

**On the earlier notices relative to the natural history of the giraffe / by
Frederic Holme.**

Contributors

Holme, Frederic.
Royal College of Surgeons of England

Publication/Creation

Oxford : Printed by S. Collingwood, printer to the University, for the
Ashmolean Society, 1838.

Persistent URL

<https://wellcomecollection.org/works/uc52nrx4>

Provider

Royal College of Surgeons

License and attribution

This material has been provided by This material has been provided by The Royal College of Surgeons of England. The original may be consulted at The Royal College of Surgeons of England. where the originals may be consulted. This work has been identified as being free of known restrictions under copyright law, including all related and neighbouring rights and is being made available under the Creative Commons, Public Domain Mark.

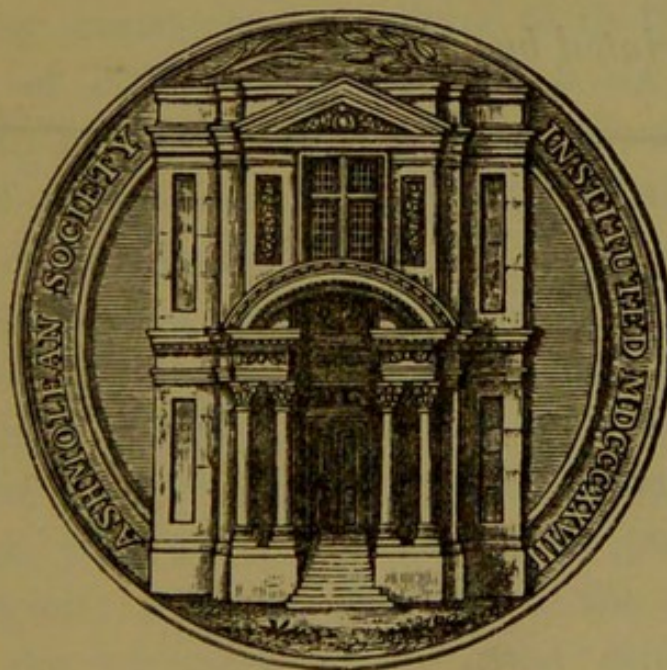
You can copy, modify, distribute and perform the work, even for commercial purposes, without asking permission.



Wellcome Collection
183 Euston Road
London NW1 2BE UK
T +44 (0)20 7611 8722
E library@wellcomecollection.org
<https://wellcomecollection.org>

ON THE
EARLIER NOTICES
RELATIVE TO
THE NATURAL HISTORY
OF THE
GIRAFFE.

BY
FREDERIC HOLME, M.A. F.Z.S.
FELLOW OF CORPUS CHRISTI COLLEGE.



OXFORD,
PRINTED BY S. COLLINGWOOD, PRINTER TO THE UNIVERSITY, FOR
THE ASHMOLEAN SOCIETY.

MDCCCXXXVIII.

The Ashmolean Society desire it to be understood, that they are not answerable, as a body, for any facts, reasonings, or opinions, advanced in papers printed by them.

ON THE
EARLIER NOTICES
RELATIVE TO THE NATURAL HISTORY
OF
THE GIRAFFE.

READ TO THE ASHMOLEAN SOCIETY, MARCH 26, 1838.

THE extraordinary form and lofty stature of the giraffe, or camelopard, combined with the singular mixture of different groups, which its characters appear to present, have rendered it in all ages an object of attention and wonder. "In the contemplation of this animal," says Col. Hamilton Smith, in his treatise on the Ruminantia, (Griffith's translation of the *Règne Animal* vol. iv. p. 150.) "our imagination is involuntarily led back to the early epochs of the earth, when colossal beings peopled the earth, and were the undisputed possessors of every region : we fancy ourselves in the presence of one of the survivors of the great diluvian catastrophe, when the mastodon, the megatherium, and perhaps its own congeners, were swept away, to leave this one species, among a few others, to attest what were the forms of a primitive animated nature." From the complete isolation of this singular

animal in family, genus, and species^a, it is impossible to misapply any description intended for it, however distorted or imperfect: while at the same time its appearance, form, and colours, are too remarkable for the most cursory or superficial writer on general zoology, who was aware of its existence, to pass it without notice. Hence, from the earliest period at which it became known to civilized nations we find repeated mention of the giraffe in the works of historians and geographers, as well as of professed zoologists: and as living specimens were from time to time brought into Europe, at first for exhibition in the splendid shows and processions of the Roman emperors, and in later ages as presents from the Mohammedan princes of Africa to the European sovereigns with whom they held diplomatic intercourse, it might have been expected that tolerably accurate notions of its form and manners would have reached us from early writers. But the accounts thus transmitted are, generally speaking, so confused and contradictory, that in some instances even their application to the animal under consideration can be determined only by the ascertained non-existence of any other species^a with which it might be confounded: so unsatisfactory, indeed, did these early notices appear, that when nearly 300 years had elapsed since a living specimen had been seen in Europe, (the last, I believe,

^a Mr. Ogilby, in his arrangement of the Ruminantia, (Proceedings of Zoological Soc. part iv. p. 134.) says, "Duo species sunt *Camelopardalis Æthiopicus* et *C. Capensis*:" but without stating on what grounds he supposes this specific distinction to rest.

being the one sent, A. D. 1487, to Lorenzo dei Medici, by Malec-al-Ashraf Kayd-Bey, the Circassian sultan of Egypt,) some naturalists began even to entertain doubts of the separate existence of the giraffe, the statements respecting which appeared at once so vague, and so much at variance from all known forms among quadrupeds;—and the idea that it might be referred to one of the large variegated African antelopes was the more plausible, as the greater number of its early describers strangely omit all mention of its extraordinary stature, and the few who notice this point might, from the notorious propensity of zoologists of that age to crowd their pages with marvels, be not unreasonably suspected of exaggeration. The stature of those seen in Europe might also probably be less remarkable from the animals being taken young, and not surviving long in captivity: and this must certainly have been the case in the one which Prosper Alpinus saw at Alexandria in 1581, and describes as being about the size of a small horse.

