt, but it attains most formidable dimensions in a very short time. Twenty or thirty eggs are laid in one spot, and, were they not destroyed by sundry enemies, the Crocodiles would destroy every living creature in the rivers. Fortunately, the eggs and young have many enemies, chiefly among which is the well-known ichneumon, which discovers the place where the eggs are laid and destroys them, and eats any young Crocodiles that it can catch before they succeed in making their way to the water.

The old writers were aware of the services rendered by the ichneumon, but, after their wont, exaggerated them by additions of their own, saying that the ichneumon enters into the mouth of the Crocodile as it lies asleep, and eats its way through the body, "putting the Crocodile to exquisite and intolerable torment, while the Crocodile tumbleth to and fro, sighing and weeping, now in the depth of water, now on the land, never resting till strength of nature faileth. For the incessant gnawing of the ichneumon so provoketh her to seek her rest in the unrest of every part, herb, element, throws, throbs, rollings, but all in vain, for the enemy within her breatheth through her breath, and sporteth herself in the consumption of those vital parts which waste and wear away by yielding to unpacificable teeth, one after another, till she that crept in by stealth at the mouth, like a puny thief, comes out at the belly like a conqueror, through a passage opened by her own labour and industry."

The author has in the long passage, a part of which is here quoted, mentioned that the ichneumon takes its opportunity of entering the jaws of the Crocodile as it lies with its mouth open against the beams of the sun. It is very true that the Crocodile does sleep with its mouth open; and, in all probability, the older observers, knowing that the ichneumon did really destroy the eggs and young of the Crocodile, only added a little amplification, and made up their minds that it also destroyed the parents. The same writer who has lately been quoted ranks the ibis among the enemies of the Crocodile, and says that the bird affects the reptile with such terror that, if but an ibis's feather be laid on its back, the Crocodile becomes rigid and unable to



ICHNEUMON DEVOURING THE EGGS OF THE CROCODILE.

move. The Arabs of the present time say that the water-tortoises are enemies to the eggs, scratching them out of the sand and eating them.

As this reptile is so dangerous a neighbour to the inhabitants of the river-banks, many means have been adopted for its destruction.

One such method, where a kind of harpoon is employed, is described by a traveller in the East as follows:—

“The most favourable season for thus hunting the Crocodile is either the winter, when the animal usually sleeps on sand-banks, luxuriating in the rays of the sun, or the spring, after the pairing time, when the female regularly watches the sand islands where she has buried her eggs.

“The native hunter finds out the place and conceals himself by digging a hole in the sand near the spot where the animal usually lies. On its arrival at the accustomed spot the hunter darts his harpoon or spear with all his force, for, in order that its stroke may be successful, the iron should penetrate to a depth of at least four inches, in order that the barb may be fixed firmly in the flesh.

“The Crocodile, on being wounded, rushes into the water, and the huntsman retreats into a canoe, with which a companion has hastened to his assistance.

“A piece of wood attached to the harpoon by a long cord swims on the water and shows the direction in which the Crocodile is moving. The hunters pull on this rope and drag the beast to the surface of the water, where it is again pierced by a second harpoon.

“When the animal is struck it by no means remains inactive; on the contrary, it lashes instantly with its tail, and endeavours to bite the rope asunder. To prevent this, the rope is made of about thirty separate slender lines, not twisted together, but merely placed in juxtaposition, and bound around at intervals of every two feet. The thin strands get between the Crocodile’s teeth, and it is unable to sever them.

“In spite of the great strength of the reptile, two men can drag a tolerably large one out of the water, tie up his mouth, twist his legs over his back, and kill him by driving a sharp steel spike into the spinal cord just at the back of the skull.

“There are many other modes of capturing the Crocodile, one of which is the snare portrayed in the illustration.



A CROCODILE TRAP

"Two elastic saplings are bent down and kept in position by stout cords, one of which bears a baited hook, while the other is fashioned into a noose. These cords are so arranged as to release the bent saplings as soon as the Crocodile pulls upon the baited hook. If all works properly, the animal suddenly finds himself suspended in the air, where he remains helpless and at the mercy of the hunter, who soon arrives and despatches him.

"The extreme tenacity of life possessed by the Crocodile is well exemplified by an incident which occurred in Ceylon. A fine specimen had been caught, and to all appearance killed, its interior parts removed, and the aperture kept open by a stick placed across it. A few hours afterwards the captors returned to their victim with the intention of cutting off the head, but were surprised to find the spot vacant. On examining the locality it was evident that the creature had retained sufficient life to crawl back into the water. From this it may be imagined that it is no easy matter to drive the breath out of a Crocodile. Its life seems to take a separate hold of every fibre in the creature's body, and though pierced through and through with bullets, crushed by heavy blows, and its body converted into a very pincushion for spears, it writhes and twists and struggles with wondrous strength, snapping savagely with its huge jaws, and lashing its muscular tail from side to side with such vigour that it requires a bold man to venture within range of that terrible weapon."

Sometimes combats occur between this creature and the tiger, one of the fiercest and most terrible of all quadrupeds. Tigers frequently go down to the rivers to drink, and, upon these occasions, the Crocodile, if near, may attempt to seize them. The ferocious beast, however, seldom falls unrevenged; for the instant he finds himself seized, he turns with great agility and fierceness on his enemy, and endeavours to strike his claws into the Crocodile's eyes, while the latter drags him into the water, where they continue to struggle until the tiger be drowned, and his triumphant antagonist feasts upon his carcass. Such a combat is depicted in the illustration which appears on an accompanying page.



A FIGHT FOR LIFE.



THE CYPRIUS, OR LIZARD OF SCRIPTURE.

THE LETÂÂH OR LIZARD.

Difficulty of identifying the Letââh—Probability that it is a collective and not a specific term—Various Lizards of Palestine—The Green or Jersey Lizard—The Cyprius, its appearance and habits—The Glass Snake or Scheltopusic—Translation of the word *chomet*—Probability that it signifies the Skink—Medicinal uses of the Lizard—The Seps tribe—The common Cicigna, and the popular belief concerning its habits—The Sphænops and its shallow tunnel.

IN Leviticus xi. 30, the word LIZARD is used as the rendering of the Hebrew word *letââh* (pronounced as L'tâh-âh). There are one or two difficulties about the word, but, without going into the question of etymology, which is beside the object of this work, it will be sufficient to state that the best authorities accept the rendering, and that in the Jewish Bible the word Lizard is retained, but with the mark of doubt appended to it.

A VERY common species of Lizard, and therefore likely to be one of those which are grouped under the common name of Letââh,

13 the CYPRIUS (*Plestiodon auratum*). This handsome Lizard is golden-yellow in colour, beautifully spotted with orange and scarlet, and may be distinguished, even when the colours have fled after death, by the curiously formed ears, which are strongly toothed in front. It is very plentiful in Palestine, and, like others of its kin, avoids cultivated tracts, and is generally found on rocky and sandy soil which cannot be tilled. It is active, and, if alarmed, hides itself quickly in the sand or under stones.

It belongs to the great family of the Skinks, many of which, like the familiar blind-worm of our own country, are without external legs, and, though true Lizards, progress in a snake-like manner, and are generally mistaken for snakes. One of these is the GLASS SNAKE or SCHELTOPUSIC (*Pseudopus pallasii*), which has two very tiny hind legs, but which is altogether so snake-like that it is considered by the natives to be really a serpent. They may well be excused for their error, as the only external indications of limbs are a pair of slightly-projecting scales at the place where the hind legs would be in a fully-developed Lizard.

Though tolerably plentiful, the Scheltopusic is not very often seen, as it is timid and wary, and, when it suspects danger, glides away silently into some place of safety. When adult, the colour of this Lizard is usually chestnut, profusely mottled with black or deep brown, the edge of each scale being of the darker colour. It feeds upon insects and small reptiles, and has been known to devour a nest full of young birds.

IN Levit. xi. 30 is a Hebrew word, *chomet*, which is given in the Authorized Version as SNAIL. There is, however, no doubt that the word is wrongly translated, and that by it some species of Lizard is signified. The Jewish Bible follows the Authorized Version, but affixes the mark of doubt to the word. There is another word, *shabblul*, which undoubtedly does signify the snail, and will be mentioned in its proper place.

It is most probable that the word *chomet* includes, among other Lizards, many of the smaller Skinks which inhabit Palestine. Among them we may take as an example the COMMON SKINK (*Scincus officinalis*), a reptile which derives its specific name from the fact that it was formerly used in medicine, together with mummy, and the other disgusting ingredients which formed the greater part of the old Pharmacopœia.

Even at the present day, it is used for similar purposes in the East, and is in consequence captured for the use of physicians, the body being simply dried in the sun, and then sent to market for sale. It is principally employed for the cure of sunstroke, nettle-rash, sand-blindness, or fever, and both patient and physician have the greatest confidence in its powers. It is said by some European physicians that the flesh of the Skink really does possess medicinal powers, and that it has fallen into disrepute chiefly because those powers have been exaggerated. In former days, the head and feet were thought to possess the greatest efficacy, and were valued accordingly.

Like all its tribe, the Skink loves sandy localities, the soil exactly suiting its peculiar habits. Although tolerably active, it does not run so fast or so far as many other Lizards, and, when alarmed, it has a peculiar faculty for sinking itself almost instantaneously under the sand, much after the fashion of the shore-crabs of our own country. Indeed, it is even more expeditious than the crab, which occupies some little time in burrowing under the wet and yielding sand, whereas the Skink slips beneath the dry and comparatively hard sand with such rapidity that it seems rather to be diving into a nearly excavated burrow than to be scooping a hollow for itself.

The sand is therefore a place of safety to the Skink, which does not, like the crab, content itself with merely burying its body just below the surface, but continues to burrow, sinking itself in a few seconds to the depth of nearly a yard.

The length of the Skink is about eight inches, and its very variable colour is generally yellowish brown, crossed with several dark bands. Several specimens, however, are spotted instead of banded with brown, while some are banded with white, and others are spotted with white. In all, however, the under-surface is silver grey.



THE CHAMELEON.

THE CHAMELEON, MONITOR, AND GECKO.

Demeanour of the Chameleon on the ground—The independent eyes—Its frequent change of colour—The Nilotic Monitor.

IN Levit. xi. 30 there occurs a word which has caused great trouble to commentators. The word is *koach*.

There are two lizards to which the term may possibly be applied—namely, the Chameleon and the Monitor; and, as the Authorized Version of the Scriptures accepts the former interpretation, we will first describe the Chameleon.

THIS reptile is very plentiful in the Holy Land, as well as in Egypt, so that the Israelites would be perfectly familiar with it, both during their captivity and after their escape. It is but a small reptile, and the reader may well ask why a name denoting strength should be given to it. I think that we may find the reason for its name in the extraordinary power of its grasp, as it is able, by means of its peculiarly-formed feet and prehensile tail, to grasp the branches so tightly that it can scarcely be removed without damage.

I once saw six or seven Chameleons huddled up together, all having clasped each other's legs and tails so firmly that they

formed a bundle that might be rolled along the ground without being broken up. In order to show the extraordinary power of the Chameleon's grasp, I have had a figure drawn from a sketch



GECKO AND CHAMELEON

taken by myself from a specimen which I kept for several months.

When the Chameleon wished to pass from one branch to another, it used to hold firmly to the branch by the tail and one hind-foot, and stretch out its body nearly horizontally, feeling about with the other three feet, as if in search of a convenient resting-place. In this curious attitude it would remain for a considerable time, apparently suffering no inconvenience, though even the spider-monkey would have been unable to maintain such an attitude for half the length of time.

The strength of the grasp is really astonishing when con-

trasted with the size of the reptile, as any one will find who allows the Chameleon to grasp his finger, or who tries to detach it from the branch to which it is clinging. The feet are most curiously made. They are furnished with five toes, which are arranged like those of parrots and other climbing birds, so as to close upon each other like the thumb and finger of a human hand. They are armed with little yellow claws, slightly curved and very sharp, and when they grasp the skin of the hand they give it an unpleasantly sharp pinch.

The tail is as prehensile as that of the spider-monkey, to which the Chameleon bears a curious resemblance in some of its attitudes, though nothing can be more different than the volatile, inquisitive, restless disposition of the spider-monkey and the staid, sober demeanour of the Chameleon. The reptile has the power of guiding the tail to any object as correctly as if there were an eye at the end of the tail. When it has been travelling over the branches of trees, I have often seen it direct its tail to a projecting bud, and grasp it as firmly as if the bud had been before and not behind it.

Sometimes, when it rests on a branch, it allows the tail to hang down as a sort of balance, the tip coiling and uncoiling unceasingly. But, as soon as the reptile wishes to move, the tail is tightened to the branch, and at once coiled round it. There really seems to be almost a separate vitality and consciousness on the part of the tail, which glides round an object as if it were acting with entire independence of its owner.

On the ground the Chameleon fares but poorly. Its walk is absolutely ludicrous, and an experienced person might easily fail to identify a Chameleon when walking with the same animal on a branch. It certainly scrambles along at a tolerable rate, but it is absurdly awkward, its legs sprawling widely on either side, and its feet grasping futilely at every step. The tail, which is usually so lithe and nimble, is then held stiffly from the body, with a slight curve upwards.

The eyes are strange objects, projecting far from the head, and each acting quite independently of the other, so that one eye may often be directed forwards, and the other backwards. The eyeballs are covered with a thick wrinkled skin, except a small aperture at the tip, which can be opened and closed like our own eyelids.

The changing colour of the Chameleon has been long known, though there are many mistaken ideas concerning it.

The reptile does not necessarily assume the colour of any object on which it is placed, but sometimes takes a totally different colour. Thus, if my Chameleon happened to come upon any scarlet substance, the colour immediately became black, covered with innumerable circular spots of light yellow. The change was so instantaneous that, as it crawled on the scarlet cloth, the colour would alter, and the fore-part of the body would be covered with yellow spots, while the hinder parts retained their dull black. Scarlet always annoyed the Chameleon, and it tried to escape whenever it found itself near any substance of the obnoxious hue.

The normal colour was undoubtedly black, with a slight tinge of grey. But in a short time the whole creature would become a vivid verdigris green, and, while the spectator was watching it, the legs would become banded with rings of bright yellow, and spots and streaks of the same colour would appear on the head and body.

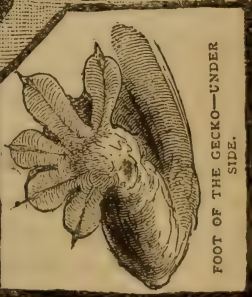
When it was excited either by anger or by expectation—as, for example, when it heard a large fly buzzing near it—the colours were singularly beautiful, almost exactly resembling in hue and arrangement those of the jaguar. Of all the colours, green seemed generally to predominate, but the creature would pass so rapidly from one colour to another that it was scarcely possible to follow the various gradations of hue.

Some persons have imagined that the variation of colour depends on the wants and passions of the animal. This is not the case. The change is often caused by mental emotion, but is not dependent on it; and I believe that the animal has no control whatever over its colour. The best proof of this assertion may be found in the fact that my own Chameleon changed colour several times after its death; and, indeed, as long as I had the dead body before me, changes of hue were taking place.

The food of the Chameleon consists of insects, mostly flies, which it catches by means of its tongue, which can be protruded to an astonishing distance. The tongue is nearly cylindrical, and is furnished at the tip with a slight cavity, which is filled with a very glutinous secretion. When the Chameleon sees a



THE GECKO.



FOOT OF THE GECKO—UNDER
SIDE.

fly or other insect, it gently protrudes the tongue once or twice, as if taking aim, like a billiard-player with his cue, and then, with a moderately smart stroke, carries off the insect on the glutinous tip of the tongue. The force with which the Chameleon strikes is really wonderful. My own specimen used to look for flies from my hand, and at first I was as much surprised with the force of the blow struck by the tongue as I was with the grasping power of the feet.

So much for the Chameleon. We will now take the NILOTIC MONITOR and the LAND MONITOR, the other reptiles which have been conjectured to be the real representatives of the Koach.

These lizards attain to some size, the former sometimes measuring six feet in length, and the latter but a foot or so less. Of the two, the Land Monitor, being the more common, both in Palestine and Egypt, has perhaps the best claim to be considered as the Koach of Scripture. It is sometimes called the Land Crocodile. It is a carnivorous animal, feeding upon other reptiles and the smaller mammalia, and is very fond of the eggs of the crocodile, which it destroys in great numbers, and is in consequence much venerated by the inhabitants of the country about the Nile.

The theory that this reptile may be the Koach of Leviticus is strengthened by the fact that even at the present day it is cooked and eaten by the natives, whereas the chameleon is so small and bony that scarcely any one would take the trouble of cooking it.

The Gecko takes its name from the sound which it utters, resembling the word "geck-o." It is exceedingly plentiful, and inhabits the interior of houses, where it can find the flies and other insects on which it lives. On account of the structure of the toes, each of which is flattened into a disk-like form, and furnished on the under surface with a series of plates like those on the back of the sucking-fish, it can walk up a smooth, perpendicular wall with perfect ease, and can even cling to the ceiling like the flies on which it feeds.

In the illustration the reader will observe the flat, fan-like expansions at the ends of the toes, by which the Gecko is able to adhere to flat surfaces, and to dart with silent rapidity from place to place.

SERPENTS.





SERPENTS.

