

are owing to the force of attraction, and depend on it as particular effects on a general effect.

However clear these ideas appear to me, I expect not to see them adopted. The people never reason but from their sensations; and natural philosophers judge from their prejudices. All these must, therefore, be set aside, and very few will remain to form a proper judgment. But this is the fate of Truth; she is content with a few admirers, and is always lost in a crowd: Though at all times august and majestic, she is often obscured by fantastic notions, or totally effaced by brilliant chimeras. This, however, is the manner in which I view and understand Nature; and perhaps she is still more simple: A single force is the cause of the phenomena exhibited by brute matter; and this force, when combined with that of heat, produces those living particles on which all the effects of organized bodies depend.

The GIRAFFE, or CAMELOPARD*.

THE camelopard is one of the most beautiful and largest quadrupeds: Without being noxious, he is at the same time extremely useless. The enormous disproportion of his legs, of which those before are double the length of those behind, prevents him from exercising his powers. His body has no stability; he has a staggering gait; and his movements are slow and constrained. When at liberty, he cannot escape from his enemies, nor can he serve man in

* The camelopard has short straight horns, covered with hair, truncated at the end, and tufted with hair. In the forehead, there is a tubercle about two inches high, resembling a third horn. The height, from the crown of the head to the soles of the fore-feet, is seventeen feet, and that from the top of the rump to the bottom of the hind-feet, only nine: The length of the body is seven, and from the withers to the loins, only six feet. The fore-legs are not longer than the hind-legs; but the shoulders are of a vast length, which give the disproportionate height between the fore and hind parts. The horns are six inches long. The head is like that of a stag. The neck is slender and elegant, and on the upper side there is a short mane. The ears are large, and the tail long, with strong hairs at the end. The colour of the whole animal is a dirty white, marked with large, broad, rusty spots; *Priestley's Synops. of Quad.* p. 20.

Giraffe, a word derived from *Giraffa*, *Siraphab*, *Zarabab*, the name of this animal in the Arabian language, which has been

in a domestic state. The species is not numerous, and has always been confined to the deserts of Ethiopia, and to some provinces in the south of Africa and India. As these countries were unknown to the Greeks, Aristotle has made no mention of this animal. Pliny speaks of it, and Oppian describes it in a manner which is by no means ambiguous *. The Camelopardalis, this

been adopted by the modern Europeans. *Camelopardalis* is Greek and Latin. Pliny gives the etymology of this compound name. * Camelorum,' he remarks, ' aliqua similitudo in aliud transferretur animal, *Nabie* Ethiopes vocant. Collo similem equo, pedibus et cruribus bovi, camelo capite; albis maculis rutilum colorem distinguentibus, unde appellata *Camelopardalis*. Dictatoris Caesaris Circensibus ludis primum visa Romæ; ex eo subinde cernitur, aspectu magis quam seriatie conspicua: Quare etiam ovis feræ nomen invenit; ' *Hist. Nat. lib. viii. cap. 18.*

La Giraffe, which the Arabs call *Zarafa*, & *Belon. Obs. p. 118. Les Afric. p. 337. Gehler. Zood. p. 160. Rall. Synops. Zool. p. 90. Brisson. Zood. p. 37.*

Camelopardalis, *Camelopardalis* sacre litteræ vocant Zener. *Dover. 14.* Ubi Chaldaica translatio habet *Deba*; Arabica, *Saraphab*; Persica *Seraphab*; Septuaginta *Camelopardalis*; Hieronymus *Camelopardum*; Gesner. *Hist. Zood. p. 147. fig. p. 149.* ubi legitur *Camelopardalus*, icon ex charta quadam nuper impecta Norimbergæ — *Sarapeta* nomine altitudine ad summum verticem supra quinque orgyas, corniculis duobus ferrei coloris, pilo levi et composito pulchro; diligenter et probe depictum Constantinopoli et in Germaniam transfusum, anno 1559.

Camelopardalis; *Plin. lib. viii. c. 18. Dion Cassius, lib. xliii. Præcept. pavoni. Shaw's Supplement, p. 88. Oppian. Cyng. lib. ii. l. 466. Aldrov. de Zood. Bist. p. 937. fig. p. 931. Prosper. Alpini. Hist. Egypt. tom. ii. p. 236. tab. 14. fig. 4. Tragus giraffa; Klein. Zood. p. 22.*

Cervus camelopardalus, cornibus simplicissimis, pedibus antice longissimis; *Linn. Syst. Nat. p. 92.*

* Oppian. de Venat. lib. iii.