From the time of Prosper Alpinus to the latter part of the last century, when all doubts were cleared up by its discovery at the Cape, a locality more accessible to Europeans than its previously known habitat of Central Africa, no European writer, except Hasselquist, appears to have seen either the giraffe or its skin; and the accounts published during that interval are consequently copied from the earlier notices. A meagre and technical account, adding little or nothing to our real knowledge of the animal, was published by Hasselquist in 1762, from a skin seen at Suez: but the skins brought to Europe from the Cape by Gordon and Patterson, and sub-

sequently by Le Vaillant, with the details of the manners, and the accurate figures, published by the latter, at once restored the giraffe to its legitimate station in the animal kingdom: and demonstrated that the accounts given of its anomalous form and structure, however caricatured and disfigured by fiction, had their origin in an existing quadruped, the actual proportions and details of which were little less extraordinary than the most marvellous statements of its former historiographers. On such of these earlier notices as appear to possess interest, either from their singularity, or from having been taken from the living animal, I shall proceed to offer some remarks; arranging my quotations in the chronological order of the authors from whom they are taken.

From the neighbourhood of Egypt to Ethiopia, we might anticipate that the giraffe would be known to the ancient Egyptians: and accordingly we find it represented in the monuments of Thebes, where the chiefs of four different nations bring tribute and presents to Thothmes III. who is supposed to have been the Pharaoh under whose reign the Israelites quitted Egypt. (Wilkinson's *Ancient Egyptians*, i. 54.) The figure, as copied in Wilkinson's work, is by far the most accurate and characteristic representation of the animal which existed till within a few years, shewing the gait and attitude with remarkable spirit and fidelity: the individual represented appears from the height to have been a young one, and is led by two men by lines attached to each fore-leg, while a monkey is climbing up its neck; the figures of baboons, leopards, antelopes, &c. which appear in the same procession, are equally

faithful resemblances. It nevertheless appears doubtful whether the animal was known to the Israelites: the *zemer*, זֶמֶר, mentioned in Deuteronomy xiv. 5. is rendered “camelopardalis” both in the Septuagint and Vulgate, and *zorāfa* (الزرافة), or giraffe, in the Arabic version: but Bochart (Hiero-Zoïcon, lib. iii. c. 21.) contends that the Hebrew word implies a wild goat, or some leaping animal, an interpretation adopted in our authorized version, where it is rendered *chamois*: and the probability of this is strengthened when we consider, that even if the Israelites had been acquainted with the giraffe in Egypt, it was not at any period a native of Palestine, whither they were then directing their course, and to which the animals permitted or prohibited as food would in all likelihood be indigenous.

To Aristotle, the father of scientific zoology, the giraffe seems to have been unknown: and the earliest author who gave a description of it was apparently the Sicilian Timæus, who lived about 260 years before Christ: his works, in their original language, have perished, but some fragments of them are preserved by Arabic writers: and among these is a passage quoted in the “Wonders of the Creation,” (عجائب المخلوقات), by Zakaria Ebn Mohammed Al Kazwini, to the following effect:—“Timat (Timæus) relates, that in the south, near the equator, animals of all species assemble in summer near the waters to quench the thirst which consumes them: this leads to connexions between animals of different species, and from these ill-assorted unions spring such strange animals as the giraffe, the *sima*, the *isbar*, &c. Among all these

animals, the giraffe is the most wonderful, both for the beauty of its form, and the extraordinary manner of its production. For they say that the giraffe proceeds from a female Ethiopian camel, a wild cow, and a male hyæna: for in Ethiopia, the male hyæna pairing with a female camel, she gives birth to a young one partaking of the natures of both parents: and if this happens to be a male, and to pair in its turn with a wild cow, the result of this second cross is the giraffe." It is not quite clear from the context whether the details of this strange genealogy are given by Kazwini on his own authority, or form part of the quotation from Timæus: the wild cow mentioned (in the Arabic البقرة الوحشية), is the addax antelope, (*Strepsiceros* of Pliny,) a large species, of the African deserts. The next author, in point of time, to Timæus, in whom I find any details relative to the giraffe, is Agatharchidas, who wrote an account of the Red sea, and the countries bordering on it, about B. C. 180. "In the region of the Troglodytes," he says, "is found the animal called by the Greeks *καμηλο-πάριδαλις*, a compound term in accordance with its mixed nature. For its colour is varied like that of a panther, but its size is that of a camel: the thickness is disproportionate, and the neck so long that it can gather its food from the tops of trees." It may be remarked that Agatharchidas speaks of the animal as already known to the Greeks, and they had doubtless become acquainted with him through the conquests of the Macedonian kings of Egypt.

The earliest indication of the giraffe being known to the Romans is afforded by the famous mosaic pavement placed by Sylla in the temple of Fortune

at Præneste, where two spotted giraffes appear together, as well as a larger animal with short horns, but without spots, and with a name written over, which has been variously read YABOUC and PA-ΦOYC, words supposed by Col. Hamilton Smith to bear some relation to Nabis, the name applied by Pliny to the giraffe. The explanation of this mosaic has given rise to some controversy: Father Kircher supposing it to be an allegorical representation of the vicissitudes of Fortune, while others consider that the subjects depicted illustrate the progress of Alexander the Great through Egypt to the cataracts of the Nile. But the silence of Aristotle on the giraffe is almost conclusive against its being known to Alexander. But for the direct testimony of Pliny that Julius Cæsar was the *first* who brought it to Rome, I should be inclined to suspect that the various animals portrayed were those exhibited by Sylla in the splendid shows of his ædileship; and for the importation of which from northern Africa, his friendship with the Numidian prince Bocchus gave him such facilities, that the populace (according to Sylla's own Commentaries as quoted by Plutarch) refused to elect him prætor till he had served the office of ædile, lest they might lose the sight of the African rarities which they expected him to bring forward in the latter capacity. The absence of the giraffe from these games seems to prove that then, as now, it was confined to the south of the Sahara: in this case its introduction into the Prænestine mosaic may probably be explained by supposing the artists to have been Egyptian Greeks, to whom this kind of work appears, till a much later period, to have

been confined ^b, and who would naturally represent the animals known in their own country.