Serpents in general—The fiery Serpents of the wilderness—Explanation of the words “flying” and “fiery” as applied to Serpents—Haunts of the Serpent—The Cobra, or Asp of Scripture—The Cerastes, or Horned Serpent—Appearance and habits of the reptile—The “Adder in the path.”

As we have seen that so much looseness of nomenclature prevailed among the Hebrews even with regard to the mammalia, birds, and lizards, we can but expect that the names of the Serpents will be equally difficult to identify.

No less than seven names are employed in the Old Testament to denote some species of Serpent; but there are only two which can be identified with any certainty, four others being left to

mere conjecture, and one being clearly a word which, like our snake or serpent, is a word not restricted to any particular species, but signifying Serpents in general. This word is *nâchâsh* (pronounced nah-kahsh). It is unfortunate that the word is so variously translated in different passages of Scripture, and we cannot do better than to follow it through the Old Testament, so as to bring all the passages under our glance.

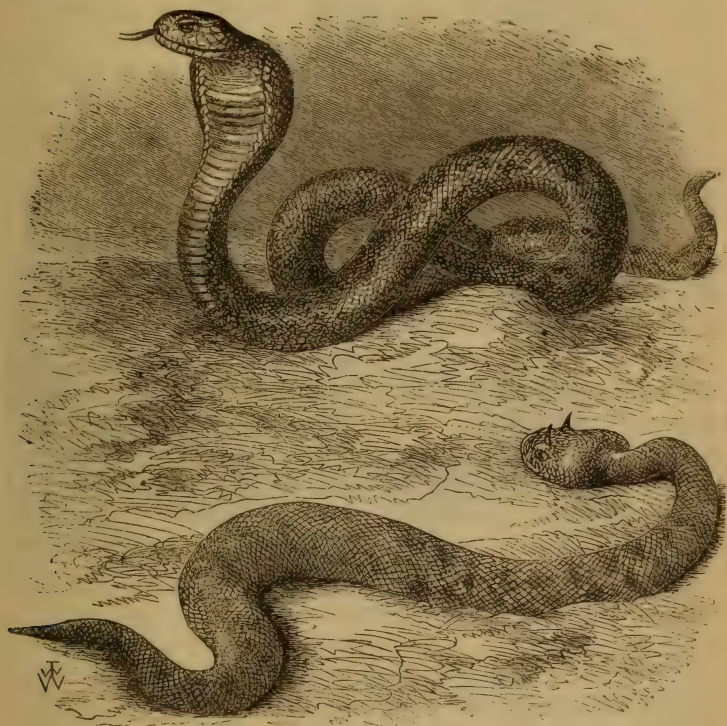
The first mention of the *Nâchâsh* occurs in Gen. iii., in the well-known passage where the Serpent is said to be more subtle than all the beasts of the field, the wisdom or subtlety of the Serpent having evidently an allegorical and not a categorical signification. We find the same symbolism employed in the New Testament, the disciples of our Lord being told to be "wise as serpents, and harmless as doves."

Allusion is made to the gliding movement of the Serpent tribe in Prov. xxx. 19. On this part of the subject little need be said, except that the movements of the Serpent are owing to the mobility of the ribs, which are pushed forward in succession and drawn back again, so as to catch against any inequality of the ground. This power is increased by the structure of the scales. Those of the upper part of the body, which are not used for locomotion, are shaped something like the scales of a fish; but those of the lower part of the body, which come in contact with the ground, are broad belts, each overlapping the other, and each connected with one pair of ribs.

When, therefore, the Serpent pushes forward the ribs, the edges of the scaly belts will catch against the slightest projection, and are able to give a very powerful impetus to the body. It is scarcely possible to drag a snake backwards over rough ground; while on a smooth surface, such as glass, the Serpent would be totally unable to proceed. This, however, was not likely to have been studied by the ancient Hebrews, who were among the most unobservant of mankind with regard to details of natural history: it is, therefore, no wonder that the gliding of the Serpent should strike the writer of the proverb in question as a mystery which he could not explain.

The poisonous nature of some of the Serpents is mentioned in several passages of Scripture; and it will be seen that the ancient Hebrews, like many modern Europeans, believed that the poison lay in the forked tongue. See, for example, Ps. lviii. 4: "Their

poison is like the poison of a serpent" (*nâchâsh*). Also Prov. xxiii. 32, in which the sacred writer says of wine that it brings woe, sorrow, contentions, wounds without cause, redness of eyes, and that "at the last it biteth like a serpent, and stingeth like an adder."



CORRA AND CERASTES, THE ASP AND ADDER OF SCRIPTURE.

The idea that the poison of the Serpent lies in the tongue is seen in several passages of Scripture. "They have sharpened their tongues like a serpent; adders' poison is under their lips" (Ps. cxl. 3). Also in Job xx. 16, the sacred writer says of the hypocrite, that "he shall suck the poison of asps: the viper's tongue shall slay him."

As to the fiery Serpents of the wilderness, it is scarcely needful to mention that the epithet of "fiery" does not signify that the Serpents in question produced real fire from their mouths, but that allusion is made to the power and virulence of their poison,

and to the pain caused by their bite. We ourselves naturally employ a similar metaphor, and speak of a "burning pain," of a "fiery trial," of "hot anger," and the like.



THE ISRAELITES ARE BITTEN BY SERPENTS IN THE WILDERNESS, AND MOSES LIFTS UP THE SERPENT OF BRASS.

The epithet of "flying" which is applied to these Serpents is explained by the earlier commentators as having reference to a Serpent which they called the Dart Snake, and which they believed to lie in wait for men and to spring at them from a distance. They thought that this snake hid itself either in hollows of the ground or in trees, and sprang through the air for thirty feet upon any man or beast that happened to pass by.

We will now take the various species of Serpents mentioned in the Bible, as nearly as they can be identified.

Of one species there is no doubt whatever. This is the Cobra di Capello, a serpent which is evidently signified by the Hebrew word *pethen*.

This celebrated Serpent has long been famous, not only for the

deadly power of its venom, but for the singular performances in which it takes part. The Cobra inhabits many parts of Asia, and in almost every place where it is found, certain daring men take upon themselves the profession of serpent-charmers, and handle these fearful reptiles with impunity, cause them to move in time to certain musical sounds, and assert that they bear a life charmed against the bite of these deadly playmates.

One of these men will take a Cobra in his bare hands, toss it about with perfect indifference, allow it to twine about his naked breast, tie it around his neck, and treat it with as little ceremony as if it were an earth-worm. He will then take the same Serpent—or apparently the same—make it bite a fowl, which soon dies from the poison, and will then renew his performance.

Some persons say that the whole affair is but an exhibition of that jugglery in which the natives of the East Indies are such wondrous adepts; that the Serpents with which the man plays are harmless, having been deprived of their fangs, and that a really venomous specimen is adroitly substituted for the purpose of killing the fowl. It is, moreover, said, and truly, that a snake thought to have been rendered harmless by the deprivation of its fangs, has bitten one of its masters and killed him, thus proving the imposture.

Still, neither of these explanations will entirely disprove the mastery of man over a venomous Serpent.

In the first instance, it is surely as perilous an action to substitute a venomous Serpent as to play with it. Where was it hidden, why did it not bite the man instead of the fowl, and how did the juggler prevent it from using its teeth while he was conveying it away?

And, in the second instance, the detection of one impostor is by no means a proof that all who pretend to the same powers are likewise impostors.

The following narrative by a traveller in the East seems to prove that the serpent-charmer possessed sufficient power to induce a truly poisonous Serpent to leave its hole, and to perform certain antics at his command:

“A snake-charmer came to my bungalow, requesting me to allow him to show his snakes. As I had frequently seen his performance, I declined to witness a repetition of it, but told him that if he would accompany me to the jungle and catch a

Cobra, that I knew frequented the place, I would give him a present of money. He was quite willing, and as I was anxious to test the truth of the charm he claimed to possess, I carefully counted his tame snakes, and put a guard over them until we should return.

"Before starting I also examined his clothing, and satisfied myself that he had no snake about his person. When we arrived at the spot, he commenced playing upon a small pipe, and, after persevering for some time, out crawled a large Cobra from an ant-hill which I knew it occupied.

On seeing the man it tried to escape, but he quickly caught it by the tail and kept swinging it round until we reached the bungalow. He then laid it upon the ground and made it raise and lower its head to the sound of his pipe.

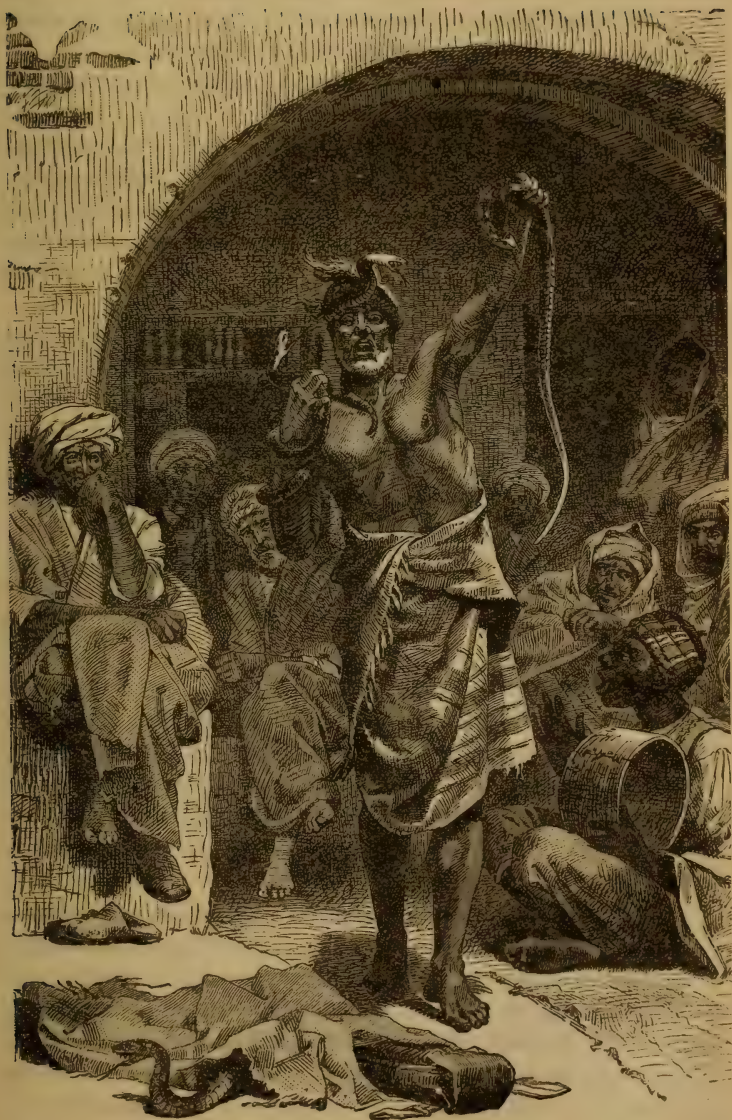
Before long, however, it bit him above the knee. He immediately bandaged the leg tightly above the wound, and applied a piece of porous stone, called a snake-stone, to extract the poison. He was in great pain for a few minutes, but afterwards it gradually subsided, the stone falling from the wound just before he was relieved.

When he recovered he held up a cloth, at which the snake flew and hung by its fangs. While in this position the man passed his hand up its back, and having seized it tightly by the throat, he pulled out the fangs and gave them to me. He then squeezed out the poison, from the glands in the Serpent's mouth, upon a leaf. It was a clear, oily substance, which when rubbed with the hand produced a fine lather.

"The whole operation was carefully watched by me, and was also witnessed by several other persons."

How the serpent-charmers perform their feats is not very intelligible. That they handle the most venomous Serpents with perfect impunity is evident enough, and it is also clear that they are able to produce certain effects upon the Serpents by means of musical (or unmusical) sounds. But these two items are entirely distinct, and one does not depend upon the other.

In the first place, the handling of venomous snakes has been performed by ordinary men without the least recourse to any arts except that of acquaintance with the habits of Serpents. The late Mr. Waterton, for example, would take up a rattlesnake in his bare hand without feeling the least uneasy as to the behaviour of his prisoner. He once took twenty-seven rattle-



THE SERPENT-CHARMER.

snakes out of a box, carried them into another room, put them into a large glass case, and afterwards replaced them in the box. He described to me the manner in which he did it, using my wrist as the representative of the Serpent.

The nature of all Serpents is rather peculiar, and is probably owing to the mode in which the blood circulates. They are extremely unwilling to move, except when urged by the wants of nature, and will lie coiled up for many hours together when not pressed by hunger. Consequently, when touched, their feeling is evidently like that of a drowsy man, who only tries to shake off the object which may rouse him, and composes himself afresh to sleep.

A quick and sudden movement would, however, alarm the reptile, which would strike in self-defence, and, sluggish as are its general movements, its stroke is delivered with such lightning rapidity that it would be sure to inflict its fatal wound before it was seized.

If, therefore, Mr. Waterton saw a Serpent which he desired to catch, he would creep very quietly up to it, and with a gentle, slow movement place his fingers round its neck just behind the head. If it happened to be coiled up in such a manner that he could not get at its neck, he had only to touch it gently until it moved sufficiently for his purpose.

When he had once placed his hand on the Serpent, it was in his power. He would then grasp it very lightly indeed, and raise it gently from the ground, trusting that the reptile would be more inclined to be carried quietly than to summon up sufficient energy to bite. Even if it had tried to use its fangs, it could not have done so as long as its captor's fingers were round its neck.

As a rule, a great amount of provocation is needed before a venomous Serpent will use its teeth. One of my friends, when a boy, caught a viper, mistaking it for a common snake. He tied it round his neck, coiled it on his wrist by way of a bracelet, and so took it home, playing many similar tricks with it as he went. After arrival in the house, he produced the viper for the amusement of his brothers and sisters, and, after repeating his performances, tried to tie the snake in a double knot. This, however, was enough to provoke the most pacific of creatures, and in consequence he received a bite on his finger.

The poison was not slow to take effect; first, the wound looked and felt like a nettle sting, then like a wasp sting, and in the course of a few minutes the whole finger was swollen. At this juncture his father, a medical man, fortunately arrived, and set the approved antidotes, ammonia, oil, and lunar caustic, to the wound, having previously made incisions about the punctured spot, and with paternal affection attempted to suck out the poison. In spite of these remedies a serious illness was the result of the bite, from which the boy did not recover for several weeks



There is no doubt that the snake-charmers trust chiefly to this sluggish nature of the reptile, but they certainly go through some ceremonies by which they believe themselves to be rendered impervious to snake-bites. They will coil the cobra round their naked bodies, they will irritate the reptile until it is in a state of fury; they will even allow it to bite them, and yet be none the worse for the wound. Then, as if to show that the venomous teeth have not been abstracted, as is possibly supposed to be the case, they will make the cobra bite a fowl, which speedily dies from the effects of the poison.

Even if the fangs were extracted, the Serpents would lose little of their venomous power. These reptiles are furnished with a whole series of fangs in different stages of development, so that when the one in use is broken or shed in the course of nature, another comes forward and fills its place. There is now before me a row of four fangs, which I took from the right upper jawbone of a viper which I recently caught.

In her interesting "Letters from Egypt," Lady Duff-Gordon gives an amusing account of the manner in which she was formally initiated into the mysteries of snake-charming, and made over afterwards impervious to the bite of venomous Serpents:—

"At Kóm Omboo, we met with a Rifáee darweesh with his basket of tame snakes. After a little talk, he proposed to initiate me: and so we sat down and held hands like people marrying. Omar [her attendant] sat behind me, and repeated the words as my 'wakeel.' Then the Rifáee twisted a cobra round our joined hands, and requested me to spit on it; he did the same, and I was pronounced safe and enveloped in snakes. My sailors groaned, and Omar shuddered as the snakes put out their tongues; the darweesh and I smiled at each other like Roman augurs."

She believed that the snakes were toothless; and perhaps on this occasion they may have been so. Extracting the teeth of the Serpent is an easy business in experienced hands, and is conducted in two ways. Those snake-charmers who are confident of their own powers merely grasp the reptile by the neck, force open its jaws with a piece of stick, and break off the fangs, which are but loosely attached to the jaw. Those who are not so sure of themselves irritate the snake, and offer it a piece of cloth, generally the corner of their mantle, to bite. The snake darts at it, and, as it seizes the garment, the man gives the cloth a sudden jerk, and so tears away the fangs.

Still, although some of the performers employ mutilated snakes, there is no doubt that others do not trouble themselves to remove the fangs of the Serpents, but handle with impunity the cobra or the cerastes with all its venomous apparatus in good order.

We now come to the second branch of the subject, namely, the influence of sound upon the cobra and other Serpents. The charmers are always provided with musical instruments, of which a sort of flute with a loud shrill sound is the one which is mostly used in the performances. Having ascertained, from slight marks which their practised eyes easily discover, that a Serpent is hidden in some crevice, the charmer plays upon his flute, and in a short time the snake is sure to make its appearance.

As soon as it is fairly out, the man seizes it by the end of the tail, and holds it up in the air at arm's length. In this position it is helpless, having no leverage, and merely wriggles about in fruitless struggles to escape. Having allowed it to exhaust its strength by its efforts, the man lowers it into a basket, where it is only too glad to find a refuge, and closes the lid. After a while, he raises the lid and begins to play the flute.