last

last author remarks, has some resemblance to the camel. Its skin is spotted like that of the panther, and its neck is as long as that of the camel. Its head and ears are small, its feet large, and its legs long, but unequal, those before being much taller than those behind, which are very short, and seem to bring the rump of the animal down to the ground. Upon the head, near the ears, there are two eminences like two small straight horns. Its mouth resembles that of the stag; the teeth are small and white, the eyes brilliant, the tail short, and garnished with black hairs at the point. By adding to this description of Oppian those of Heliodorus and Strabo, we shall have a pretty just idea of the camelopard. The Ethiopian ambassadors, says Heliodorus, brought an animal of the size of a camel, whose skin was marked with lively spots and brilliant colours, and whose posterior parts were much lower than the anterior. The neck, though attached to a pretty large body, was thin, the head, in figure, resembled that of the camel, and, in size, it was not twice as large as that of the ostrich. The eyes appear to be tinged with different colours. The gait of this animal was different from that of all other quadrupeds, which in walking lift their feet diagonally, that is, the right fore foot with the left hind foot. But the camelopard ambles naturally, lifting the two right or the two left feet together. It is a gentle creature, and may be conducted

conducted at pleasure by a small cord put round its head *. There is, says Strabo, a large animal in *Æthiopia*, called *camelopardalis*, though it has no resemblance to the panther; for its skin is not spotted in the same manner. The spots of the panther are circular, and those of the camelopard resemble the spots of the fawn or young stag. The posterior parts of its body are much lower than the anterior; so that, at the rump, it is not higher than an ox, and at the shoulders it is higher than a camel. From this disproportion of parts, its motions should not be quick. It is a mild animal, does no mischief, and feeds upon herbs and leaves †.

Belon is the first author who has given a good description of the camelopard. 'I saw,' says he, 'at the castle of Cairo, an animal commonly called *Zurnapa*. It was formerly denominated *Camelopardalis*, a name compounded of *leopard* and *camel*; for it is variegated with the spots of a leopard, and has a long neck, like the camel. It is a most beautiful creature, as gentle in its dispositions as a sheep, and more amiable than any other wild beast. Its head is nearly similar to that of the stag, except in size. Its horns are blunt, six inches long, and covered with hair; those of the male are longer than those of the female. Both male and female have large ears, like those of a cow, and a black

* Heliodorus, lib. x.

† Strabo, lib. xvi. et xvii.

tongue

tongue resembling that of an ox. It has no teeth in the upper jaw. The neck is long, straight, and slender. The horns are round and delicate, the legs long and slender, and those behind are so low, that the animal seems to stand on end. Its feet resemble those of an ox. Its tail, which hangs as low as the hock, is round, having hairs three times as gross as those of a horse. The hair on the body is white and red. Its manner of running is similar to that of the camel. When it runs, the two fore feet move together. It lies on its belly, and has hard protuberances on its breast and thighs, like the camel. When standing, it cannot browse the grass, without spreading its fore feet very wide, and even then the operation is performed with great difficulty; for which reason it could not live in the fields, if it were not supplied with the leaves and sprigs of trees *.

The description of Gillius is still better than that of Belon. 'I saw, (says Gillius, chap. 9.) three giraffes at Cairo. They had two horns of six inches in length, and, on the middle of the front, a protuberance about two inches high, which resembled a third horn. This animal, when he raises his head, is sixteen feet high; the neck alone is seven feet; and the length, from the extremity of the tail to the end of the nose, is twenty-two feet. The fore and

* Observ. de Belon, p. 118.

' hind legs are nearly of an equal height. But
' the fore thighs are so disproportionally long,
' that the back of the animal inclines like the
' roof of a house. The whole body is marked
' with large yellow spots, nearly of a square
' figure. . . . It has cloven feet like the ox. The
' upper lip protrudes beyond the under. The
' tail is slender, with hairs at the point. It ra-
' minates and eats herbage, like the ox. Its mane
' extends from the top of the head along the
' back. When it walks, its legs and flanks on
' both sides seem to be alternately lame; and,
' when it brouses herbage or drinks, it is obliged
' to spread its fore legs prodigiously wide.'

Gesner quotes Belon for affirming that the horns of the giraffe fall off like those of the fallow deer*. I could never discover this fact in Belon. He only says, in the above passage, that the horns of the giraffe are covered with hair. He makes no other mention of this animal, except when treating of the axis, where he remarks, 'that the ground colour of the giraffe is white, and that the large spots scattered over the body are reddish, but not so red as those of the axis†.' This fact, however, which I can no where discover, would be of great importance in determining the nature of the giraffe; for, if its horns shed annually, it belongs to the deer kind; and, on the other hand, if its horns are perma-

nent, it must be referred to the ox or goat kind. Until we obtain a distinct knowledge of this fact, we cannot affirm, as our nomenclators have done, that the giraffe belongs to the genus of stags; and it is astonishing that Hasselquist, who has lately given a very long and very inanimated description of this animal, has said nothing concerning its nature. After amassing methodically, that is, like a school-boy, a hundred minute and insignificant characters, he says not a syllable regarding the substance of the horns, and leaves us ignorant whether they are solid or hollow, whether they shed or not, whether, in a word, they are *wood* or horns. I here give Hasselquist's* description, not on account of its utility, but