The magnificent triumph of Julius Cæsar over the East, on his return from his Egyptian campaign, was the first occasion on which a giraffe was seen at Rome; and the interest and astonishment excited by its singularity of form and beauty of colouring, are evidenced by the numerous notices which we find in the authors who treat of this period. Varro (*De Lingua Latina*, lib. iv.) speaks of the Camelopardalis as “the animal lately brought over from Alexandria, resembling the camel in form, and the panther in markings;”—his predilection for the party of Pompey, perhaps, restraining him from giving more than this brief notice of an animal, for the knowledge of which Europe was indebted to the rival and conqueror of his old commander.

Dio (who wrote three centuries after the time) thus describes the giraffe, (lib. xliii.) in his account of Cæsar’s triumph: “This animal is in all respects like a camel, except that its limbs are not of equal proportions: for its hind-legs are much lower than the fore, and the body, from the loins forward, is raised and shortened, so that it appears as if it ascended; and the anterior part of the body, which is raised up highest, is further elevated by the great length of the fore-legs: the neck also is remarkably long. It is spotted like a panther, whence its name.” No notice is here taken of its stature: and this and other descriptions are in error in attributing the elevation of the anterior part of

^b See a note by Col. Hamilton Smith, in Griffiths’ *Règne Animal*, iv. 154.

the body to the greater length of the fore-legs, as it results from the length of the omoplate, or shoulder-blade, and the great extension of the spinous processes of the vertebræ of the back ; the hind and fore-legs being nearly of the same length.

From this time, according to Pliny, the giraffe was not unfrequently seen in Rome : the constant intercourse between Italy and the province of Egypt facilitating the transmission of the wonders of Africa to the imperial city. Strabo, writing in the reign of Augustus, gives the most detailed account of its appearance and manners which had hitherto appeared : and his description will be read with interest, as the geographer, from his extensive travels in Upper Egypt, had probably seen the animal amidst its native scenery, as well as in the confinement of a Roman menagerie. “ In these countries is produced the camelopardalis, an animal not at all resembling a panther, as might be imagined : for in the variegation of its colours it more resembles a fawn, and is marked with striped hairs (*ῥαβδωτοῖς πῖλοις κατεστιγμέναι*) : the hind quarters are lower than the fore, seeming to settle down towards the tail, where it is not higher than an ox, whereas the fore-legs are as high as those of a camel : the neck is straight, and raised to a great height, so that to the top of the head it is much taller than a camel. From this disproportion of parts, I should not think the animal likely to possess the extraordinary swiftness attributed to it by Artemidorus, who says, that nothing can overtake it. It is not, however, a ferocious animal, but graminivorous in its habits (*οὐδὲ θηρίον ἀλλὰ βόσκημα μάλλον*).” He further notices, as natives of the same country, the sphinges and cynocephali, different species of baboons, which

appear in the Theban monuments in the same procession as the giraffe.

Horace indicates this animal as forming part of the customary attractions of the Circensian games^c:

———— seu
Diversum confusa genus panthera camelo,
Sive elephas albus vulgi converteret ora.

Epist. II. 1. 195.

[a passage which may be considered as proving incidentally the former existence of an albino variety in the African elephant, the white individuals of the Asiatic species being confined to Ceylon and Birmāh; countries unknown to Europeans in the age of Horace. The African elephant is now confined to the south of that continent, and is not known to occur of a white colour in the present day: if, unlike its Asiatic congener, it bred in confinement, as some zoologists have supposed, it would doubtless vary in colour like other domesticated animals. The period at which its domestication fell into disuse does not exactly appear: it continued longest in Ethiopia. The negus of Abyssinia received the ambassadors of Justinian, A. D. 533, on a platform or chariot drawn by four elephants: and in the famous attack of Mekka by the Abyssinians, A. D. 569, their general Abrahah was mounted on a white elephant: whence the 105th chapter of the Koran, in which this incident is recorded, is entitled the "Chapter of the Elephant." The conquest of Africa by the Saracens, at the beginning of the next century, probably hastened its final disuse; as the superiority

^c Pausanias (lib. 9.) says, that he had seen at the Roman games Indian camels spotted like panthers, which can refer only to the giraffe.

of the Arabian camel to the elephant, in swiftness and power of abstinence, would reduce the latter to comparative inutility on the sandy deserts of Barbary.]

The account of the giraffe given by Pliny (Hist. Nat. lib. viii. c. 28.), and copied almost verbatim by his plagiarist Solinus, is singularly meagre, when we consider the length of time the animal had been known. “Nabin Æthiopes vocant, collo similem
“equo, pedibus et cruribus bovi, camelo capite, albis
“maculis rutilum colorem distinguuntibus, unde ap-
“pellata camelopardalis, dictatoris Cæsaris ludis
“Circensibus primum visa Romæ. Ex eo subinde
“cernitur, aspectu magis, quam feritate, conspicua:
“quare etiam *ovis feræ* nomen invenit.” The name Nabis is curious, as corresponding almost exactly with the Hottentot term *Naïp*: but the colours of the ground and the spots are inverted in the description, and but for the mention of the name Camelopardalis, it would have been difficult to decide the animal meant: and in this, as in all the preceding notices, no mention is made of the existence of horns, though the animal might almost be considered to have three; the frontal prominence differing in little but length from the horns, which are themselves merely prolongations of the bone of the skull, without any solution of continuity. These horns, however, are mentioned by no ancient writer up to Oppian, who introduces a very spirited description of the animal at the end of the third book of the *Cynegetica*:

Ἐννεπέ μοι κα̐κεῖνα, πολύθροε μοῦσα λιγεία,
Μικτὰ φύσιν θηρῶν, διχόθεν κεκερασμένα φῦλα,
Πόρδαλιν αἰολόνωτον ὁμοῦ ξυνήν τε καμήλω.