The Serpent tries to glide out of the basket, but, as soon as it does so, the lid is shut down again, and in a very short time the reptile finds that escape is impossible, and, as long as it hears



TEACHING COBRAS TO DANCE.

the sound of the flute, only raises its head in the air, supporting itself on the lower portion of its tail, and continues to wave its head from side to side as long as it hears the sound of the music.

The rapidity with which a cobra learns this lesson is extraordinary, the charmers being as willing to show their mastery over newly-caught Serpents as over those which have been long in their possession.

The colour of the Cobra is in most cases a brownish olive. The most noted peculiarity is the expansion of the neck, popularly called the hood. This phenomenon is attributable not only to the skin and muscles, but to the skeleton. About twenty pairs of the ribs of the neck and fore part of the back are flat instead of curved, and increase gradually from the head to the eleventh or twelfth pair, from which they decrease until they are merged into the ordinary curved ribs of the body. When the snake is excited, it brings these ribs forward so as to spread the skin, and then displays the oval hood to best advantage.

In the Cobra di Capello the back of the hood is ornamented by two large eye-like spots, united by a curved black stripe, so formed that the whole mark bears a singular resemblance to a pair of spectacles.

THE CERASTES, OR SHEPHIPHON OF SCRIPTURE.

THE word *shephiphon*, which evidently signifies some species of snake, only occurs once in the Scriptures, but fortunately that single passage contains an allusion to the habits of the serpent which makes identification nearly certain. The passage in question occurs in Gen. xlix. 17, and forms part of the prophecy of Jacob respecting his children: "Dan shall be a serpent by the way, an adder in the path, that biteth the horse's heels, so that his rider shall fall backward."

Putting aside the deeper meaning of this prophecy, there is here an evident allusion to the habits of the CERASTES, or HORNED VIPER, a species of venomous serpent, which is plentiful in Northern Africa, and is found also in Palestine and Syria. It is a very conspicuous reptile, and is easily recognised by the two horn-like projections over the eyes. The

name *Cerastes*, or horned, has been given to it on account of these projections.

This snake has a custom of lying half buried in the sand, awaiting the approach of some animal on which it can feed. Its usual diet consists of the jerboas and other small mammalia, and as they are exceedingly active, while the *Cerastes* is slow and sluggish, its only chance of obtaining food is to lie in wait. It will always take advantage of any small depression, such as the print of a camel's foot, and, as it finds many of these



HORNED VIPER.

depressions in the line of the caravans, it is literally "a serpent by the way, an adder in the path."

According to the accounts of travellers, the *Cerastes* is much more irritable than the cobra, and is very apt to strike at any object which may disturb it. Therefore, whenever a horseman passes along the usual route, his steed is very likely to disturb a *Cerastes* lying in the path, and to be liable to the attack of the irritated reptile. Horses are instinctively aware of the presence of the snake, and mostly perceive it in time to avoid its stroke.

Its small dimensions, the snake rarely exceeding two feet in length, enable it to conceal itself in a very small hollow, and its brownish-white colour, diversified with darker spots, causes it to harmonize so thoroughly with the loose sand in which it lies buried, that, even when it is pointed out, an unpractised eye does not readily perceive it.

Even the cobra is scarcely so dreaded as this little snake, whose bite is so deadly, and whose habits are such as to cause travellers considerable risk of being bitten.

The head of the Viper affords a very good example of the venomous apparatus of the poisonous serpents, and is well worthy of description. The poison fangs or teeth lie on the sides of the upper jaw, folded back, and almost undistinguishable until lifted with a needle. They are singularly fine and delicate, hardly larger than a lady's needle, and are covered almost to their tips with a muscular envelope, through which the points just peer.

The poison bags or glands, and the reservoir in which the venom is stored, are found at the back and sides of the head, and give to the venomous serpents that peculiar width of head which is so unfailing a characteristic.

On examining carefully the poison fangs, the structure by which the venom is injected into the wound will be easily understood. Under a magnifying glass they will be seen to be hollow, thus affording a passage for the poison.

When the creature draws back its head and opens its mouth to strike, the deadly fangs spring up with their points ready for action, and fully charged with their poisonous distillment.



THE VIPER, OR EPHEH.

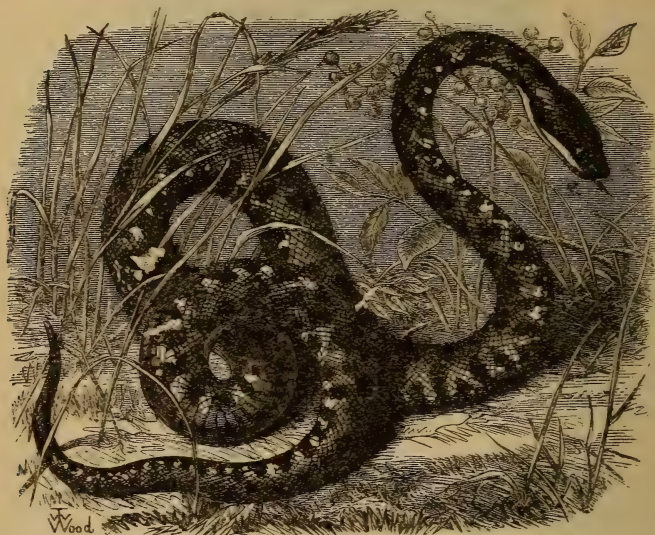
The Sand-Viper, or *Toxicoa*—Its appearance and habits—Adder's poison—The Cockatrice, or *Tsepha*—The Yellow Viper—Ancient ideas concerning the Cockatrice—Power of its venom.

WE now come to the species of snake which cannot be identified with any certainty, and will first take the word *epheh*.

Mr. Tristram believes that he has identified the *Epheh* of the Old Testament with the Sand-Viper, or *Toxicoa*. This reptile, though very small, and scarcely exceeding a foot in length, is a dangerous one, but its bite is not so deadly as that of the cobra or cerastes. It is variable in colour, and has angular white streaks on its body, with a row of whitish spots along the back. The top of the head is dark, and variegated with arrow-shaped white marks.

The *Toxicoa* is very plentiful in Northern Africa, Palestine, Syria, and the neighbouring countries, and, as it is exceedingly active, is held in some dread by the natives.

ANOTHER name of a poisonous snake occurs several times in the Old Testament. The word is *tsepha*, or *tsiphōni*, and it is sometimes translated as Adder, and sometimes as Cockatrice. The word is rendered as Adder in Prov. xxiii. 32, where it is said that wine "biteth like a serpent, and stingeth like an adder." Even



THE TOXICOA. (Supposed to be the viper of Scripture.)

in this case, however, the word is rendered as Cockatrice in the marginal translation.

It is found three times in the Book of Isaiah. Ch. xi. 8: "The weaned child shall put his hand on the cockatrice' den." Also, ch. xiv. 29: "Rejoice not thou, whole Palestina, because the rod of him that smote thee is broken: for out of the serpent's (*nachash*) nest shall come forth a cockatrice (*tsepha*), and his fruit shall be a fiery flying serpent." The same word occurs again in ch. lix. 5: "They hatch cockatrice' eggs." In the prophet Jeremiah we again find the word: "For, behold, I will send serpents, cockatrices among you, which will not be charmed, and they shall bite you, saith the Lord."

Around this reptile a wonderful variety of legends have been accumulated. The Cockatrice was said to kill by its very look, "because the beams of the Cockatrice's eyes do corrupt the

visible spirit of a man, which visible spirit corrupted all the other spirits coming from the brain and life of the heart, are thereby corrupted, and so the man dyeth."

The subtle poison of the Cockatrice infected everything near it, so that a man who killed a Cockatrice with a spear fell dead himself, by reason of the poison darting up the shaft of the spear and passing into his hand. Any living thing near which the Cockatrice passed was instantly slain by the fiery heat of its venom, which was exhaled not only from its mouth, but its sides. For the old writers, whose statements are here summarizied, contrived to jumble together a number of miscellaneous facts in natural history, and so to produce a most extraordinary series of legends.

I should not have given even this limited space to such puerile legends, but for the fact that such stories as these were fully believed in the days when the Authorized Version of the Bible was translated. The translators of the Bible believed most heartily in the mysterious and baleful reptile, and, as they saw that the Tsepha of Scripture was an exceptionally venomous serpent, they naturally rendered it by the word Cockatrice.





THE FROG.

The Frog only mentioned in the Old Testament as connected with the plagues of Egypt—The severity of this plague explained—The Frog detestable to the Egyptians—The Edible Frog and its numbers—Description of the species.

PLENTIFUL as is the FROG throughout Egypt, Palestine, and Syria, it is very remarkable that in the whole of the canonical books of the Old Testament the word is only mentioned thrice, and each case in connexion with the same event.

In Exod. viii. we find that the second of the plagues which visited Egypt came out of the Nile, the sacred river, in the form of innumerable Frogs. The reader will probably remark, on perusing the consecutive account of these plagues, that the two first plagues were connected with that river, and that they were foreshadowed by the transformation of Aaron's rod.

When Moses and Aaron appeared before Pharaoh to ask him to let the people go, Pharaoh demanded a miracle from them, as had been foretold. Following the divine command, Aaron threw down his rod, which was changed into a serpent.

Next, as was most appropriate, came a transformation wrought on the river by means of the same rod which had been transformed into a Serpent, the whole of the fresh-water throughout the land being turned into blood, and the fish dying and polluting the venerated river with their putrefying bodies. In Egypt, a partially rainless country, such a calamity as this was doubly terrible, as it at the same time desecrated the object of their worship, and menaced them with perishing by thirst.

The next plague had also its origin in the river, but extended far beyond the limits of its banks. The frogs, being unable to return to the contaminated stream wherein they had lived, spread themselves in all directions, so as to fulfil the words of the prediction: "If thou refuse to let them go, behold, I will smite all thy borders with frogs:

"And the river shall bring forth frogs abundantly, which shall go up and come into thine house, and into thy bed-chamber, and upon thy bed, and into the house of thy servants, and upon thy people, and into thine ovens, and into thy kneading-troughs" (or dough).

Supposing that such a plague was to come upon us at the present day, we should consider it to be a terrible annoyance, yet scarcely worthy of the name of plague, and certainly not to be classed with the turning of a river into blood, with the hail and lightning that destroyed the crops and cattle, and with the simultaneous death of the first-born. But the Egyptians suffered most keenly from the infliction. They were a singularly fastidious people, and abhorred the contact of anything that they held to be unclean. We may well realize, therefore, the effect of a visitation of Frogs, which rendered their houses unclean by entering them, and themselves unclean by leaping upon them; which deprived them of rest by getting on their beds, and of food by crawling into their ovens and upon the dough in the kneading-troughs.

And, as if to make the visitation still worse, when the plague was removed, the Frogs died in the places into which they had intruded, so that the Egyptians were obliged to clear their houses of the dead carcasses, and to pile them up in heaps, to be dried by the sun or eaten by birds and other scavengers of the East.

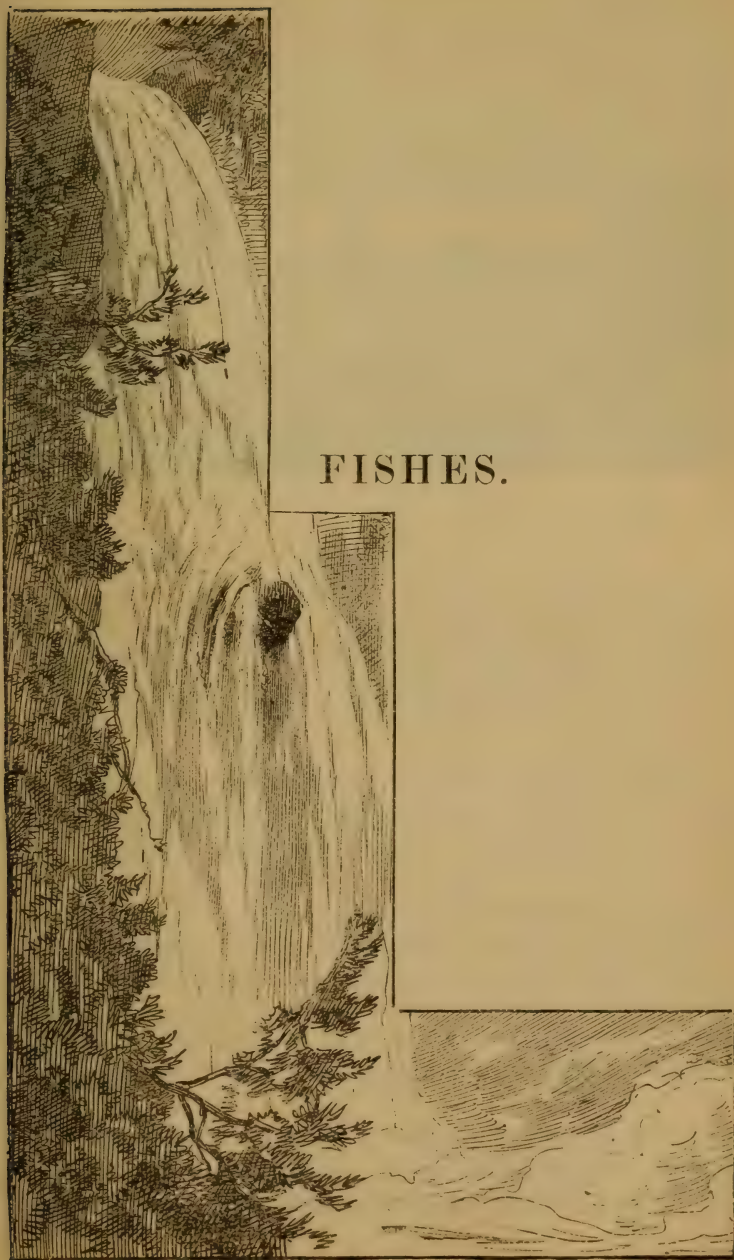
As to the species of Frog which thus invaded the houses of the Egyptians, there is no doubt whatever. It can be but the

GREEN, or EDIBLE FROG (*Rana esculenta*), which is so well known for the delicacy of its flesh. This is believed to be the only aquatic Frog of Egypt, and therefore must be the species which came out of the river into the houses.

Both in Egypt and Palestine it exists in very great numbers, swarming in every marshy place, and inhabiting the pools in such numbers that the water can scarcely be seen for the Frogs. Thus the multitudes of the Frogs which invaded the Egyptians was no matter of wonder, the only miraculous element being that the reptiles were simultaneously directed to the houses, and their simultaneous death when the plague was taken away.

Frogs are also mentioned in Rev. xvi. 13: "And I saw three unclean spirits like frogs come out of the mouth of the dragon, and out of the mouth of the beast, and out of the mouth of the false prophet." With the exception of this passage, which is a purely symbolical one, there is no mention of Frogs in the New Testament. It is rather remarkable that the Toad, which might be thought to afford an excellent symbol for various forms of evil, is entirely ignored, both in the Old and New Testaments. Probably the Frogs and Toads were all classed together under the same title.





FISHES.



FISHES.

Impossibility of distinguishing the different species of Fishes—The fishermen Apostles—Fish used for food—The miracle of the loaves and Fishes—The Fish broiled on the coals—Clean and unclean Fishes—The Sheat-fish, or Silurus—The Eel and the Muræna—The Long-headed Barbel—Fish-ponds and preserves—The Fish-ponds of Heshbon—The Sucking-fish—The Lump-sucker—The Tunny—The Coryphene.

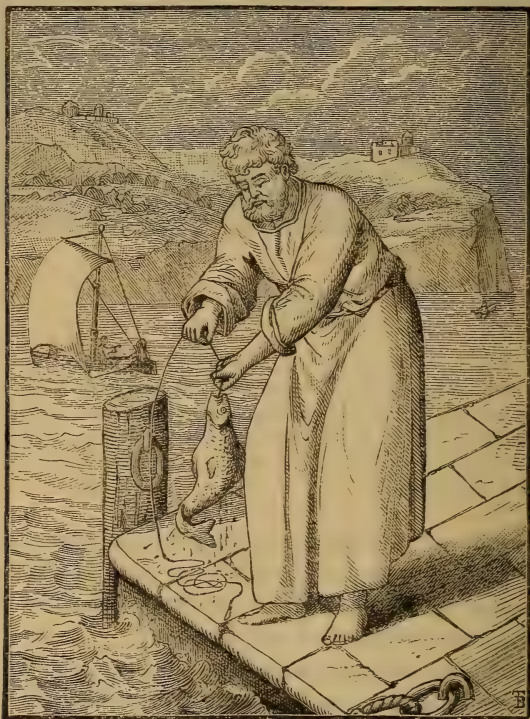
WE now come to the FISHES, a class of animals which are repeatedly mentioned both in the Old and New Testaments, but only in general terms, no one species being described so as to give the slightest indication of its identity.

This is the more remarkable because, although the Jews were, like all Orientals, utterly unobservant of those characteristics by which the various species are distinguished from each other, we might expect that St. Peter and other of the fisher Apostles would have given the names of some of the Fish which they were in the habit of catching, and by the sale of which they gained their living.

It is true that the Jews, as a nation, would not distinguish between the various species of Fishes, except, perhaps, by comparative size. But professional fishermen would be sure to dis-

tinguish one species from another, if only for the fact that they would sell the best-flavoured Fish at the highest price.