Ζεῦ πάτερ, ὅσσα νοήσας, ὅς' εἶδεα νῶϊ φύτευσας,
 Ὅσσα βροτοῖσιν ὅπασσας, ὅς' εἰναλῖος νεπόδεσσιν,
 Ὅς τόδ' ἐμήσαο πάγχυ καμήλων αἰόλον εἶδος,
 Ἀμφιέσας ῥινοῖσιν ἀναιδέσι πορδαλίεσσι,
 Φαιδίμον, ἱμερόεν, τιθασὸν γένος ἀνθρώποισι
 Δειρή οἱ ταναή, στικτὸν δέμας, οὔατα βαιὰ,
 Ψιλὸν ὑπερθε κάρη, δολιχοὶ πόδες, εὐρέα ταρσά.
 Κώλων δ' οὐκ ἴσα μέτρα, πόδες δ' οὐ πάμπαν ὁμοῖοι
 Ἀλλ' οἱ πρόσθεν ἔασιν ἀρείονες, ὑστάτιοι δὲ
 Πολλὸν ὀλιζότεροι, κατὰ τ' ὀκλάζουσιν ὁμοῖοι.
 Ἐκ δὲ μέσης κεφαλῆς δίδυμον κέρας ἰθὺς ὀρούει,
 Οὔτι κέρας κερόεν, παρὰ δ' οὔατα μεσσοῦσι κόρσης
 Ἀβληχραὶ κροτάφοισιν ἐπαντέλλουσι κεραῖαι.
 Ἄρκιον, ὡς ἐλάφοιο, τέρεν στόμα, λεπταλέοι τε
 Ἐντὸς ἐρηρέδαται γαλακτόχροες ἀμφὶς ὀδόντες·
 Αἶγλην παμφανόωσαν ἀπαστράπτουσιν ὀπωπαί·
 Οὐρὴ δ' αὖτ' ἐλάχεια, θαῖς ἅτε δορκαλίδεσσιν,
 Ἀκραισιν μετόπισθε μελαινομένησιν ἐθείραις.

The exactness of this description, independent of its poetic merits, is in some points remarkable: particularly in the observation that the so-called horns do not consist of horny substance (οὔτι κέρας κερόεν): and in the allusion to the pencils of hair (ἀβληχραὶ κεραῖαι) with which they are tipped. That the animal must have been seen alive by Oppian, is evident from his remark on the brilliancy of the eyes, and the halting motion of the hinder limbs: and his sketch is altogether so vivid and characteristic, that it makes some amends for the obscure and imperfect notices quoted above. In his catalogue of animals he places it next to the ostrich, apparently from the idea that their common resemblance, in some points, to the camel, constituted a sort of relationship between them.

As Oppian died at the age of thirty, A. D. 213, he could scarcely have derived his knowledge of the

giraffe from the one which Dion states Commodus to have produced, A. D. 190, among the animals which he slew with his own hand in the circus, for the purpose of displaying his skill as an archer^d. It is more probable that he drew his description from the numerous specimens imported in the early part of the third century by the Gordian family, whose vast estates in Africa enabled them to adorn the magnificent shows which they exhibited to the people, with many animals till then rare or unknown. The menagerie (*sylva*) of the eldest Gordian when quæstor was exhibited, according to Capitolinus (Hist. Aug. Script. ii. 81.) by paintings in the Domus Rostrata, a palace built by Pompey the Great, which at that time was the family mansion of the Gordians: among the rarities which it contained, and which were all abandoned to the populace on the last day of the festival, are enumerated 100 palmated stags (*cervi palmati*), probably fallow-deer, 30 wild horses, 10 elks, 30 onagri, 300 ostriches, 200 ibexes, and 100 *oves feræ*, the name by which, according to Pliny, the giraffe was popularly known. The number appears to stagger Casaubon, who suggests in a note that these *oves feræ* may have been, not giraffes, but genuine wild sheep or *mouflons*, such as exist at the present day in Corsica: but these animals were well known to the

^d Gibbon, in a note on this passage of Dion, says, that at the time he wrote (1776), the giraffe had not been seen in Europe since the revival of letters: he calls it, in one of those antithetical sentences in which he delighted, "the tallest, the most gentle, and the most useless of the large quadrupeds:" but this last epithet is not more applicable to the giraffe than to any other of the larger Ruminantia.

ancients under the names of *musmon* and *tragelaphus*, by which Pliny describes them, and are nowhere designated *oves feræ*: and even if we suppose that an error may have crept into the number in the progress of transcription, it is not probable that the giraffe would be altogether absent from an exhibition, the principal novelties of which were evidently drawn from its native country. Nor will the number of 100, on an occasion of extraordinary splendour and solemnity, appear so remarkable, when we find that the third Gordian, grandson of Gordian the elder, kept in his private menagerie, when emperor, exclusive of the animals devoted to the public games, 10 camelopards, a hippopotamus, a rhinoceros, 20 onagri, 40 wild horses, “et cætera hujusmodi animalia” (says Capitolinus) “innumera et diversa”—all which were either killed or dispersed, two years after the death of Gordian, at the secular and Circensian games given to celebrate the thousandth anniversary of the foundation of Rome, by the emperor Philip the Arabian (ib. 134.).—Thirty years subsequently, only a single camelopard, if the text of Vopiscus is accurate, was seen at the triumph of Aurelian over Zenobia and the East; it was probably brought from the country of the Axumitæ or Abyssinians, who are mentioned among the fifteen conquered nations whose representatives walked in the procession, and whose name still exists in the city of Axum near Gondar.