We might have expected, for example, that the Apostles and disciples who were present when the miraculous draught of Fishes took place would have mentioned the technical names by which they were accustomed to distinguish the different degrees of the saleable and unsaleable kinds.



PETER CATCHES THE FISH.

Or we might have expected that on the occasion when St. Peter cast his line and hook into the sea, and drew out a Fish holding the tribute-money in his mouth, we might have learned the particular species of Fish which was thus captured. We ourselves would assuredly have done so. It would not have been thought sufficient merely to say that a Fish was caught with money in its mouth, but it would have been considered necessary to mention the particular fish as well as the particular coin.

But it must be remembered that the whole tone of thought differs in Orientals and Europeans, and that the exactness required by the one has no place in the mind of the other. The whole of the Scriptural narratives are essentially Oriental in their character, bringing out the salient points in strong relief, but entirely regardless of minute detail.

WE find from many passages both in the Old and New Testaments that Fish were largely used as food by the Israelites, both when captives in Egypt and after their arrival in the Promised Land. Take, for example, Numb. xi. 4, 5: "And the children of Israel also wept again, and said, Who shall give us flesh to eat?"

"We remember the fish which we did eat in Egypt freely." Then, in the Old Testament, although we do not find many such categorical statements, there are many passages which allude to professional fishermen, showing that there was a demand for the Fish which they caught, sufficient to yield them a maintenance.

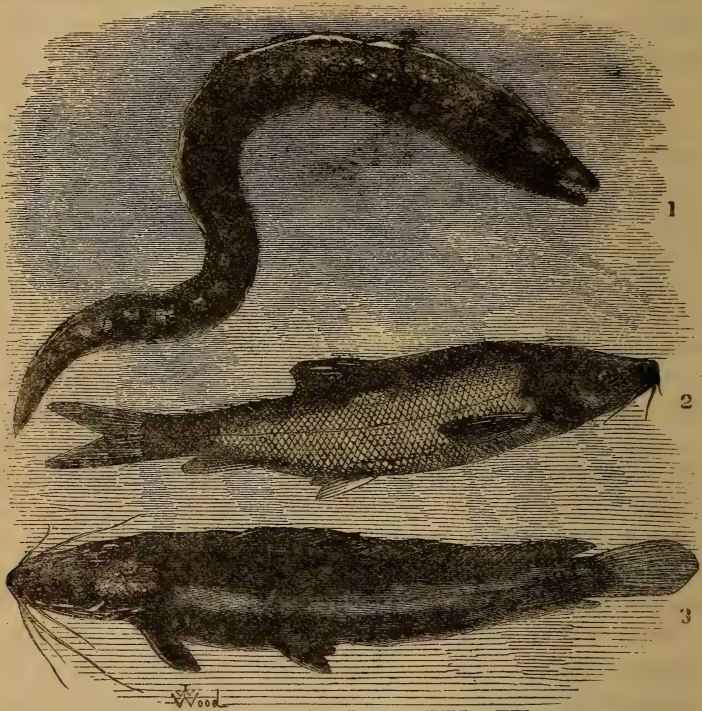
In the New Testament, however, there are several passages in which the Fishes are distinctly mentioned as articles of food. Take, for example, the well-known miracle of multiplying the loaves and the Fishes, and the scarcely less familiar passage in John xxi. 9: "As soon then as they were come to land, they saw a fire of coals there, and fish laid thereon, and bread.

We find in all these examples that bread and Fish were eaten together. Indeed, Fish was eaten with bread just as we eat cheese or butter; and St. John, in his account of the multiplication of the loaves and Fishes, does not use the word "fish," but another word which rather signifies sauce, and was generally employed to designate the little Fish that were salted down and dried in the sunbeams for future use.

As to the various species which were used for different purposes, we know really nothing, the Jews merely dividing their Fish into clean and unclean.

Some of the species to which the prohibition would extend are evident enough. There are, for example, the Sheat-fishes, which have the body naked, and which are therefore taken out of the list of permitted Fishes. The Sheat-fishes inhabit rivers in many parts of the world, and often grow to a very considerable size. They may be at once recognised by their peculiar shape, and by the long, fleshy tentacles that hang from the

mouth. The object of these tentacles is rather dubious, but as the fish have been seen to direct them at will to various objects, it is likely that they may answer as organs of touch.



1. MURENA.

2. LONG-HEADED BARBEL.

3. SHEAT-FISH.

As might be conjectured from its general appearance, it is one of the Fishes that love muddy banks, in which it is fond of burrowing so deeply that, although the river may swarm with Sheat-fishes, a practised eye is required to see them.

As far as the Sheat-fishes are concerned, there is little need for the prohibition, inasmuch as the flesh is not at all agreeable in flavour, and is difficult of digestion, being very fat and gelatinous. The swimming-bladder of the Sheat-fish is used in some countries for making a kind of isinglass, similar in character to that of the sturgeon, but of coarser quality.

The lowermost figure in the above illustration represents a species which is exceedingly plentiful in the Sea of Galilee.

On account of the mode in which their body is covered, the whole of the sharks and rays are excluded from the list of permitted Fish, as, although they have fins, they have no scales, their place being taken by shields varying greatly in size. The same rule excludes the whole of the lamprey tribe, although the excellence of their flesh is well known.

Moreover, the Jews almost universally declare that the *Muræna* and Eel tribe are also unclean, because, although it has been proved that these Fishes really possess scales as well as fins, and are therefore legally permissible, the scales are hidden under a slimy covering, and are so minute as to be practically absent.

The uppermost figure in the illustration represents the celebrated *Muræna*, one of the fishes of the Mediterranean, in which sea it is tolerably plentiful. In the days of the old Roman empire, the *Muræna* was very highly valued for the table. The wealthier citizens built ponds in which the *Murænæ* were kept alive until they were wanted. This Fish sometimes reaches four feet in length.

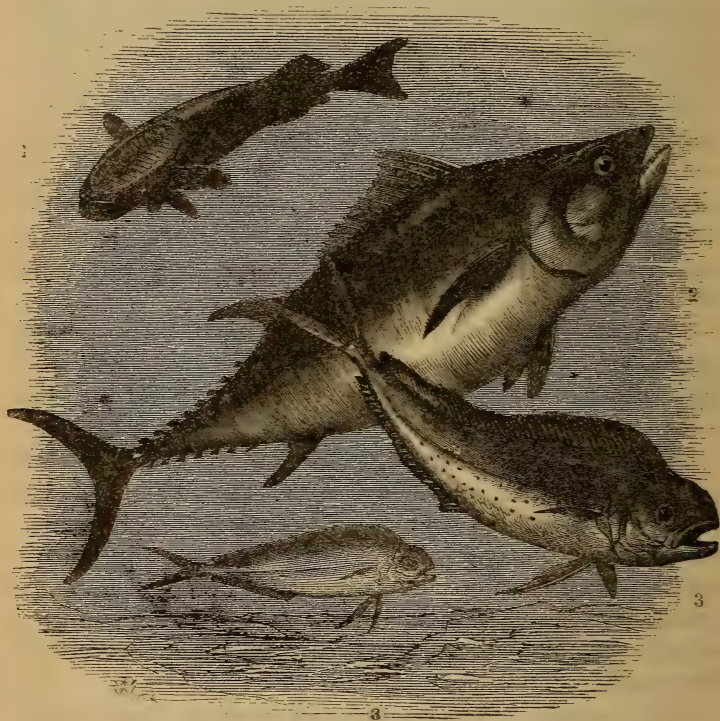
The rest of the Fishes which are shown in the three illustrations belong to the class of clean Fish, and were permitted as food. The figure of the Fish between the *Muræna* and Sheat-fish is the Long-headed Barbel, so called from its curious form.

The Barbels are closely allied to the carps, and are easily known by the barbs or beards which hang from their lips. Like the sheat-fishes, the Barbels are fond of grubbing in the mud, for the purpose of getting at the worms, grubs, and larvæ of aquatic insects that are always to be found in such places. The Barbels are rather long in proportion to their depth, a peculiarity which, owing to the length of the head, is rather exaggerated in this species.

The Long-headed Barbel is extremely common in Palestine, and may be taken with the very simplest kind of net. Indeed, in some places, the fish are so numerous that a common sack answers nearly as well as a net.

It has been mentioned that the ancient Romans were in the habit of forming ponds in which the *Murænæ* were kept, and it is evident, from several passages of Scripture, that the Jews were accustomed to preserve fish in a similar manner, though they would not restrict their tanks or ponds to one species.

The accompanying illustration represents Fishes of the Mediterranean Sea, and it is probable that one of them may be identified, though the passage in which it is mentioned is only an inferential one. In the prophecy against Pharaoh, king of Egypt, the prophet Ezekiel writes as follows: "I will put hooks in thy jaws, and I will cause the fish of thy rivers to stick unto thy scales, and I will bring thee up out of the midst of thy rivers, and all the fish of thy rivers shall stick unto thy scales" (xxix. 4).



FISHES OF THE MEDITERRANEAN.

1. SUCKING-FISH.

2. TUNNY.

3. CORYPHENE.

Some believe that the prophet made allusion to the Sucking-fish, which has the dorsal fins developed into a most curious apparatus of adhesion, by means of which it can fasten itself at will to any smooth object, and hold so tightly to it that it can scarcely be torn away without injury.

The common Sucking-fish is shown in the upper part of the illustration.

There are, however, other fish which have powers of adhesion which, although not so remarkable as those of the Sucking-fish, are yet very strong. There is, for example, the well-known Lump-sucker, or Lump-fish, which has the ventral fins modified into a sucker so powerful that, when one of these fishes has been put into a pail of water, it has attached itself so firmly to the bottom of the vessel that when lifted by the tail it raised the pail, together with several gallons of water.

The Gobies, again, have their ventral fins united and modified into a single sucker, by means of which the fish is able to secure itself to a stone, rock, or indeed any tolerably smooth surface. These fishes are popularly known as Bull-routs.

The centre of the illustration is occupied by another of the Mediterranean fishes. This is the well-known Tunny, which furnishes food to the inhabitants of the coasts of this inland sea, and indeed constitutes one of their principal sources of wealth. This fine fish is on an average four or five feet in length, and sometimes attains the length of six or seven feet.

The flesh of the Tunny is excellent, and the fish is so conspicuous, that the silence of the Scriptures concerning its existence shows the utter indifference to specific accuracy that prevailed among the various writers.

The other figure represents the Coryphene, popularly, though very wrongly, called the Dolphin, and celebrated, under that name, for the beautiful colours which fly over the surface of the body as it dies.

The flesh of the Coryphene is excellent, and in the times of classic Rome the epicures were accustomed to keep these fish alive, and at the beginning of a feast to lay them before the guests, so that they might, in the first place, witness the magnificent colours of the dying fish, and, in the second place, might be assured that when it was cooked it was perfectly fresh. Even during life, the Coryphene is a most lovely fish, and those who have witnessed it playing round a ship, or dashing off in chase of a shoal of flying-fishes, can scarcely find words to express their admiration of its beauty.



F I S H E S.

CHAPTER II.

Various modes of capturing Fish—The hook and line—Military use of the hook—Putting a hook in the jaws—The fishing spear—Different kinds of net—The casting-net—Prevalence of this form—Technical words among fishermen—Fishing by night—The draught of Fishes—The real force of the miracle—Selecting the Fish—The Fish-gate and Fish-market—Fish killed by a draught—Fishing in the Dead Sea—Dagon, the fish-god of Philistina, Assyria, and Siam—Various Fishes of Egypt and Palestine.

As to the various methods of capturing Fish, we will first take the simplest plan, that of the hook and line.

Sundry references are made to angling, both in the Old and New Testaments. See, for example, the well-known passage respecting the leviathan, in Job xli. 1, 2: "Canst thou draw out leviathan with an hook? or his tongue with a cord which thou lettest down?"

"Canst thou put an hook into his nose? or bore his jaw through with a thorn?"

It is thought that the last clause of this passage refers, not to the actual capture of the Fish, but to the mode in which they were kept in the tanks, each being secured by a ring or hook and line, so that it might be taken when wanted.

On referring to the New Testament, we find that the fisher Apostles used both the hook and the net. See Matt. xvii. 27 : "Go thou to the sea, and cast an hook, and take up the fish that first cometh up." Now this passage explains one or two points.

In the first place, it is one among others which shows that, although the Apostles gave up all to follow Christ, they did not throw away their means of livelihood, as some seem to fancy, nor exist ever afterwards on the earnings of others. On the contrary, they retained their fisher equipment, whether boats, nets, or hooks ; and here we find St. Peter, after the way of fishermen, carrying about with him the more portable implements of his craft.

Next, the phrase "casting" the hook into the sea is exactly expressive of the mode in which angling is conducted in the sea and large pieces of water, such as the Lake of Galilee. The fisherman does not require a rod, but takes his line, which has a weight just above the hook, coils it on his left arm in lasso fashion, baits the hook, and then, with a peculiar swing, throws it into the water as far as it will reach. The hook is allowed to sink for a short time, and is then drawn towards the shore in a series of jerks, in order to attract the Fish, so that, although the fisherman does not employ a rod, he manages his line very much as does an angler of our own day when "spinning" for pike or trout.

Sometimes the fisherman has a number of lines to manage, and in this case he acts in a slightly different manner. After throwing out the loaded hook, as above mentioned, he takes a short stick, notched at one end, and pointed at the other, thrusts the sharp end into the ground at the margin of the water, and hitches the line on the notch.

He then proceeds to do the same with all his lines in succession, and when he has flung the last hook into the water, he sits down on a heap of leaves and grass which he has gathered together, and watches the lines to see if either of them is moved in the peculiar jerking manner which is characteristic of a

"bite." After a while, he hauls them in successively, removes the Fish that may have been caught, and throws the lines into the water afresh.

We now come to the practice of catching Fish by the net, a custom to which the various Scriptural writers frequently refer, sometimes in course of historical narrative, and sometimes by way of allegory or metaphor. The reader will remember that the net was also used on land for the purpose of catching wild animals, and that many of the allusions to the net which occur in the Old Testament refer to the land and not to the water.

The commonest kind of net, which was used in the olden times as it is now, was the casting-net. This kind of net is circular, and is loaded all round its edge with weights, and suspended by the middle to a cord. When the fisherman throws this net, he gathers it up in folds in his arms, and, with a peculiar swing of the arms, only to be learned by long practice, flings it so that it spreads out and falls in its circular form upon the surface of the water. It rapidly sinks to the bottom, the loaded circumference causing it to assume a cup-like form, enclosing within its meshes all the Fish that happen to be under it as it falls. When it has reached the bottom, the fisherman cautiously hauls in the rope, so that the loaded edges gradually approach each other, and by their own weight cling together and prevent the Fish from escaping as the net is slowly drawn ashore.

This kind of net is found, with certain modifications, in nearly all parts of the world. The Chinese are perhaps supreme in their management of it. They have a net of extraordinary size, and cast it by flinging it over their backs, the huge circle spreading itself out in the most perfect manner as it falls on the water.

At the present day, when the fishermen use this net they wade into the sea as far as they can, and then cast it. In consequence of this custom, the fishermen are always naked while engaged in their work, wearing nothing but a thick cap in order to save themselves from sun-stroke. It is probable that on the memorable occasion mentioned by St. John, in chap. xxi., all the fishermen were absolutely, and not relatively naked, wearing no clothes at all, not even the ordinary tunic.

That a great variety of nets was used by the ancient Jews is evident from the fact that there are no less than ten words to signify different kinds of net. At the present day we have very great difficulty in deciding upon the exact interpretation of these technical terms, especially as in very few cases are we assisted either by the context or by the etymology of the words. It is the same in all trades or pursuits, and we can easily understand how our own names of drag-net, seine, trawl, and keel-drag would perplex any commentator who happened to live some two thousand years after English had ceased to be a living language.



MODE OF DRAGGING THE SEINE-NET.

The Sagene, or seine-net, was made in lengths, any number of which could be joined together, so as to enclose a large space of water. The upper edge was kept at the surface of the water by floats, and the lower edge sunk by weights.

This net was always taken to sea in vessels, and when "shot" the various lengths were joined together, and the net extended in a line, with a boat at each end. The boats then gradually approached each other, so as to bring the net into a semicircle, and finally met, enclosing thereby a vast number of Fishes in their meshed walls. The water was then beaten, so as

to frighten the Fishes and drive them into the meshes, and the net was then either taken ashore, or lifted by degrees on board the boats, and the Fish removed from it.

As in a net of this kind Fishes of all sorts are enclosed, the contents are carefully examined, and those which are unfit for eating are thrown away. Even at the present day much care is taken in the selection, but in the ancient times the fishermen were still more cautious, every Fish having to be separately examined in order that the presence both of fins and scales might be assured before the captors could send it to the market.

It is to this custom that Christ alludes in the well-known parable of the net: "Again, the kingdom of heaven is like unto a net that was cast into the sea, and gathered of every kind;

"Which, when it was full, they drew to shore, and sat down, and gathered the good into vessels, but cast the bad away"

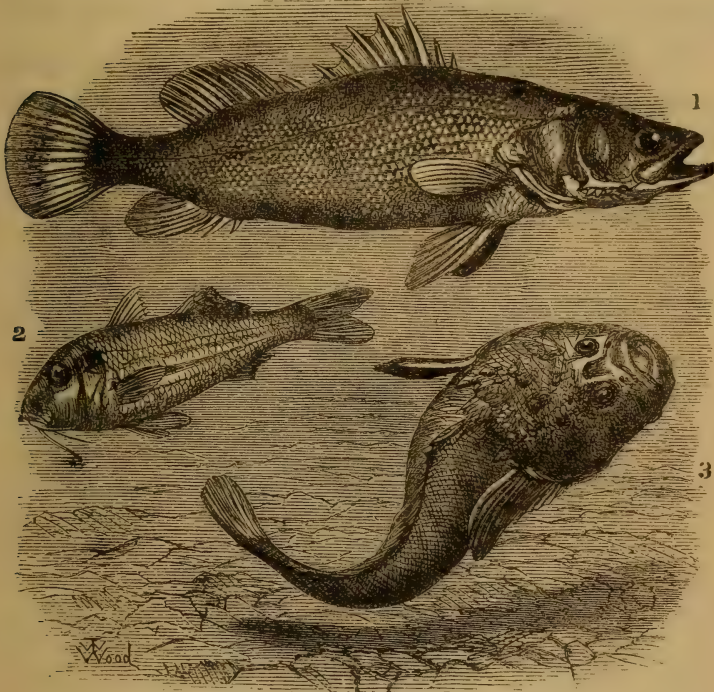
LASTLY, we come to the religious, or rather superstitious, part played by Fish in the ancient times. That the Egyptians employed Fish as material symbols of Divine attributes we learn from secular writers, such as Herodotus and Strabo.

The Jews, who seem to have had an irrepressible tendency to idolatry, and to have adopted the idols of every people with whom they came in contact, resuscitated the Fish-worship of Egypt as soon as they found themselves among the Philistines. We might naturally imagine that as the Israelites were bitterly opposed to their persistent enemy, who trod them under foot and crushed every attempt at rebellion for more than three hundred years, they would repudiate the worship as well as the rule of their conquerors. But, on the contrary, they adopted the worship of Dagon, the Fish-god, who was the principal deity of the Philistines, and erected temples in his honour.

We find precisely the same worship at the present day in Siam, where Dagon has exactly the same form as among the Philistines of old. There is now before me a photograph of a great temple at Ayutia, the entrance to which is guarded by two huge images of the Fish-god. They are about sixty feet in height, and have both legs and feet like man, but in addition the lower part of the body is modified into the tail of a Fish, which, in common with the whole of the body, is covered with gilded scales.

IN order that the reader may see examples of the typical Fish which are to be found in Egypt and Palestine, I have added three more species, which are represented in the following illustration.

The uppermost figure represents the NILE PERCH. This Fish is



FISHES OF EGYPT AND PALESTINE.

1. NILE PERCH.

2. SURMULLET.

3. STAR-GAZER.

plentiful in the Nile, and in the mouths of many Asiatic rivers. It is brown above, silvery white below, and may be distinguished by the armed gill-covers, and the three strong spines of the anal fin. The tongue is smooth.

Immediately below the Nile Perch is the STAR-GAZER.

This Fish is found in the Mediterranean, and derives its name from the singular mode in which the eyes are set in the head, so that it looks upwards instead of sideways. It is one of the

mud-lovers, a fact which accounts for the peculiar position of the eyes. It is said to feed after the fashion of the fishing-frog—*i.e.* by burying itself in the mud and attracting other Fishes by a worm-like appendage of its mouth, and pouncing on them before they are aware of their danger.

This is not a pretty Fish, and as it is very spiny, is not pleasant to the grasp, but its flesh is very good, and it is much valued by those who can obtain it.

The last Fish to be noticed is the SURMULLET, a Fish that is equally remarkable for the beauty of its colours and the excellence of its flesh.



MOLLUSCS.

The purple of Scripture—The sac containing the purple dye—Curious change of colour—Mode of obtaining the dye—The Tyrian purple—The king of the Ethiopians and the purple robe—The professional purple dyers—Various words expressive of different shades of purple.

LEAVING the higher forms of animal life, we now pass to the Invertebrated Animals which are mentioned in Scripture.

As may be inferred from the extreme looseness of nomenclature which prevails among the higher animals, the species which can be identified are comparatively few, and of them but a very few details are given in the Scriptures.

Taking them in their zoological order, we will begin with the MOLLUSCS.

WE are all familiar with the value which was set by the ancients upon the peculiar dye which may be called by the name of Imperial Purple. In the first place, it was exceedingly costly, not only for its richness of hue, but from the great difficulty with which a sufficient quantity could be procured for staining a dress. Purple was exclusively a royal colour, which might not be worn by a subject. Among the ancient Romans, during the times of the Cæsars, any one who ventured to appear in a dress of purple would do so at the peril of his life. In the consular days of Rome, the dress of the consuls was white, striped with purple; but the Cæsars advanced another step in luxury, and dyed the whole toga of this costly hue.

The colour of the dye is scarcely what we understand by the term "purple," *i.e.* a mixture of blue and red. It has but very little blue in it, and has been compared by the ancients to the colour of newly-clotted blood. It is obtained from several

Shell Fish belonging to the great Whelk family, the chief of which is the *Murex brandaris*.

The shell is shaped something like that of a whelk, but is very smooth and porcelain-like, and is generally white, ornamented with several coloured bands. It is, however, one of the most variable of shells, differing not only in colour but in form. It always inhabits the belt of the shore between tide-marks, and preys upon other Molluscs, such as the mussel and periwinkle, literally licking them to pieces with its long riband tongue.

This tongue is beset with rows of hooked teeth, exactly like the shark-tooth weapons of the Samoan and Mangaian Islanders, and with it the creature is enabled to bore through the shells of mussels and similar Molluscs, and to eat the enclosed animal. It is very destructive to periwinkles, thrusting its tongue through the mouth of the shell, piercing easily the operculum by which the entrance is closed, and gradually scooping out the unfortunate inmate.

Even the bivalves, which can shut themselves up between two shells, fare no better, the tongue of the Dog-Whelk rasping a hole in the hard shell in eight-and-forty hours.

In order to procure the animal, the shell must be broken with a sharp blow of a small hammer, and the receptacle of the colouring matter can then be seen behind the head, and recognised by its lighter hue.

When it is opened, a creamy sort of matter exudes. It is yellowish, and gives no promise of its future richness of hue. There is only one drop of this matter in each animal, and it is about sufficient in quantity to stain a piece of linen the size of a dime.

The best mode of seeing the full beauty of the purple is to take a number of the Molluscs, and to stain as large a surface as possible. The piece of linen should then be exposed to the rays of the sun, when it will go through a most curious series of colours. The yellow begins to turn green, and, after a while, the stained portions of the linen will be entirely green, the yellow having been vanquished by the blue. By degrees the blue predominates more and more over the yellow, until the linen is no more green, but blue. Then, just as the yellow yielded to the blue, the blue yields to red, and becomes first violet, then purple, and lastly assumes the blood-red hue of royalty.

The colour is very permanent, and, instead of fading by time, seems rather to brighten.

In some cases the ancients appear not to have troubled themselves with the complicated operation of taking the animal out of the shell, opening the receptacle, and squeezing the contents on the fabric to be dyed, but simply crushed the whole of the Mollusc, so as to set the colouring matter free, and steeped the cloth in the pulp. Tyre was one of the most celebrated spots for this manufacture, the "Tyrian dye" being celebrated for its richness. Heaps of broken shells remain to the present day as memorials of the long-perished manufacture.

The value which the ancients set upon this dye is shown by many passages in various books. Among others we may refer to Herodotus.

Cambyzes, it appears, had a design to make war upon three nations, the Ammonians, the Carthaginians, and the Ethiopians. He determined to invade the first by land, and the second by sea; but, being ignorant of the best method of reaching the Ethiopians, he dispatched messengers to them, nominally as ambassadors, but practically as spies. He sent to the King of Ethiopia valuable presents—namely, a purple mantle, a golden necklace and bracelet, an elaborate box of perfumed ointment, and a cask of palm-wine, these evidently being considered a proof of imperial magnificence.

The Ethiopian king ridiculed the jewels, praised the wine, and asked curiously concerning the dye with which the purple mantle was stained. On being told the mode of preparation, he refused to believe the visitors, and, referring to the changing hues of the mantle and to the perfume of the ointment, he showed his appreciation of their real character by saying that the goods were deceptive, and so were the bearers.

The Hebrew word *argaman*, which signifies the regal purple, occurs several times in Scripture, and takes a slightly different form according to the Chaldaic or Hebraic idiom.

For example, we find it in Exod. xxv. 4: "This is the offering which ye shall take of them: gold, and silver, and brass,

"And blue, and purple, and scarlet, and fine linen," &c. &c.

It occurs again in 2 Chron. ii. 7: "Send me now therefore a man cunning to work in gold, and in silver, and in brass, and in iron, and in purple, and crimson, and blue."

THE SNAIL.

The Snail which melteth—Rendering of the Jewish Bible—Theory respecting the track of the Snail—The Hebrew word *Shablul*—Various Snails of Palestine.

THERE is a very remarkable and not very intelligible passage in Ps. lviii. 8: "As a snail which melteth, let every one of them pass away." The Jewish Bible renders the passage in a way which explains the idea which evidently prevailed at the time when the Psalms were composed: "As a snail let him melt as he passeth on."

The ancients had an idea that the slimy track made by a Snail as it crawled along was subtracted from the substance of its body, and that in consequence the farther it crept, the smaller it became, until at last it wasted entirely away. The commentators on the Talmud took this view of the case. The Hebrew word *shablul*, which undoubtedly does signify a Snail of some kind, is thus explained: "The *Shablul* is a creeping thing: when it comes out of its shell, saliva pours from itself, until it becomes liquid, and so dies."

Other explanations of this passage have been offered, but there is no doubt that the view taken by these commentators is the correct one, and that the Psalmist, when he wrote the terrible series of denunciations in which the passage in question occurs, had in his mind the popular belief regarding the gradual wasting away of the Snail as it "passeth on."

It is needless to say that no particular species of Snail is mentioned, and almost as needless to state that in Palestine there are many species of Snails, to any or all of which these words are equally applicable.



PEARL OYSTER.

THE PEARL.

The Pearl of Scripture—Wisdom compared to Pearl—Metaphorical uses of the Pearl—The Pearl of great price—Casting Pearls before swine.

THERE is only one passage in the Old Testament in which can be found the word which is translated as PEARL, and it is certain that the word in question may have another interpretation.

The word in question is *gabish*, and occurs in Job xxviii. 18. Treating of wisdom, in that magnificent passage beginning, "But where shall Wisdom be found, and where is the place of understanding?" the sacred writer uses these words, "No mention shall be made of coral, or of pearls : for the price of wisdom is above rubies."

In consequence of the labour and research required for seeking wisdom, it was proverbially likened to a Pearl, and in this sense we must understand the warning of our Lord, not to cast Pearls before swine. The "pearl of great price" is another form of the same metaphor.

The substance of Pearls is essentially the same as that which lines many shells, and is known as "mother of pearl."

Although a large number of shell-fish secrete "mother of pearl," only a few of them yield true Pearls. The finest are obtained from the so-called Pearl oyster, an illustration of which is given on the preceding page.

The Ancients obtained their Pearls chiefly from India and the Persian Gulf, where to this day the industry of Pearl-fishing is still carried on by the natives.

The oysters containing the Pearls are brought up from the bottom of the sea by divers, who go out in boats to the fishing-grounds, which are some distance from the shore.

Leaping naked into the water, carrying a heavy stone to enable him to sink quickly to the bottom, the diver descends to where the oysters lie, and secures as many of them as possible during the limited time that his breath lasts. On an average the divers remain under water from fifty to eighty seconds, though some can endure a much longer period.

Sharks are the special dread of Pearl-divers, and many are carried off by this fierce monster of the deep. To arm himself against their attack the diver carries a sharp knife, and instances are known of his having attacked and fairly defeated the dread destroyer in its own element.

Not only is the diver exposed to the danger of attack from sharks, but his hazardous calling is necessarily exhausting, and, as a rule, he is a short-lived man.

There are some kinds of fresh-water mussels which contain Pearls of an inferior quality; perhaps the most celebrated of these is the Pearl Mussel of the Chinese, who make a singular use of it. They string a number of globular pellets, and introduce them between the valves of the mussel, so that in course of time the creature deposits a coating of pearly substance upon them, and forms a very good imitation of real Pearls.

INSECTS.





INSECTS.

THE LOCUST.

Insects—The Locust—The two migratory Locusts at rest and on the wing—The Locust swarms—Gordon Cumming's account—Progress of the insect hosts—Vain attempts to check them—Tossed up and down as a Locust—Effect of the winds on the insect—The east and the west winds—Locusts used for food—Ancient and modern travellers—The food of John the Baptist.

OF the LOCUSTS there are several species in Palestine, two of which are represented in the accompanying plate. Those on the ground are the common Migratory Locusts, while those on the wing, which have long heads, are a species of *Truxalis*.

The Locust belongs to the great order of Orthoptera, or straight-winged insects. They have, when fully developed, four wings, the two front being thick and membraneous, while the two hinder wings are large, delicate, translucent, and folded longitudinally under the front pair of wings when the insect is at rest. In the Locusts these characteristics are admirably shown. The appearance of a Locust when at rest and when flying is so different that the creature is at first sight scarcely recognisable as the same creature. When at rest, it is a compact and tolerably stout insect, with a dull though delicately coloured body; but when it takes flight it appears to attain twice its previous dimensions.

The front pair of wings, which alone were seen before they were expanded, became comparatively insignificant, while the hinder pair, which were before invisible, became the most prominent part of the insect, their translucent folds being coloured with the most brilliant hues, according to the species. The body seems to have shrunk as the wings have increased, and to have

diminished to half its previous size, while the long legs that previously were so conspicuous are stretched out like the legs of a flying heron.

All the Locusts are vegetable-feeders, and do great harm wherever they happen to be plentiful, their powerful jaws severing even the thick grass stems as if cut by scissors. But it is only when they invade a country that their real power is felt. They come flying with the wind in such vast multitudes that the sky is darkened as if by thunder-clouds; and when they settle, every vestige of green disappears off the face of the earth.

Mr. Gordon Cumming once saw a flight of these Locusts. They flew about three hundred feet from the ground, and came on in thick, solid masses, forming one unbroken cloud. On all sides nothing was to be seen but Locusts. The air was full of them, and the plain was covered with them, and for more than an hour the insect army flew past him. When the Locusts settle, they eat with such voracity that the sound caused by their jaws cutting the leaves and grass can be heard at a great distance; and even the young Locusts, which have no wings, and are graphically termed by the Dutch colonists of Southern Africa "voet-gangers," or foot-goers, are little inferior in power of jaw to the fully-developed insect.

As long as they have a favourable wind, nothing stops the progress of the Locusts. They press forward just like the vast herds of antelopes that cover the plains of Africa, or the bison that once blackened the prairies of America, and the progress of even the wingless young is as irresistible as that of the adult insects. Regiments of soldiers have in vain attempted to stop them. Trenches have been dug across their path, only to be filled up in a few minutes with the advancing hosts, over whose bodies the millions of survivors continued their march. When the trenches were filled with water, the result was the same; and even when fire was substituted for water, the flames were quenched by the masses of Locusts that fell into them. When they come to a tree, they climb up it in swarms, and devour every particle of foliage, not even sparing the bark of the smaller branches. They ascend the walls of houses that come in the line of their march, swarming in at the windows, and gnawing in their hunger the very woodwork of the furniture.

We shall now see how true to nature is the terrible prophecy



LOCUSTS.

of Joel. "A day of darkness and of gloominess, a day of clouds and of thick darkness, as the morning spread upon the mountains: a great people and a strong; there hath not been ever the like, neither shall be any more after it, even to the years of many generations.

"A fire devoureth before them; and behind them a flame burneth: the land is as the garden of Eden before them, and behind them a desolate wilderness; yea, and nothing shall escape them.

"And the Lord shall utter His voice before His army: for His camp is very great" (Joel ii. 2—11).

Nothing can be more vividly accurate than this splendid description of the Locust armies. First we have the darkness caused by them as they fly like black clouds between the sun and the earth. Then comes the contrast between the blooming and fertile aspect of the land before they settle on it, and its utter desolation when they leave it.

There is one passage in the Scriptures which at first sight seems rather obscure, but is clear enough when we understand the character of the insect to which it refers: "I am gone like the shadow when it declineth: I am tossed up and down as the locust" (Ps. cix. 23).

Although the Locusts have sufficient strength of flight to remain on the wing for a considerable period, and to pass over great distances, they have little or no command over the direction of their flight, and always travel with the wind, just as has been mentioned regarding the quail. So entirely are they at the mercy of the wind, that if a sudden gust arises the Locusts are tossed about in the most helpless manner; and if they should happen to come across one of the circular air-currents that are so frequently found in the countries which they inhabit, they are whirled round and round without the least power of extricating themselves.

In the account of the great plague of Locusts, the wind is mentioned as the proximate cause both of their arrival and their departure. See, for example, Exod. x. 12, 13:

"And the Lord said unto Moses, Stretch out thine hand over the land of Egypt for the locusts, that they may come up upon the land of Egypt, and eat every herb of the land, even all that the hail hath left.

“ And Moses stretched forth his rod over the land of Egypt, and the Lord brought an east wind upon the land all that day, and all that night; and when it was morning, the east wind brought the locusts.”