After the removal of the capital to Constantinople, the giraffe was less frequently seen in Europe: the next notice of it in point of time which has fallen under my observation, is in the 10th book of the Greek romance by Heliodorus, called “The Ethio-

“pics: or the Loves of Theagenes and Chariclea.” (This was a juvenile production of Heliodorus, who, when he afterwards became bishop of Tricca in Thessaly, was severely commented upon for having written it: and the Ecclesiastical History of Nicephorus even asserts, that the provincial synod having given him the option of either burning his novel or resigning his see, he preferred the latter course: but this is contradicted by other writers, and does not appear probable.) In the passage above referred to, he introduces the ambassadors of the Axiomitæ as bringing gifts to Hydaspes king of Ethiopia, “and among them an animal of a strange and wonderful form, in bulk about equal to a camel, and having the skin mottled with florid spots like scales: the hinder parts from the stomach were low like a lion, but the shoulder-blades, fore-feet, and breast, were raised out of all proportion to the other parts: the neck slender, and lengthened out like that of a swan: the head resembling that of a camel’s in form, and rather more than twice as large as that of a Libyan ostrich: its eyes appeared as if painted^e, and it rolled them strangely. It waddled in a way unlike the pace of any other animal, terrestrial or aquatic: moving its legs not alternately, but those on the right both together, and then those on the left in the same manner: it was so tame and gentle that the keeper led it by a small string from the

^e “ὀφθαλμοὺς ὑπογεγραμμένους.” This phrase is erroneously rendered, in the quotation in Griffith’s Cuvier, “eyes which had a film over them:” but ὑπογραφὴ ὀφθαλμῶν implies the colouring of the edges of the eyelids with surmāh, as practised by women in the East; and whoever has seen the full dark eye of the giraffe, must admit the justness of the comparison.

head, as easily as by a strong chain. Its appearance struck the whole multitude with astonishment, and they gave it extempore the name of *Camelopardalis*." The statement of its moving the two legs on the same side at once, proves that Heliodorus must have seen the animal, which might otherwise have been doubted from his saying that the head was only twice the size of that of an ostrich: unless, as old Le Vaillant quaintly remarks on the passage, the relative proportions of the two animals have undergone a great change since that time.

Heliodorus lived at the end of the fourth century, and I have not found any mention of the giraffe being seen in Europe for several hundred years after this time: and the conquest of Egypt and Africa by the Arabs, early in the seventh century, intercepted the communication of the Greeks of the Lower Empire with the countries in which it is found: it appears to have been early known to the Arabs (whose doctors state doubts whether it was permitted for food by the Mohammedan law^f), by the name of *zorafa* or *zorafat* (زرافة), a name derived by Bochart from *zarfa* (زرَف), "to walk with a long stride^g:" a name of which the *ζοραφίς* of the Byzantine Greeks, and the *giraffe* of the Franks, are obviously corruptions.—The Persians, who had never seen it till the union of Asia and Africa, under the sway of the caliphs, introduced Egyptian rarities at the court of Bagdad, designated it in their own language by the compound term *لشتر کاو بلیک* or

^f Bochart.

^g The same author suggests that *Nabis* may be derived from the Arabic *naba* نَبَا, to be raised or exalted.

camel-cow-tiger^h, from the resemblance they perceived in it to all those animals. Various Arabic writers quoted by Bochart, have mentioned or described it: but their accounts contain little to interest, and are generally disfigured by fable. The story of its triple generation by a male hyæna, a female camel, and a wild cow or antelope, is repeated by Ebn Khalcan and other authors besides Kazwini; the hint for this strange fiction seems to have been given by a remark of Aristotle, that the monsters reported to occur in Africa might probably originate from the meeting of different animals at the waters in the deserts: this was applied by Timæus, as quoted above, to the giraffe, and improved upon by the fertile fancy of the Arabs: Aljahed alone restores it to its legitimate rank as a species, and asserts that it was propagated by its kind in the ordinary course of nature.—Its appearance is thus described by Kazwini:—"Its head resembles that of a camel: it has the horns and hoofs of an ox, the skin of a panther (نمر), and the legs of a camel: its neck is of disproportionate length; its fore-legs are high, and its hind ones low: its general form most resembles that of the camel, and its skin that of the tiger (ببر): its tail is like that of the antelope." The small size of the tail, according to Bochart, is alluded to in the name given to the animal in the Amharic dialect of the Abyssinian tongue, *zirath-katchin*: which, as he was informed by Ludolfi, implies λεπτοκέρκος, or slender tailed. Kemaleddin Al-Damiri states, that it has no joints in the hind-legs, as Cæsar had previously asserted of the elk: this error probably originated in their shuffling

^h Alkami.

gait: but Kemaleddin's History of Animals is so replete with errors, that Ahmed Al Afcasbi wrote a work expressly for their correction, though I am not aware whether he noticed this among the restⁱ. Kemaleddin, however, gives an accurate account of the manner in which it browses on the branches of trees, and ascribes the greater height of its anterior extremities to a provision of Providence for the purpose.—I am informed by the keeper of the Ashmolean Museum, that an Arabic MS. of the travels of Ebn Batuta, in one of the Cambridge libraries, contains an illuminated figure of the giraffe: but I have not succeeded, on a cursory examination, in finding any notice of the animal in Professor Lee's translation of the abridgment of that work^k. It is needless to give any further extracts from the Oriental accounts: their general value may be estimated from the specimens given above: in the case of less known or fabulous animals, many Oriental naturalists gravely admit fictions as strange as the wildest hearsay narrations of Ctesias or Herodotus.

The notice of the giraffe by the Greek annalist, Michael Glycas, under the reign of Alexius Comnenus, proves that its existence was then only remembered in Europe by the statements of former writers: he relates that it is said (*ἱστούρηται*) to occur in Libya, and repeats the old fable of its hybrid origin, though with a diminution of the number of its parents to two. It is not improbable that on the renewed intercourse between the Greek empire and

ⁱ D'Herbelot in art. Demiri, p. 290.

^k Edrisi, the Nubian geographer, enumerates it among the animals found only in the first climate, or torrid zone.