Afterwards, when Moses was brought before Pharaoh, and entreated to remove the plague which had been brought upon the land, the west wind was employed to take the Locusts away, just as the east wind had brought them.

“ He went out from Pharaoh, and entreated the Lord.

“ And the Lord turned a mighty strong west wind, which took away the locusts, and cast them into the Red Sea; there remained not one locust in all the coasts of Egypt” (Exod. x. 18, 19).

Modern travellers have given accounts of these Locust armies, which exactly correspond with the sacred narrative. One traveller mentions that, after a severe storm, the Locusts were destroyed in such multitudes, that they were heaped in a sort of wall, varying from three to four feet in height, fifty miles in length, and almost unapproachable, on account of the odour of their decomposing bodies.

WE now come to the use of Locusts as food.

Very few insects have been recognised as fit for human food, even among uncivilized nations, and it is rather singular that the Israelites, whose dietary was so scrupulously limited, should have been permitted the use of the Locust. These insects are, however, eaten in all parts of the world which they frequent, and in some places form an important article of diet, thus compensating in some way for the amount of vegetable food which they consume.

When their captors have roasted and eaten as many as they can manage to devour, they dry the rest over the fires, pulverize them between two stones, and keep the meal for future use, mixing it with water, or, if they can get it, with milk.

We will now take a few accounts given by travellers of the present day, selecting one or two from many. Mr. W. G. Palgrave, in his “ Central and Eastern Arabia,” gives a description of the custom of eating Locusts. “ On a sloping bank, at a short distance in front, we discerned certain large black patches, in strong contrast with the white glisten of the soil around, and at the same time our attention was attracted by a strange

whizzing, like that of a flight of hornets, close along the ground, while our dromedaries capered and started as though struck with sudden insanity.

"The cause of all this was a vast swarm of locusts, here alighted in their northerly wanderings from their birthplace in the Dahna; their camp extended far and wide, and we had already disturbed their outposts. These insects are wont to settle on the ground after sunset, and there, half-stupified by the night chill, await the morning rays, which warm them once more into life and movement.

"This time, the dromedaries did the work of the sun, and it would be hard to say which of the two were the most frightened, they or the locusts. It was truly laughable to see so huge a beast lose his wits for fear at the flight of a harmless, stingless insect, for, of all timid creatures, none equal this 'ship of the desert' for cowardice.

"But, if the beasts were frightened, not so their masters. I really thought they would have gone mad for joy. Locusts are here an article of food, nay, a dainty, and a good swarm of them is begged of Heaven in Arabia. . . .

"The locust, when boiled or fried, is said to be delicious, and boiled and fried accordingly they are to an incredible extent. **However,** I never could persuade myself to taste them, whatever invitations the inhabitants of the land, smacking their lips over large dishes full of entomological 'delicatesses,' would make me to join them. Barakàt ventured on one for a trial. He pronounced it oily and disgusting, nor added a second to the first: it is caviare to unaccustomed palates.

"The swarm now before us was a thorough godsend for our Arabs, on no account to be neglected. Thirst, weariness, all were forgotten, and down the riders leaped from their starting camels. This one spread out a cloak, that one a saddle-bag, a third his shirt, over the unlucky creatures, destined for the morning meal. Some flew away, whizzing across our feet; others were caught, and tied up in sacks."

Mr. Mansfield Parkyns, in his "Life in Abyssinia," mentions that the true Abyssinian will not eat the Locust, but that the negroes and Arabs do so. He describes the flavour as being something between the burnt end of a quill and a crumb of linseed cake. The flavour, however, depends much on the

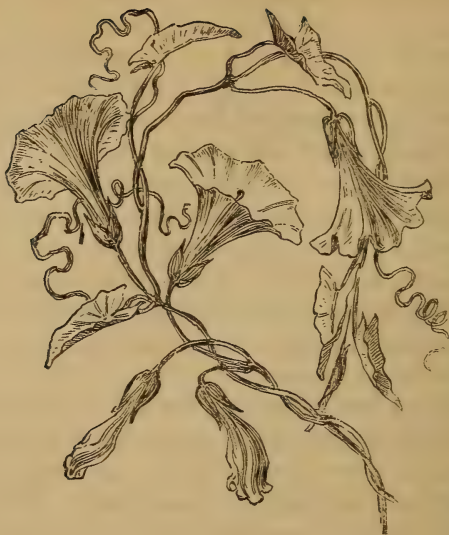
mode of cooking, and, as some say, on the nature of the Locusts' food.

Signor Pierotti states, in his "Customs and Traditions of Palestine," that Locusts are really excellent food, and that he was accustomed to eat them, not from necessity, but from choice, and compares their flavour to that of shrimps.

Dr. Livingstone makes a similar comparison. In Palestine, Locusts are eaten either roasted or boiled in salt and water, but, when preserved for future use, they are dried in the sun, their heads, wings, and legs picked off, and their bodies ground into dust. This dust has naturally a rather bitter flavour, which is corrected by mixing it with camel's milk or honey, the latter being the favourite substance.

We may now see that the food of John the Baptist was, like his dress, that of a people who lived at a distance from towns, and that there was no more hardship in the one than in the other. Some commentators have tried to prove that he fed on the fruit of the locust or carob tree—the same that is used in some countries for feeding cattle; but there is not the least ground for such an explanation. The account of his life, indeed, requires no explanation; Locust-dust, mixed with honey, being an ordinary article of food even at the present day.





THE BEE.

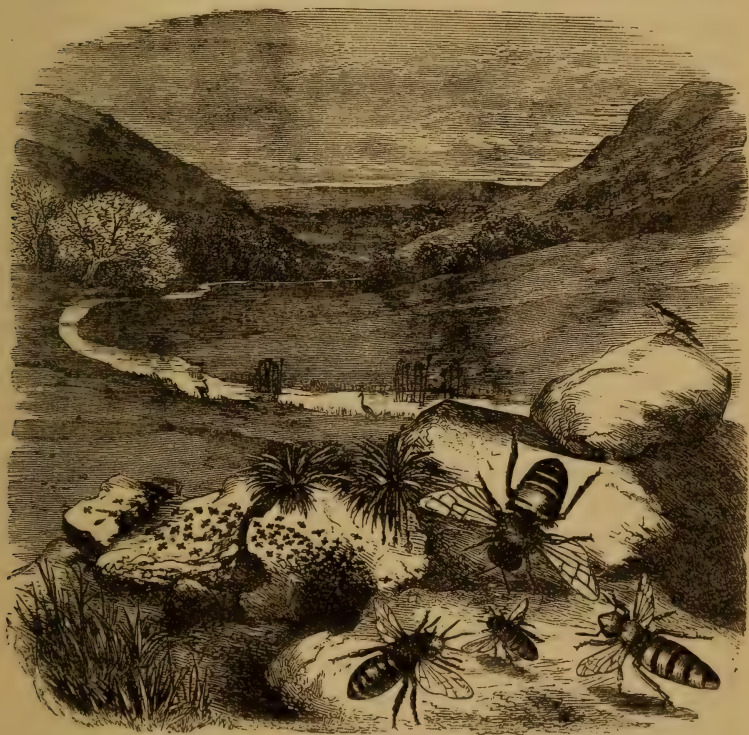
The Honey Bee of Palestine—Abundance of Bees in the Holy Land—Habitations of the wild Bee—The honey of Scripture—Domesticated Bees and their hives—Stores of wild honey—The story of Jonathan—The Crusaders and the honey.

FORTUNATELY, there is no doubt about the rendering of the Hebrew word *debôrah*, which has always been acknowledged to be rightly translated as "Bee."

The Honey Bee is exceedingly plentiful in Palestine, and in some parts of the country multiplying to such an extent that the precipitous ravines in which it takes up its residence are almost impassable by human beings, so jealous are the Bees of their domains. Although the Bee is not exactly the same species as that of our own country, being the Banded Bee (*Apis fasciata*), and not the *Apis mellifica*, the two insects very much resemble each other in shape, colour, and habits. Both of them share the instinctive dislike of strangers and jealousy of

intrusion, and the Banded Bee of Palestine has as great an objection to intrusion as its congener in this country.

Several allusions are made in the Scriptures to this trait in the character of the Bee. See, for example, Deut. i 44: "And the Amorites, which dwelt in that mountain, came out against you, and chased you, as bees do, and destroyed you in Seir, even unto Hormah." All those who have had the misfortune to offend Bees will recognise the truth of this metaphor, the



THE BEE.

Amorites swarming out of the mountain like wild Bees out of the rocky clefts which serve them as hives, and chasing the intruder fairly out of their domains.

A similar metaphor is employed in the Psalms: "They compassed me about; yea, they compassed me about; but in the name of the Lord I will destroy them.

"They compassed me about like bees, they are quick as the fire of thorns, but in the name of the Lord I will destroy them."

The custom of swarming is mentioned in one of the earlier books of Scripture. The reader will remember that, after Samson had killed the lion which met him on the way, he left the carcase alone. The various carnivorous beasts and birds at once discover such a banquet, and in a very short time the body of a dead animal is reduced to a hollow skeleton, partially or entirely covered with skin, the rays of the sun drying and hardening the skin until it is like horn.

In exceptionally hot weather, the same result occurs even in this country. Some years before this account was written there was a very hot and dry summer, and a great mortality took place among the sheep. So many indeed died that at last their owners merely flayed them, and left their bodies to perish. One of the dead sheep had been thrown into a rather thick copse, and had fallen in a spot where it was sheltered from the wind, and yet exposed to the fierce heat of the summer's sun. The consequence was that in a few days it was reduced to a mere shell. The heat hardened and dried the external layer of flesh so that not even the carnivorous beetles could penetrate it, while the whole of the interior dissolved into a semi-putrescent state, and was rapidly devoured by myriads of blue-bottles and other larvæ.

It was so thoroughly dried that scarcely any evil odour clung to it, and as soon as I came across it the story of Samson received a simple elucidation. In the hotter Eastern lands, the whole process would have been more rapid and more complete, and the skeleton of the lion, with the hard and horny skin strained over it, would afford exactly the habitation of which a wandering swarm of Bees would take advantage. At the present day swarms of wild Bees often make their habitations within the desiccated bodies of dead camels that have perished on the way.

As to the expression "hissing" for the Bee, the reader must bear in mind that a sharp, short hiss is the ordinary call in Palestine, when one person desires to attract the attention of another. A similar sound, which may perhaps be expressed by the letters *tst*, prevails on the Continent at the present day.

Signor Pierotti remarks that the inhabitants of Palestine are even now accustomed to summon Bees by a sort of hissing sound.

Whether the honey spoken of in the Scriptures was obtained from wild or domesticated Bees is not very certain, but, as the manners of the East are much the same now as they were three thousand years ago, it is probable that Bees were kept then as they are now. The hives are not in the least like ours, but are cylindrical vases of coarse earthenware, laid horizontally, much like the bark hives employed in many parts of Southern Africa.

In some places the hives are actually built into the walls of the houses, the closed end of the cylinder projecting into the interior, while an entrance is made for the Bees in the other end, so that the insects have no business in the house. When the inhabitants wish to take the honey, they resort to the operation which is technically termed "driving" by bee-masters.

They gently tap the end within the house, and continue the tapping until the Bees, annoyed by the sound, have left the hive. They then take out the circular door that closes the end of the hive, remove as much comb as they want, carefully put back those portions which contain grubs and bee-bread, and replace the door, when the Bees soon return and fill up the gaps in the combs. As to the wasteful, cruel, and foolish custom of "burning" the Bees, the Orientals never think of practising it.

In many places the culture of Bees is carried out to a very great extent, numbers of the earthenware cylinders being piled on one another, and a quantity of mud thrown over them in order to defend them from the rays of the sun, which would soon melt the wax of the combs.

In consequence of the geographical characteristics of the Holy Land, which supplies not only convenient receptacles for the Bees in the rocks, but abundance of thyme and similar plants, vast stores of bee-comb are to be found in the cliffs, and form no small part of the wealth of the people.

The abundance of wild honey is shown by the memorable events recorded in 1 Sam. xiv. Saul had prohibited all the people from eating until the evening. Jonathan, who had not heard the prohibition, was faint and weary, and, seeing honey dripping on the ground from the abundance and weight of

the comb, he took it up on the end of his staff, and ate sufficient to restore his strength.

Thus, if we refer again to the history of John the Baptist and his food, we shall find that he was in no danger of starving for want of nourishment, the Bees breeding abundantly in the desert places he frequented, and affording him a plentiful supply of the very material which was needed to correct the deficiencies of the dried locusts which he used instead of bread.

The expression "a land flowing with milk and honey" has become proverbial as a metaphor expressive of plenty. Those to whom the words were spoken understood it as something more than a metaphor. In the work to which reference has already been made Signor Pierotti writes as follows:—"Let us now see how far the land could be said to flow with milk and honey during the latter part of its history and at the present day.

"We find that honey was abundant in the time of the Crusades, for the English, who followed Edward I. to Palestine, died in great numbers from the excessive heat, and from eating too much fruit and honey.

"At the present day, after traversing the country in every direction, I am able to affirm that in the south-east and north-east, where the ancient customs of the patriarchs are most fully preserved, and the effects of civilization have been felt least, milk and honey may still be said to flow, as they form a portion of every meal, and may even be more abundant than water, which fails occasionally in the heat of summer. . . . I have often eaten of the comb, which I found very good and of delicious fragrance."

The Bee represented in the illustration is the common Bee of Palestine, *Apis fasciata*. The lowest figure in the corner, with a long body and shut wings, is the queen. The central figure represents the drone, conspicuous by means of his large eyes, that almost join each other at the top of the head, and for his thicker and stouter body, while the third figure represents the worker Bee. Near them is shown the entrance to one of the natural hives which are so plentiful in the Holy Land, and are made in the "clefts of the rocks." A number of Bees are shown issuing from the hole.



THE HORNET AND ITS NEST.

THE HORNET.

The Tzirah or Hornet of Scripture—Travellers driven away by Hornets—The Hornet used as a metaphor—Oriental symbolism—Sting of the Hornet.

STILL keeping to the hymenopterous insects, we come to the Hornet. There are three passages in which occurs the word *tzirah*, which has been translated as Hornet. In every case when the word is mentioned the insect is employed in a metaphorical sense. See, for example, Exod. xxiii. 27, 28 : "I will send my fear before thee, and will destroy all the people to whom thou shalt come ; and I will make all thine enemies turn their backs unto thee.

"And I will send hornets before thee, which shall drive out the Hivite, the Canaanite, and the Hittite, from before thee."

The Hornet affords a most appropriate image for such a promise as was made to the Israelites, and was one which they must have thoroughly comprehended. The Hornets of Palestine and the neighbouring countries are far more common than our own Hornets here, and they evidently infested some parts to such an extent that they gave their name to those spots. Thus the word *Zoreah*, which is mentioned in Josh. xv. 33, signifies the "place of Hornets."

They make their nests in various ways ; some species placing them underground, and others disposing them as shown in the illustration, and merely sheltering them from the elements by a paper cover. Such nests as these would easily be disturbed by the animals which accompanied the Israelites on their journeys, even if the people were careful to avoid them. In such a case, the irritated insects rush out at the intruders ; and so great is the terror of their stings, that men and beasts fly promiscuously in every direction, each only anxious to escape from the winged foes.

The recollection of such scenes would necessarily dwell in the memory of those who had taken part in them, and cause the metaphor to impress itself strongly upon them.

It is needless to say that the passages in question might be literal statements of facts, and that the various nations were actually driven out of their countries by Hornets. Let the insects be brought upon the land in sufficient numbers, and neither man nor beast could stay in it. It is not likely, however, that such a series of miracles, far exceeding the insect-plagues of Egypt, would have been worked without frequent references to them in the subsequent books of the Scriptures ; and, moreover, the quick, short, and headlong flight of the attack of Hornets is a very different thing from the emigration which is mentioned in the Scriptures, and the long journeys which such a proceeding involved.



ANTS ON THE MARCH.

THE ANT.

The Ant of Scripture—Habit of laying up stores of food—The Ants of Palestine and their habits—The Agricultural or Mound-making Ant—Preparing ground, sowing, tending, reaping, and storing the crop—Different habits of Ants—The winged Ants.

ONE of the best-known and most frequently quoted passages of Scripture is found in Proverbs, chap. vi. 6–8: “Go to the ant, thou sluggard; consider her ways, and be wise:

“Which, having no guide, overseer, or ruler,

“Provideth her meat in the summer, and gathereth her food in the harvest.”

In Palestine Ants abound, and the species are tolerably numerous. Among them are found some species which do convey seeds into their subterranean home; and if their stores should be wetted by the heavy rains which sometimes prevail in that country, bring them to the outer air, as soon as the weather clears up, and dry them in the sun.

The writer of the Proverbs was therefore perfectly right when he alluded to the vegetable stores within the nest, and only spoke the truth when he wrote of the Ant that it was exceeding wise. Any one who wishes to test the truth of his words can easily do so by watching the first Ants' nest which he finds, the species of the Ant not being of much consequence. The nests of the Wood-Ant are perhaps the best suited for investigation, partly because the insect and its habitation are comparatively large, and, secondly, because so much of the work is done **above-ground**.

The most wonderful Ant in the world is one which hitherto is only known in some parts of America. Its scientific name is *Atta malefaciens*, and it has been called by various popular names, such as the Mound-making Ant and the Agricultural Ant on account of its habits, and the Stinging Ant on account of the pungency of its venom. This characteristic has gained for it the scientific name of *malefaciens*, or villanous.

The habits of this Ant were studied in Texas by Dr. Lincecum for the space of twelve years, and the result of his investigations was communicated to the Linnæan Society by C. Darwin, Esq. It is so extraordinary an account that it must be given in the narrator's own words:—

“The species which I have named ‘Agricultural’ is a large brownish ant. It dwells in what may be termed paved cities, and, like a thrifty, diligent, provident farmer, makes suitable and timely arrangements for the changing seasons. It is, in short, endowed with skill, **ingenuity**, and untiring patience sufficient to enable it successfully to contend with the varying exigencies which it may have to encounter in the life-conflict.

“When it has selected a situation for its habitation, if on ordinary dry ground, it bores a hole, around which it raises the surface three and sometimes six inches, forming a low circular mound having a very gentle inclination from the centre to the outer border, which on an average is three or four feet from the **entrance**. But if the location is chosen on low, flat, wet land liable to inundation, though the ground may be perfectly dry at the time the ant sets to work, it nevertheless elevates the mound, in the form of a pretty sharp cone, to the height of fifteen to twenty inches or more, and makes the entrance near the summit. Around the mound in either case the ant clears

the ground of all obstructions, levels and smooths the surface to the distance of three or four feet from the gate of the city, giving the space the appearance of a handsome pavement, as it really is.

"Within this paved area not a blade of any green thing is allowed to grow, except a single species of grain-bearing grass. Having planted this crop in a circle around, and two or three feet from, the centre of the mound, the insect tends and cultivates it with constant care, cutting away all other grasses and weeds that may spring up amongst it and all around outside of the farm-circle to the extent of one or two feet more.

"The cultivated grass grows luxuriantly, and produces a heavy crop of small, white, flinty seeds, which under the microscope very closely resemble ordinary rice. When ripe, it is carefully harvested, and carried by the workers, chaff and all, into the granary cells, where it is divested of the chaff and packed away. The chaff is taken out and thrown beyond the limits of the paved area.

"During protracted wet weather, it sometimes happens that the provision stores become damp, and are liable to sprout and spoil. In this case, on the first fine day the ants bring out the damp and damaged grain, and expose it to the sun till it is dry, when they carry it back and pack away all the sound seeds, leaving those that had sprouted to waste.

"In a peach-orchard not far from my house is a considerable elevation, on which is an extensive bed of rock. In the sand-beds overlying portions of this rock are fine cities of the Agricultural ants, evidently very ancient. My observations on their manners and customs have been limited to the last twelve years, during which time the enclosure surrounding the orchard has prevented the approach of cattle to the ant-farms. The cities which are outside of the enclosure as well as those protected in it are, at the proper season, invariably planted with the ant-rice. The crop may accordingly always be seen springing up within the circle about the 1st of November every year.

"Of late years, however, since the number of farms and cattle has greatly increased, and the latter are eating off the grass much closer than formerly, thus preventing the ripening of the seeds, I notice that the Agricultural ant is placing its cities along the turn-rows in the fields, walks in gardens, inside about the gates,

&c., where they can cultivate their farms without molestation from the cattle.

“There can be no doubt of the fact, that the particular species of grain-bearing grass mentioned above is intentionally planted. In farmer-like manner the ground upon which it stands is carefully divested of all other grasses and weeds during the time it is growing. When it is ripe the grain is taken care of, the dry stubble cut away and carried off, the paved area being left unencumbered until the ensuing autumn, when the same ‘ant-rice’ reappears within the same circle, and receives the same agricultural attention as was bestowed upon the previous crop; and so on year after year, as I *know* to be the case, in all situations where the ants’ settlements are protected from graminivorous animals.”

In a second letter, Dr. Lincecum, in reply to an inquiry from Mr. Darwin, whether he supposed that the Ants plant seeds for the ensuing crop, says, “I have not the slightest doubt of it. And my conclusions have not been arrived at from hasty or careless observation, nor from seeing the ants do something that looked a little like it, and then guessing at the results. I have at all seasons watched the same ant-cities during the last twelve years, and I know that what I stated in my former letter is true. I visited the same cities yesterday, and found the crop of ant-rice growing finely, and exhibiting also the signs of high cultivation, and not a blade of any other kind of grass or weed was to be seen within twelve inches of the circular row of ant-rice.”

The economical habits of this wonderful insect far surpass anything that Solomon has written of the Ant, and it is not too much to say that if any of the Scriptural writers had ventured to speak of an Ant that not only laid up stores of grain, but actually prepared the soil for the crop, planted the seed, kept the ground free from weeds, and finally reaped the harvest, the statement would have been utterly disbelieved, and the credibility not only of that particular writer but of the rest of Scripture severely endangered.

As may be inferred from the above description, the habits of Ants vary greatly according to their species and the climate in which they live. All, however, are wonderful creatures; and whether we look at their varied architecture, their mode of

procuring food, the system of slave-catching adopted by some, the "milking" of aphides practised by others, their astonishing mode of communicating thought to each other, and their perfect system of discipline, we feel how true were the words of the royal naturalist, that the Ants are "little upon earth, but are exceeding wise."

There is one point of their economy in which all known



ANT OF PALESTINE.

species agree. Only those which are destined to become perfectly developed males and females attain the winged state. Before they assume the transitional or pupal condition, each spins around itself a slight but tough silken cocoon, in which it lies secure during the time which is consumed in developing its full perfection of form.

When it is ready to emerge, the labourer Ants aid in freeing it

from the cocoon, and in a short time it is ready to fly. Millions of these winged ants rise into the air, seeking their mates, and, as they are not strong on the wing, and are liable to be tossed about by every gust of wind, vast numbers of them perish. Whole armies of them fall into the water and are drowned or devoured by fish, while the insectivorous birds hold great festival on so abundant a supply of food. As soon as they are mated they bend their wings forward, snap them off, and pass the rest of their lives on the ground.

In consequence of the destruction that takes place among the winged Ants, the Arabs have a proverb which is applied to those who are over-ambitious : "If God purposes the destruction of an ant, He permits wings to grow upon her."

THE CRIMSON WORM.

The scarlet or crimson of Scripture—The Coccus or Cochineal of Palestine compared with that of Mexico—Difference between the sexes—Mode of preparing the insect.

WE now come to another order of insects.

Just as the purple dye was obtained from a shell-fish, the scarcely less valuable crimson or scarlet was obtained from an insect. This is an insect popularly known as the Crimson Worm. It is closely allied to the cochineal insect of Mexico, which gives a more brilliant dye, and has at the present day nearly superseded the native insect. It is, however, still employed as a dye in some parts of the country.

Like the cochineal insect of Mexico, the female is very much larger than her mate, and it is only from her that the dye is procured. At the proper season of year the females are gathered off the trees and carefully dried, the mode of drying having some effect upon the quality of the dye. During the process of

drying the insect alters greatly, both in colour and size, shrinking to less than half its original dimensions, and assuming a greyish brown hue instead of a deep red. When placed in water it soon gives out its colouring matter, and communicates to the water



THE CRIMSON WORM.

the rich colour with which we are familiar under the name of carmine, or crimson. This latter name, by the way, is only a corruption of the Arabic *kermes*, which is the name of the insect.

The reader will remember that this was one of the three sacred colours—scarlet, purple, and blue—used in the vestments of the priests and the hangings of the tabernacle, the white not taking rank as a colour.

THE CLOTHES MOTH.

The Moth of Scripture evidently the Clothes Moth—Moths and garments—Accumulation of clothes in the East—Various uses of the hoarded robes—The Moths, the rust, and the thief.

ONE of the insects mentioned by name in the Scriptures is the MOTH, by which we must always understand some species of Clothes Moth. These are as plentiful and destructive in Palestine as in this country.

Several references are made to the Moth in the Scriptures, and nearly all have reference to its destructive habits. The solitary exceptions occur in the Book of Job, "Behold, He put no trust in His servants; and His angels He charged with folly: how much less in them that dwell in houses of clay, whose foundation is in the dust, which are crushed before the moth?"

In the New Testament reference is made several times to the Moth. "Lay not up for yourselves treasures upon earth, where moth and rust doth corrupt, and where thieves break through and steal" (Matt. vi. 19).

Even to ourselves these passages are significant enough, but to the Jews and the inhabitants of Palestine they possessed a force which we can hardly realize in this country. In the East large stores of clothing are kept by the wealthy, not only for their own use, but as presents to others. At a marriage feast, for example, the host presents each of the guests with a wedding garment. Clothes are also given as marks of favour, and a present of "changes of raiment," *i.e.* suits of clothing, is one of the most common gifts. As at the present day, there was anciently no greater mark of favour than for the giver to present the very robe which he was wearing, and when that robe happened to be an official one, the gift included the rank which it symbolized. Thus Joseph was invested with royal robes, as well as with the

royal ring (Gen. xli. 42). Mordecai was clothed in the king's robes : " Let the royal apparel be brought which the king useth to wear, and the horse the king rideth upon, and the crown royal which is set upon his head.



MORDECAI IS LED THROUGH THE CITY UPON THE KING'S HORSE.

" And let this apparel and horse be delivered to the hand of one of the king's most noble princes, that they may array the man withal whom the king delighteth to honour, and bring him on horseback through the street of the city, and proclaim before him, Thus shall it be done to the man whom the king delighteth to honour." (Esther vi. 8, 9.)

The loose clothing of the East requires no fitting, as is the case with the tight garments of the West; any garment fits any man: so that the powerful and wealthy could lay up great stores of clothing, knowing that they would fit any person to whom they were given. An allusion to this practice of keeping great stores of clothing is made in Job xxvii. 26: " Though he heap up silver as the dust, and prepare raiment as the clay;

" He may prepare it, but the just shall put it on, and the innocent shall divide the silver."

So large was the supply of clothing in a wealthy man's house,

that special chambers were set apart for it, and a special officer, called the "keeper of the garments" (2 Chron. xxxiv. 22), was appointed to take charge of them.

Thus, when a man was said to have clothing, the expression was a synonym for wealth and power. See Isa. iii. 6 : "When a man shall take hold of his brother of the house of his father, saying, Thou hast clothing, be thou our ruler."

The reader will now see how forcible was the image of the Moth and the garments, that is used so freely in the Scriptures. The Moth would not meddle with garments actually in use, so that a poor man would not be troubled with it. Only those who were rich enough to keep stores of clothing in their houses need fear the Moth.

THE SILKWORM MOTH.

Probability that the Hebrews were acquainted with Silk—Present cultivation of the Silkworm—The Silk-farms of the Lebanon—Silkworms and thunder.

In the Authorized Version there are several passages wherein silk is mentioned, but it is rather doubtful whether the translation be correct or not, except in one passage of the Revelation : "And the merchants of the earth shall weep and mourn over her ; for no man buyeth their merchandise any more :

"The merchandise of gold, and silver, and precious stones, and of pearls, and fine linen, and purple, and silk." (xviii. 11, 12.)

That the Hebrews were acquainted with silk from very early times is nearly certain, but it is probable that until comparatively late years they only knew the manufactured material, and were ignorant of the source whence it was derived. As to the date at which silk was introduced into Palestine, nothing certain is known ; but it is most likely that Solomon's fleets brought silk from India, together with the other valuables which are mentioned in the history of that monarch,

At the present day silk is largely cultivated, and the silk-farmers of the Lebanon are noted for the abundance of the crop which is annually produced. The greatest care is taken in rearing the worms. An excellent account of these farms is given by Mr. G. W. Chasseaud in his "Druses of the Lebanon:"—

"Proceeding onward, and protected from the fierce heat of the sun's rays by the pleasant shade of mountain pines, we were continually encountering horseloads of cocoons, the fruit of the industry of the Druse silk-rearer. The whole process, from hatching the silkworms' eggs till the moment that the worm becomes a cocoon, is one series of anxiety and labour to the peasant. The worms are so delicate that the smallest change of temperature exposes them to destruction, and the peasant can never confidently count upon reaping a harvest until the cocoon is fairly set."

After a long and interesting description of the multiplied and ceaseless labours of the silk-grower in providing food for the armies of caterpillars and sheltering them from the elements, the writer proceeds as follows:—

"The peasant is unwilling to permit of our remaining and watching operations. Traditional superstition has inculcated in him a dread of the evil eye. If we stop and admire the wisdom displayed by the worm, it will, in his opinion, be productive of evil results; either the cocoon will be badly formed, or the silk will be worthless. So, first clearing the place of all intruders, he puts a huge padlock on the door, and, locking the *khlook* (room in which the silkworms are kept), deposits the key in his *zinnar*, or waistband.

"Next week he will come and take out the cocoons, and, separating them from the briars, choose out a sufficiency for breeding purposes, and all the rest are handed over to the women of his family. These first of all disentangle the cocoon from the rich and fibrous web with which it is enveloped, and which constitutes an article of trade by itself. The cocoons are then either reeled off by the peasant himself or else sold to some of the silk factories of the neighbourhood, where they are immediately reeled off, or are suffocated in an oven, and afterwards, being well aired and dried, piled up in the magazines of the factory.

"Such is a brief account or history of these cocoons, of which we were continually encountering horseload after horseload.

"As you will perceive, unless suffering from a severe cold in the head, the odour arising from these cocoons is not the most agreeable; but this arises partly from the neglect and want of care of the peasants themselves, who, reeling off basketful after basketful of cocoons, suffer the dead insects within to be thrown



BUTTERFLIES OF PALESTINE.

SYRIAN GRAYLING.

SYRIAN ORANGE-TIP.

SYRIAN SWALLOW-TAIL.

about and accumulate round the house, where they putrefy and emit noxious vapours."

Although our limits will not permit the cultivation of the Silkworm to be described more fully, it may here be added that all silk-growers are full of superstition regarding the welfare of the caterpillars, and imagine that they are so sensitive that they will die of fear. The noise of a thunderclap is, in their estima-

tion, fatal to Silkworms; and the breeders were therefore accustomed to beat drums within the hearing of the Silkworms, increasing the loudness of the sound, and imitating as nearly as possible the crash and roll of thunder, so that the caterpillars might be familiar with the sound if the thunderstorm should happen to break near them.

FLIES.

Flies of Scripture—Annoyance caused by the House-fly—Flies and ophthalmia—Signor Pierotti's account of the Flies—The sovereign remedy against Flies—Causes of their prevalence.

THERE are two Hebrew words which are translated as "fly." One is *zebub*, and the other is *arob*, the latter being applied to the flies which were brought upon Egypt in the great plague. It is probable that some different species is here signified, but there is no certainty in the matter. Any species, however, would be a sufficient plague if they exceeded the usual number which infest Egypt, and which at first make the life of a foreigner a burden to him. They swarm in such myriads, that he eats flies, drinks flies, and breathes flies.

Not the least part of the nuisance is, that they cluster in the eyes of those who are affected with the prevalent ophthalmia, which is so fertile a cause of blindness, and so convey the infection with them. A stranger is always struck with the appearance of the children, who have quantities of these pests upon and about their eyes, and yet seem perfectly unaffected by a visitation which would wellnigh drive a European mad.

Signor Pierotti writes feelingly on the subject:—

"These insects sometimes cause no slight suffering in Palestine, as I can vouch from my own experience. However large or however small they may be, a rabid and restless foe, they attack alike, and make themselves insufferable in a thousand ways, in every season and place, in the house and in the field, by day and by night.

While I was encamped near the tents of the Bedawin, in the neighbourhood of the Jordan, and to the south of Hebron, flies were brought in such numbers by the east wind that all, beasts and men, were in danger of being choked by them, as they crept into our ears, noses, and mouths, and all over our bodies. My servant and I were the first to fly from the pest, as we were spotted all over like lepers with the eruption caused by their bites: the Bedawin themselves were not slow to follow our example.

“The flies, therefore, still infest Palestine as they did of old, except that they are not now so numerous as to compel the chiefs of the villages or tribes (answering to the kings of the Pentateuch and Joshua) to evacuate the country before them.

“The Philistines had a special deity whom they invoked against these pests, Baalzebub, the God of Flies, whose temple was at Ekron. The reason of this is evident at the present day, for the ancient country of the Philistines is infested with insect plagues, as I experienced to my cost.

“As, however, we had no faith in Baalzebub, we were obliged to arm ourselves with fly-traps and stoical patience. Many travellers bring with them a perfect druggist’s shop from Europe as a protection against these nuisances, and leave behind them this only efficacious remedy, patience. This I strongly recommend; it is very portable, very cheap, and equally useful in all climates.

“It is especially valuable in the case of the insects, as they are found everywhere in greater or less numbers; especially in the dwellings, where they are nourished by the carrion that lies about, the heaps of rubbish, the filth of the streets, the leakage of cesspools and sewers, the dirt in the houses, the filthy clothing worn by the people, and the kind of food they eat. Though the country of Baalzebub is deserted and enslaved, the flies are still abundant and free, self-invited guests at the table, unasked assistants in the kitchen, tasting everything, immolating themselves in their gastronomic ardour, and forming an undesired seasoning in every dish.”

GNATS.

The Gnat of Scripture—Straining out the Gnat and swallowing the camel, a typographical error—Probable identity of the Gnat and the mosquito.

It has already been stated that only one species of fly is mentioned by name in the Scriptures. This is the Gnat, the name of which occurs in the familiar passage, “Ye blind guides, which strain at a gnat and swallow a camel” (Matt. xxiii. 24).