Egypt during the crusades, it may occasionally have been brought to Constantinople: but the only instance of which I have chanced to detect any record in the long and dreary series of the Byzantine historians, was A. D. 1260, when an embassy was sent by Rokneddin Bibars, the fourth Mamluke sultan of Egypt, to the emperor Michael Palæologus, in order to obtain permission for Egyptian vessels to pass the Bosphorus and Dardanelles, with cargoes of Tartar slaves from the Crimea to reinforce the ranks of the Mamluke corps. Among the presents which accompanied this mission was a giraffe, which the Byzantine historian, George Pachymeres, (who vehemently condemns the emperor for thus augmenting the strength of the infidels,) describes with a minuteness shewing how rare such a spectacle then was in Europe. “Concerning the camelopard sent over on this occasion I shall make a few remarks, for the information of those who saw it not, and to refresh the recollection of those who did. Its body was of a moderate bulk, about the size of such asses as we call *Καρθῶνες*: its skin, like that of a panther, white, and marked with ruddy spots. In the shape of the body it resembled a camel, but rose from the flanks towards the shoulders, so that the fore legs greatly exceeded the hind ones. The neck was very long, like that of a crane, and raised up so as to give the animal an appearance of pride. The head small, and in form like that of a camel. The belly white; and from the neck all along the spine to the tail extends a regular black list, as if drawn by a rule: the limbs are slender, like those of a deer, and with cloven hoofs. It is a tame and gentle creature,

easily led by a string from the head: it feeds on grass, but will eat bread and barley from the hand like a sheep: it is not easily provoked, but if offended or attacked (since nature has provided almost every animal with some weapon for self-defence), it defends itself, not with its heels as the horse, nor with horns as the ox, for with horns it is not provided (*ἐσττεπται*), nor with tusks like the boar, nor yet with claws like the feline tribe; but only by biting gently with its teeth, so that its intent appears not to injure others, but merely to defend itself: for its teeth are not furnished, like those of many others, with poisonous matter to be instilled through the bite. Such, and so strange, was the appearance of the animal now sent out of Ethiopia to the emperor, who for some time caused it to be daily led about the streets and squares of Constantinople as a sight for the people, in order that, by seeing the wonderful products of this distant commerce, they might be reconciled to the alliance now concluded with the Ethiopians."—The errors, however, observable in this description would seem to indicate that while writing, as he says, to refresh the memory of others, the historian had somewhat overrated the accuracy of his own. Not contented, like the classical writers, with omitting to mention the horns, he expressly denies their existence: and in stating that the animal uses its teeth as a means of defence, he contradicts the statement of every traveller who has observed it in its native state. All agree that when surrounded and unable to escape, it endeavours to secure its head from attack by keeping its lofty neck perpendicularly elevated, while it defends itself by kicking with great force and ra-

pidity. M. Le Vaillant was told by the Hottentots that it would in this manner beat off a lion, though the panther overpowered it by leaping on its back. And M. Thibaut, who brought over the specimens now in the Regent's Park, told me that the kicks were so rapid that his eye could scarcely follow the motion of the limbs. It is not improbable that Pachymeres, writing at the distance of some years, and not thinking it likely that his account would ever be contradicted by the importation of another specimen, supplied from his imagination the deficiency of his memory; a method of theorizing which has been adopted, to the great detriment of science, by many more modern zoologists.

The specimen described as above by Pachymeres, was apparently the last ever seen at Constantinople previous to the Turkish conquest; and with the exception of two specimens sent over in the 15th century by the sultan of Egypt, one to the emperor Frederick III, the other to Lorenzo dei Medici, I can find no mention of its having been seen alive in Europe from that time till its recent introduction in the menageries of France and England. The one sent to the emperor is noticed by contemporary writers under the names of *orasius* and *orafus*, apparently corruptions of *girafa*; and appears to have been adult, as the accounts quoted by Gesner state it to have been 20 cubits in height. By Albertus Magnus it is called *anabula*, probably a corruption of the word *nabis*, the name used by Pliny. That sent to Lorenzo dei Medici is described in a long letter from Antonius Constantius to Galeotto Manfredi, prince of Faenza, an abstract of which is given at some length by Bochart: but the only novelty it contains

is the correction of the error of Strabo in supposing the animal deficient in velocity. The writer states that he saw the animal, when exhibited at Fano, where it landed, distance horsemen at full gallop without any apparent exertion. The letter concludes with an epigram, in which the animal is represented as complaining of the omission of its horns in former accounts :

“ Albertus, Magni clarus cognomine, plenam
Non didicit nostri corporis effigiem :
Non qui orbis modico scripsit memoranda libello
Plinius, et pulchræ conditor historiæ.
Non qui scriptorem dum corrigit Artemidorum
Strabo mihi dotes invidet ipse meas.
Qualiacunque vides isti mihi cornua demunt :
Laurenti, hos tibi do barbara discipulos.”

This specimen is said to have been eleven feet high.

But though the giraffe was no longer seen in Europe after this period, we find frequent notices of it by such Europeans as business or pilgrimage led to the courts of Oriental sovereigns, to whom it seems to have been considered an acceptable gift, and consequently to have frequently accompanied embassies from the Egyptian sultans, of whose dominions it was a native. Marco Polo, though he does not expressly mention having seen the animal, was well acquainted with its nature, and enumerates it among the productions of Abascia (Abyssinia), and the island of Magastar, or Madagascar, in which latter locality I believe it is not now known to exist. He says, “ it is a handsome beast, well proportioned, with the fore-legs long and high, the hind ones shorter, and the neck very long, measuring three paces in length, including the head, which is small

and elegant. It is light coloured, with round rufous spots, and its manners are gentle." Clavijo, who was sent in 1403, by Henry III of Castile, to the court of Timur at Samarkand (and who was the last European recorded to have visited that city), states, that on the frontiers of Armenia he met an ambassador from the sultan of Babylon (as the Frank writers of that age invariably term the Egyptian monarch), also on his way with presents to Timur, and among these was a beast whose appearance struck the whole company with astonishment. In its body it resembled a horse, and its head was like that of a stag; but its most wonderful features were the length and slenderness of its fore legs and neck, each of which measured near 16 palms, so that when it raised its head it was a wonder to be seen. It could thus reach the top of a high wall, and browse without difficulty on the leaves of lofty trees. He calls it *jornufa*, an evident corruption of the Arabic name.

Barbaro, a Venetian envoy, mentions having seen a *zirnafa* in 1475 at Tabreez, belonging to the king Uzun Hassan, or Hassan the Tall (the Ussuncassanes of Knolles and other writers of that time), who had probably received it from his Egyptian ally, the sultan Kayd-Bey, the same who twelve years later sent the one already noticed to Lorenzo dei Medici. The embassies to which these animals were accompaniments, were in all probability relative to the league formed about that period between Persia, Egypt, Venice, and the Knights of Rhodes, against the preponderating power of the Porte.

The accounts of the giraffe in the works of Aldrovandus and Conrad Gesner, in the beginning of

the 16th century, are merely repetitions of what had previously appeared. Gesner has collated these statements with great diligence, and has given a wretched figure of it, copied from a description of Palestine by an author whom he does not name, but quotes as saying, that the colours are disposed as if a fishing net were thrown over the animal, which he compares in figure to a goat; and with some likeness to a goat he accordingly represents it, with slender horns of some length curving backwards, and bearing scarcely any recognisable likeness to the animal intended. Such figures, however, in Gesner's work as are taken from the animals themselves, are very creditable, both in accuracy and execution, for the period at which they were done. Petrus Gyllius (Pierre de Gilles) in his Latin paraphrase of Ælian, which he dedicated in 1535 to Francis I. of France, inserts an account of the camelopardalis, principally taken from Heliodorus, and sufficiently proving that he never could have seen one.

Bellonius, in his Travels, lib. ii. ch. 49, describes the giraffe from a specimen which he saw at Cairo in 1555, and gives a rude woodcut, sufficiently accurate to give some idea of its appearance. His account contains several particulars previously unnoticed, as the hairy tips of its horns, its long and black tongue, and the want of *molars* in the upper jaw; though this is evidently a slip of the pen or the press for incisors, of which the giraffe, in common with all the ruminantia, except the camelidæ, is destitute in that jaw. He also notices its throwing out its fore feet together, not alternately, in running, and its inability to graze without straddling widely with

the fore legs ; whence he correctly infers that in its native country its food consists of leaves of trees, “ for gathering which its long neck adapts it, as it can thus reach with its head to the length of a half lance, or German pike.” The notice already referred to by Prosper Alpinus, from one which he saw exhibited in 1581 at Alexandria, in company with a young elephant, is only remarkable for the small size which he attributes to the specimens, not exceeding that of a small horse ; and for the mention which he makes of the frontal prominence, omitted by all previous writers. “ Duo cornicula habebat, et circa frontem habebat etiam quandam eminentiam duram, carnosam, instar parvi cornu.”

The Portuguese, in the extensive commerce they carried on along the Abyssinian coast, and the embassies they dispatched into the interior in quest of Ogané or Prester John, must doubtless have seen or heard of the giraffe ; but I can find no further record of the fact than a letter quoted in Purchas’s Pilgrims from Fernandez, one of the Jesuits, who unsuccessfully attempted to establish themselves in the country about 1610, where he enumerates, among the wild beasts of Abascia, or Abyssinia, “ one so huge that a man sitting on horseback may pass upright under his belly. His shape is like a camel, but his nature diverse, feeding on leaves, which he reached from the tops of trees with his neck stretched forth.”

From this time, for more than 150 years, I can find no author who has given a description of the living animal, or even of its skin : and so little, in the general absence of figures on which any dependence might be placed, was its real nature understood,

that Bochart (whose work has been so often quoted), in 1663, concluded that the omission of all mention of the horns in classical writers might proceed from their specimens having been females; a conjecture which could only have been hazarded from utter ignorance of the real nature of the giraffe's horns¹. Linnæus, in the early edition of the *Systema Naturæ*, placed it doubtfully among the deer as *Cervus camelopardalis*; though he afterwards made it a distinct genus. Hasselquist, in 1762, gave an account of it from a skin which he saw at Suez; but this account, though minute as to the length of the horns, breadth of the hoofs, and similar particulars, gave no information as to the general figure, habits, and manners of the animal. This deficiency was in some degree supplied by the discovery of the animal a few years subsequently at the Cape; and the skins brought to Europe by Patterson and Gordon, enabled Buffon and Vosmaer to figure and describe it with tolerable accuracy. But it is to the indefatigable zeal of Le Vaillant that we are indebted for finally clearing away the errors with which these accounts were still disfigured. His animated account of the chase and capture of his first specimen cannot be perused without interest by any lover of nature; and the ample details which he has furnished in his *Travels*, not only on the form, but on the economy, food, and habits of the giraffe, are so

¹ The following notice in Edmonson's *Heraldry* is amusing from its naïveté: "Camelopard; said by heraldic authors to be a beast engendered between a camel and a leopard; but whoever chooses to read Dr. Goldsmith's *History of the Earth*, and other writers of *Natural History*, will find the *Camelopard* to be a distinct species of beast."

exact and complete, as to leave nothing to be supplied by succeeding observers.

From the date of Le Vaillant's travels, the spoils of the giraffe were not unfrequently imported from Southern Africa to adorn the museums of Europe ; but the living animal continued for many years to be a desideratum in our menageries. Its peculiar unfitness, both from its great height and the delicacy of its constitution, for a long sea-voyage, precluded the hope of importing it from the Cape : and its existence in Abyssinia seems, in the long cessation of intercourse with that country, to have been either overlooked or forgotten. About 1821, however, the attention of naturalists was excited by a report that *wild camels*^m had been seen in the mountains of Kordofan by some officers of the Turkish force, dispatched by the present pasha of Egypt under his son Ismail, to expel the fugitive Mamlukes from Dongola and Sennaar : these proved on further investigation to be giraffes, and three specimens, captured in Kordofan, were severally presented by the pasha, in 1827, to the emperor of Austria, and the kings of France and England. The interest excited by the arrival of these giraffes, (the first seen alive in Europe for 340 years,) must be fresh in the remembrance of every one : but unfortunately the French specimen was the only one which survived the fatigues of transport more than a few months. This loss, however, has been since supplied by the acquisition of the beautiful specimens now in the Regent's Park : and the ease with which they appear to bear

^m Neither the Arabian nor the Bactrian camel is known to have existed in a wild state at any period within the reach of records.

our climate gives every reason to hope that this beautiful and interesting animal may reproduce here, and become a permanent ornament to our menageries. I shall conclude with an extract from the notice relative to these last, forwarded by their captor M. Thibaut to the Zoological Society in Feb. 1836.