NOXIOUS FLIES OF PALESTINE.

MOSQUITO.

CAMEL FLY.

I may again mention here that the words “strain at” ought to have been printed “strain out,” the substitution of one for the other being only a typographical error. The allusion is made to a custom which is explained by reference to the preced-

ing article on the fly. In order to avoid taking flies and other insects into the mouth while drinking, a piece of thin linen stuff was placed over the cup, so that if any insects, as was usually the case, had got into the liquid, they would be "strained out" by the linen.

Whether or not any particular species of insect was signified by the word "gnat" is very doubtful, and in all probability the word is only used to express the contrast between the smallest known insects and the largest known beasts. Gnats, especially those species which are popularly known by the word "mosquito," are very plentiful in many parts of Palestine, especially those which are near water, and are as annoying there as in other lands which they inhabit.

THE LOUSE.

Insect parasites—The plague of Lice—Its effect on the magicians or priests—The Hebrew word *Chinnim*—Probability that it may be represented by "tick"—Habits of the ticks, their dwellings in dust, and their effects on man and beast.

WE close the history of insects mentioned in Scripture with two parasites of a singularly disagreeable character.

With respect to the former of them, we find it mentioned in the account of the great plagues of Egypt. After the two plagues of the waters and the frogs, both of which were imitated by the magicians, *i.e.* the priests, a third was brought upon Egypt, which affected the magicians even more than the people, for a reason which we shall presently see:—

"And the Lord said unto Moses, Say unto Aaron, Stretch out thy rod, and smite the dust of the land, that it may become lice, throughout all the land of Egypt.

"And they did so; for Aaron stretched out his hand with his rod, and smote the dust of the earth, and it became lice in man

and in beast; all the dust of the land became lice throughout all the land of Egypt.

“And the magicians did so with their enchantments to bring forth lice, but they could not: so there were lice upon man and upon beast.”

Now it is hardly possible to conceive a calamity which would have told with greater effect upon the magicians, by whose advice Pharoah had resisted the requests of Moses and Aaron.

Living in a land where all, from the highest to the lowest, were infested with parasites, the priests were so much in advance of the laity that they were held polluted if they harboured one single noxious insect upon their persons, or in their clothing. The clothing, being linen, could be kept clean by frequent washing, while the possibility of the body being infested by parasites was prevented by the custom of shaving the whole of the body, from the crown of the head to the sole of the foot, at least once in every three days.

It may easily be imagined, therefore, how terrible this visitation must have been to such men. As swine to the Pharisee, as the flesh of cattle to the Brahmin, so was the touch of a parasite to the Egyptian priest. He was degraded in his own estimation and in that of his fellows. He could perform no sacred offices: so that, in fact, all the idolatrous worship of Egypt ceased until this particular plague had been withdrawn.

We now come to a consideration of the insect which is signified by the Hebrew word *chinnim*. Sir Samuel Baker is of opinion that the word ought to have been translated as “ticks,” and for the following reasons:—

After quoting the passage which relates to the stretching of Aaron’s rod over the dust, and the consequence of that action, he proceeds as follows: “Now the louse that infests the human body and hair has no connexion whatever with dust, and, if subjected to a few hours’ exposure to the dry heat of the burning sand, it would shrivel and die. But a tick is an inhabitant of the dust, a dry horny insect, without any apparent moisture in its composition. It lives in hot sand and dust, where it cannot possibly obtain nourishment until some wretched animal should lie down upon the spot, and become covered with these horrible vermin.

“I have frequently seen dry desert places so infested with

ticks that the ground was perfectly alive with them, and it would have been impossible to have rested upon the earth. In such spots, the passage in Exodus has frequently seemed to me as bearing reference to these vermin, which are the greatest enemy to man and beast. It is well known that from the size of a grain of sand, in their natural state, they will distend to the size of a hazel nut after having preyed for some days on the body of an animal."

Granting that this suggestion be the correct one, as it certainly is the most consistent both with actual facts and with the words of Holy Writ, the plague would lose none of its intensity, but would, if anything, be more horrible. Only those who have suffered from them can appreciate the miseries caused by the attack of these ticks, which cling so tightly that they can scarcely be removed without being torn in pieces, and without leaving some portion of their head beneath the skin of their victim. Man and beast suffer equally from them, as is implied in the words of Scripture, and, unless they are very cautiously removed, painful and obstinate is the result of their bites.

THE FLEA.

Prevalence of the Flea in the East, and the annoyance caused by them to travellers—Fleas of the Lebanon—The Bey's bedfellows—The Pasha at the bath—Use of the word in Scripture.

THIS active little pest absolutely swarms in the East. The inhabitants are so used to the Fleas that either the insects do not touch them, or by long custom they become so inured to their attack that the bites are not felt.

But every traveller in Eastern lands has a tale to tell about the Fleas, which seem to be accepted as one of the institutions of the country, and to be contemplated with perfect equanimity. Miss Rogers, for example, in her "Domestic Life in Palestine," mentions how she was obliged to stand upon a box in order

to be out of the reach of a large company of Fleas that were hopping about on the floor!

Mr. Urquhart, experienced Orientalist as he was, found on one occasion that the Fleas were too strong for him. He had forgotten his curtain, and was invaded by armies of Fleas, that marched steadily up the bed and took possession of their prey. The people were quite amused at his complaints, and said that their Bey could not sleep without a couple of hundred of them in his bosom. Mr. Urquhart suggests that these little creatures act as a wholesome irritant to the skin, and says that the last two mouthfuls of every meal are for the benefit of the Fleas.

In order to show the perfect indifference with which the presence of these little pests is regarded, I quote a passage from Mr. Farley's "*Druses of the Lebanon*." He was in a Turkish bath, and was much amused at a scene which presented itself.

"A man, whose skin resembled old discoloured vellum, was occupying himself with the somewhat undignified pursuit of pursuing with great eagerness something that, from the movement of his hands, seemed continually to elude him, jumping about and taking refuge in the creases and folds of his shirt, that was spread out over his lap as he sat cross-legged on his bedstead like a tailor on his board. This oddity was no less a dignity than a Pasha."



SCORPION.

THE SCORPION.

The Scorpions of Palestine—Habits of the Scorpion—Dangers of mud walls—
Venom of the Scorpion—Scorpions at sea—The Scorpion whip, and its use—
The Scorpion Pass.

SCORPIONS are exceedingly common in Palestine, and to a novice are a constant source of terror until he learns to be accustomed to them. The appearance of the Scorpion is too well known to need description, every one being aware that it is in reality a kind of spider that has the venom claw at the end of its body, and not in its jaw. As to the rendering of the word *akrabbim* as "Scorpions," there has never been any doubt.

These unpleasant creatures always manage to insinuate themselves in some crevice, and an experienced traveller is cautious where the Scorpions are plentiful, and will never seat himself in the country until he has ascertained that no Scorpions are beneath the stones on or near which he is sitting. Holes in walls are favourite places of refuge for the Scorpion, and are very plentiful, the mud walls always tumbling down in parts, and affording homes for Scorpions, spiders, snakes, and other visitors.

The venom of the Scorpion varies much in potency according to the species and size of the creature, some of the larger Scorpions being able to render a man ill for a considerable time, and even to kill him if he should be a sensitive subject. So much feared were the Scorpions that one of the chief privileges of the Apostles and their immediate followers was their immunity from the stings of Scorpions and the bite of venomous serpents.

It is said, however, that after a person has been stung once by a Scorpion, he suffers comparatively little the second time, and that if he be stung three or four times, the only pain that he suffers arises from the puncture. Sailors also say that after a week at sea the poison of the Scorpion loses its power, and that they care nothing for the Scorpions which are sure to come on board inside the bundles of firewood.

Those passages which mention the venom of the Scorpion are numerous, though most, if not all, of them occur in the New Testament. See Rev. ix. 5: "And to them it was given that they should not kill them, but that they should be tormented five months, and their torment was as the torment of a scorpion, when he striketh a man." Also ver. 10 of the same chapter: "And they had tails like unto scorpions: and there were stings in their tails: and their power was to hurt men five months."

There is, also, the well-known saying of our Lord, "If a son shall ask an egg, will he offer him a scorpion?" (Luke xi. 12.) And in the preceding chapter of the same Evangelist Scorpions are classed with serpents in their power of injury: "Behold, I give unto you power to tread on serpents and scorpions, and over all the power of the enemy; and nothing shall by any means hurt you."

THERE is another reference to the Scorpion in the Old Testament, which requires an explanation. It forms part of the rash

counsel given to Rehoboam by his friends : " My father made your yoke heavy, and I will add to your yoke ; my father also chastised you with whips, but I will chastise you with scorpions."

The general tenor of this passage is evident enough, namely, that he intended to be far more severe than his father had been. But his words assume a new force when we remember that there was a kind of whip called a Scorpion. This terrible instrument was made for the express purpose of punishing slaves, so that the mere mention of it was an insult. It consisted of several thongs, each of which was loaded with knobs of metal, and tipped with a metal hook, so that it resembled the jointed and hooked tail of the Scorpion. This dreadful instrument of torture could kill a man by a few blows, and it was even used in combats in the amphitheatre, a gladiator armed with a Scorpion being matched against one armed with a spear.

THE SPIDER.

Spiders of Palestine.

THERE are very many species of Spider in Palestine ; some which spin webs, like the common Garden Spider, some which dig subterranean cells and make doors in them, like the well-known Trap-door Spider of Southern Europe, and some which have no webs, but chase their prey upon the ground, like the Wolf and Hunting Spiders.

THE HORSE LEECH.

Signification of the word *Alukah*—Leeches in Palestine—The horse and the Leech.

IN Prov. xxx. 15 there is a word which only occurs once in the Scriptures. This is *alukah*, which is translated as horse-leech. "The horseleech hath two daughters, crying, Give, give."

The Leeches are very common in Palestine, and infest the rivers to such an extent that they enter the nostrils of animals who come to drink, and cause great annoyance and even danger. The following anecdote, related by Mr. H. Dixon in his "Holy Land," gives us a good idea of the prevalence of the Leeches, and the tenacity with which they retain their hold:—

"At Beit-Dejan, on a slight twist in the road, we find the wheel and well, and hear a delicious plash and rustle in the troughs. To slip from my seat to dip Sabeah's nose into the fluid is the work of a second; but no sooner has she lapped up a mouthful of water, than one sees that the refuse falling back from her lips into the tank is dabbled and red. Opening her mouth, I find a gorged leech dangling from her gum. But the reptile being swept off, and the mare's nose dipt into the cooling stream, the blood still flows from between her teeth, and, forcing them open, I find two other leeches lodged in the roof of her mouth.

"Poor little beast! how grateful and relieved she seems, how gay, how gentle, when I have torn these suckers from her flesh, and soused the water about her wounds; and how my hunting-whip yearns to descend upon the shoulders of that laughing and careless Nubian slave!"

Persons passing through the river are also attacked by them, and, if they have a delicate skin, suffer greatly.



CORAL.

SPONGE AND CORAL.

Use of the Sponge in Scripture—Probability that the ancient Jews were acquainted with it—Sponges of the Mediterranean—The Coral, and its value—Signification of the word *Ramoth*.

THERE is little to be said on either of these subjects.

Sponge is only mentioned with reference to the events of the Crucifixion, where it is related that a soldier placed a sponge upon hyssop, dipped it in vinegar (*i.e.* the acid wine issued to the Roman soldiers), and held it to the Lord's lips. There is

little doubt that the ancient Hebrews were fully aware of the value of the Sponge, which they could obtain from the Mediterranean which skirted all their western coasts.

THE Coral is mentioned in two passages of Scripture: "No mention shall be made of coral, or of pearls" (Job xxviii. 18). The second occurrence of the word is in Ezek. xxvii. 16: "They occupied in thy fairs with emeralds, purple, and brodered work, and fine linen, and coral, and agate."

This Coral, which is described as being brought from Syria, was probably that of the Red Sea, where the Coral abounds, and where it attains the greatest perfection.



THE END.

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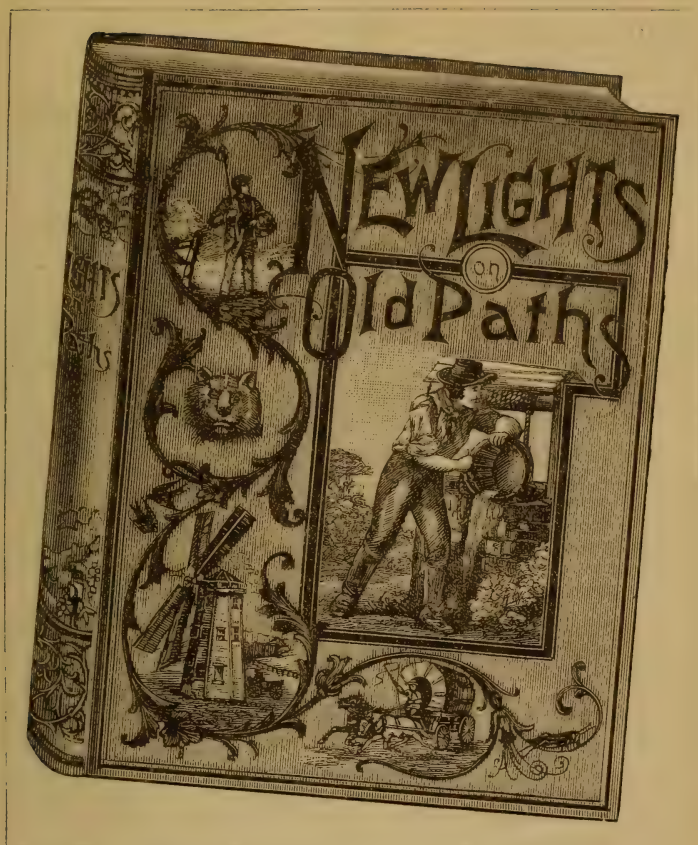
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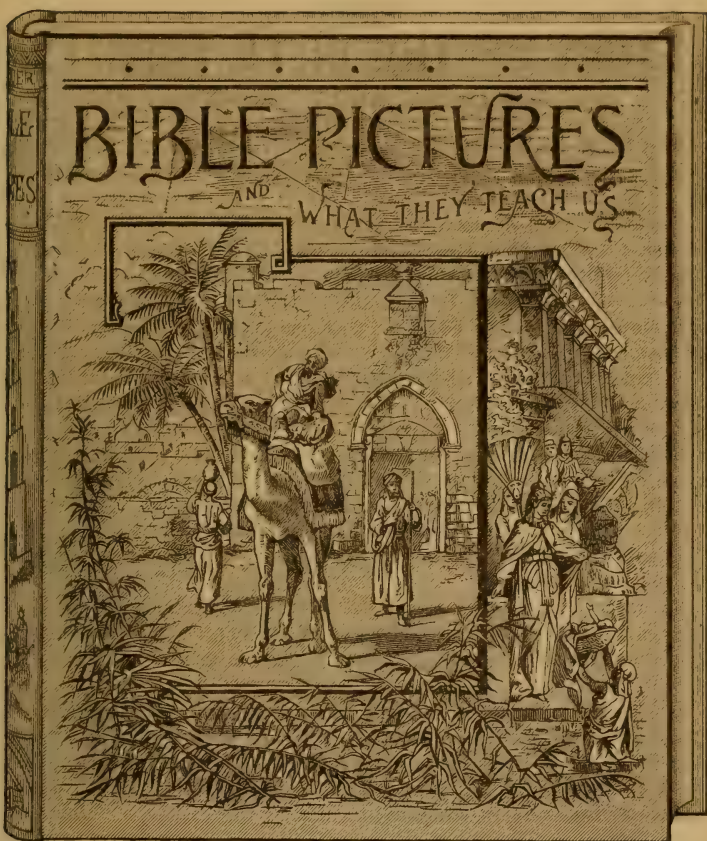
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In the never-changing East this is in many respects a counterpart of the times in which the Bible was written. The Arab as he speeds across the desert upon his swift dromedary, or sits at the door of his tent watching his flocks and herds, retains many of the customs which prevailed in the time of Abraham.

The wild animals of these countries still roam through the forests and are hunted and slain by mankind. The crocodile and hippopotamus of the Nile are yet found in that mighty river, and yield their lives to the courage and skill of modern hunters as did those of old.

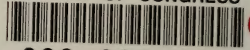
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The Arabian proverb¹ is an example of the kind of association between the color of a horse and its other attributes that would have been possible in the ancient Near East: “The fleetest of horses is the chestnut, the most enduring the bay, the most spirited the black, and the most blessed the white”

I would like to add this: the film ends with the image of the horses in the rain. In this manner, we wanted to come back to the symbol of life, because for me the horse symbolizes life. This may be my internal subjective vision, but the fact is that, when I see a horse, it seems to me that I have life itself before me. Because it is at the same time very beautiful, very familiar, and very significant in Russian life. In fact, there are a lot of horses in our film. An example: in the balloon sequence, there is a horse, and it is the horse who looks sad because of the death of the man who flew. Another horse dies during the sack of Vladimir and symbolizes all the horror of violence. In a manner of speaking, the horse is the witness and the symbol of life throughout the film. By returning to the image of the horses in the last shots, we wanted to highlight that the source of all of Roublev's art is life itself.

Don Quixote



Miguel de Cervantes