“ Instructed by Colonel Campbell, His Majesty’s Consul General in the Levant, and desirous of rendering available for the purposes of the Zoological Society the knowledge which I had acquired by twelve years’ experience in travelling in the interior of Africa, I quitted Cairo on the 15th of April, 1834. After sailing up the Nile as far as Wadi Halfa (the second cataract), I took camels, and proceeded to Debbat, a province of Dongolah ; whence, on the 14th of July, I started for the desert of Kordofan.

“ Being perfectly acquainted with the locality, and on friendly terms with the Arabs of the country, I attached them to me still more by the desire of profit. All were desirous of accompanying me in my pursuit of the giraffes, which, up to that time, they had hunted solely for the sake of the flesh, which they eat, and of the skin, from which they made bucklers and sandals. I availed myself of the emulation which prevailed among the Arabs, and as the season was far advanced and favourable, I proceeded immediately to the south-west of Kordofan.

“ It was on the 15th of August that I saw the first two giraffes. A rapid chase, on horses accustomed to the fatigues of the desert, put us in possession, at the end of three hours, of the largest

of the two; the mother of one of those now in my charge. Unable to take her alive, the Arabs killed her with blows of the sabre, and cutting her to pieces, carried the meat to the head-quarters which we had established in a wooded situation; an arrangement necessary for our own comforts and to secure pasturage for the camels of both sexes which we had brought with us in aid of the object of our chase. We deferred until the morrow the pursuit of the young giraffe, which my companions assured me they would have no difficulty in again discovering. The Arabs are very fond of the flesh of this animal. I partook of their repast. The live embers were quickly covered with slices of the meat, which I found to be excellent eating.

“ On the following day, the 16th of August, the Arabs started at day-break in search of the young one, of which we had lost sight not far from our camp. The sandy nature of the soil of the desert is well adapted to afford indications to a hunter, and in a very short time we were on the track of the animal which was the object of our pursuit. We followed the traces with rapidity and in silence, cautious to avoid alarming the creature while it was yet at a distance from us. Unwearied myself, and anxious to act in the same manner as the Arabs, I followed them impatiently, and at nine o'clock in the morning I had the happiness to find myself in possession of the giraffe. A premium was given to the hunter whose horse had first come up with the animal, and this reward is the more merited as the laborious chase is pursued in the midst of brambles and of thorny trees.

“ Possessed of this giraffe, it was necessary to

rest for three or four days, in order to render it sufficiently tame. During this period an Arab constantly holds it at the end of a long cord. By degrees it becomes accustomed to the presence of man, and takes a little nourishment. To furnish milk for it I had brought with me female camels. It became gradually reconciled to its condition, and was soon willing to follow, in short stages, the route of our caravan.

“ This first giraffe, captured at four days’ journey to the south-west of Kordofan, will enable us to form some judgment as to its probable age at present; as I have observed its growth and its mode of life. When it first came into my hands, it was necessary to insert a finger into its mouth in order to deceive it into a belief that the nipple of its dam was there: then it sucked freely. According to the opinion of the Arabs, and to the length of time that I have had it, this first giraffe cannot, at the utmost, be more than nineteen months old. Since I have had it, its size has fully doubled.

“ The first run of the giraffe is exceedingly rapid. The swiftest horse, if unaccustomed to the desert, could not come up with it unless with extreme difficulty. The Arabs accustom their coursers to hunger and to fatigue; milk generally serves them for food, and gives them power to continue their exertions during a very long run. If the giraffe reaches a mountain, it passes the heights with rapidity; its feet, which are like those of a goat, endow it with the dexterity of that animal; it bounds over ravines with incredible power; horses cannot, in such situations, compete with it.

“ The giraffe is fond of a wooded country. The

leaves of trees are its principal food. Its conformation allows of its reaching their tops. The one of which I have previously spoken, as having been killed by the Arabs, measured 21 French feet in height from the ears to the hoofs. Green herbs are also very agreeable to this animal ; but its structure does not admit of its feeding on them in the same manner as our domestic animals, such as the ox and the horse. It is obliged to straddle widely ; its two fore-feet are gradually stretched widely apart from each other, and its neck being then bent into a semicircular form, the animal is thus enabled to collect the grass. But on the instant that any noise interrupts its repast, the animal raises itself with rapidity, and has recourse to immediate flight.

“ The giraffe eats with great delicacy, and takes its food leaf by leaf, collecting them from the trees by means of its long tongue. It rejects the thorns, and in this respect differs from the camel. As the grass on which it is now fed is cut for it, it takes the upper part only, and chews it until it perceives that the stem is too coarse for it. Great care is required for its preservation, and especially great cleanliness.

“ It is extremely fond of society, and is very sensible. I have observed one of them shed tears when it no longer saw its companions, or the persons who were in the habit of attending to it.

“ I was so fortunate as to collect five individuals at Kordofan ; but the cold weather of December, 1834, killed four of them in the desert on the route to Dongolah, my point of departure for Bebbah. Only one was preserved ; this was the first specimen that I obtained, and the one of which I have

already spoken. After twenty-two days in the desert, I reached Dongolah on the 6th of January, 1835.

“Unwilling to return to Cairo without being really useful to the Society, and being actually at Dongolah, I determined on resuming the pursuit of giraffes. I remained for three months in the desert, crossing it in all directions. Arabs in whom I could confide accompanied me, and our course was through districts destitute of everything. We had to dread the Arabs of Darfour, of which country I saw the first mountain. We were successful in our researches. I obtained three giraffes, smaller than the one I already possessed. Experience suggested to me the means of preserving them.”