* *Cervus camelopardalis*. Caput prominens, labium superius crassum, inferius tenue; nares oblongae, amplae; pili rigidi, sparsi in utroque labio anterieus et ad latera. Supercilia rigida, distinctissima, serie una composita. Oculi ad latera capitis, vertici quam rostro, et et fronti quam collo, propiores. Dentes, lingua cornua simplicissima, cylindrica, brevissima, basi crassa, in vertice capitis lita, pilosa basi pilis longissimis rigidis tecta, apice pilis longioribus erectis, rigidissimis, apicem longitudine superantibus, cincti. Apex cornuum in medio horum pilorum obtusus nodus. Eminentia in fronte, infra cornua, inferius oblonga humilior, superius elevatior, subrotunda, postice parum depressa, inaequali. Auricula ad latera capitis infra cornua pone illa posita. Collum erectum, compellum, longissimum, versus caput angustissimum, inferius latiusculum. Crura cylindrica anterioribus plus quam dimidio longioribus. Tuberculum crassum, durum in genitulum. Ungues bifiduli, angulati. Pili brevissimi universum corpus, caput, et pedes tegunt.

* Giraffa et damis cornua cadunt; Belon, *Gesner, Hist. Quad.* p. 148.

† Observ. de Belon, p. 120.

but of its singularity, and, at the same time, to persuade travellers to use their own eyes, and not to view objects through the medium of other men's: It is necessary to caution them against such methodical arrangements, the authors of which lay reason aside, and believe themselves wise in proportion to their want of genius. Have we advanced a single step, after fatiguing ourselves with this enumeration of minute, equivocal, and useless characters? Do not the descriptions given by the ancients and moderns, in the passages above quoted, convey a more distinct picture, and clearer ideas of this animal? Figures supply all such trifling characters; it is the province of history to mark those which are more important: A single glance of the eye upon a good figure conveys more information than

teguant. Linea pilis rigidis longioribus per dorsum a capite ad caudam extensa. Cauda teres, lumborum dimidia longitudo; non juxta. Color totius corporis, capitis, ac pedum ex maculis fuscis et ferrugineis variegatus. Maculae palmari latitudine, figura irregulari, in vivo animali ex lucidiori et obscuriore variantes. Magnitudo cameli minoris, longitudo totius a labio superiore ad finem dorci spith. 24. Longitudo capitis spith. 4. colli spith. 9 ad 10, pedum anter. spith. 11 ad 13, poster. spith. 7 ad 8, longit. cornuum vix spithimalis. Spatiem inter cornua spith. 1, longit. pilorum in dorso poll. 3, latitud. capitis juxta tuberculum vel eminentiam spith. 1, prope maxillam spith. 1, colli utrinque prope caput spith. 1; in medio spith. 1½, ad basin spith. 2 ad 3, latitud. Lat. abd. anterius spith. 4, poster. spith. 6 ad 7. Crassities pelli aut corii cervi vulgaris. . . Descriptio antecedem juxta pellem animalis factam; animal vero nondum vidi; *Perseus, d'Haefelings, Ryck 1762.*

descriptions

descriptions of this kind, which always become more obscure in proportion to their minuteness.

In the year 1764, a drawing of the giraffe, accompanied with some remarks, was sent to the academy of sciences, from which we learn, that this animal, which was thought to be peculiar to Ethiopia*, is likewise found in the neighbourhood of the Cape of Good Hope. The figure is so incorrect, that no use can be made of it; but, as the remarks contain a kind of description, they merit insertion. 'In an expedition, made in the year 1702, two hundred leagues to the north of the Cape of Good Hope, we found the camelopardalis, whose figure we have subjoined. The body resembles that of an ox, and the head and neck those of a horse. All those we met with were white with brown spots. It has two horns, and cloven feet. The two we killed, and whose skins have been transmitted to Europe, were of the following dimensions: The length of the head, one foot eight inches; the height, from the extremity of the fore-foot to the withers, ten feet, and from the withers to the top of the head, seven feet, in all seventeen feet high. The length,

* The giraffe is no where found but in Ethiopia. I saw two tame ones in the royal palace. I remarked, that, when they wanted to drink, they were obliged to spread the fore-legs very wide, otherwise, though their necks were long, they could not reach the water. What I relate, I saw with my eyes; *Relation de Thevenot, p. 10.*

' from the withers to the reins, is five feet six inches, and from the reins to the tail, one foot six inches: Thus, the whole length of the body is seven feet. The height, from the hind feet to the reins, is eight feet six inches. From the disproportion in the height and length, it appears that this animal can be of little use. He feeds upon the leaves of trees; and, when he wants to drink, or to take any thing from the surface of the earth, he is obliged to bend down on his knees.'

In examining what travellers have said concerning the giraffe, I find they all agree, that this animal, when in its natural situation, can reach with its head from sixteen to seventeen feet high*; and that its fore legs are twice as long as the hind legs; so that, when it sits on its crupper, it seems to be entirely on end†. They likewise

* Prosper Alpinus is the only author who gives a different idea of the magnitude of this animal, by comparing it to a small horse: 'Anno 1581, Alexandria vidimus camelopardalem, quem Arabes zurnap et nostri giraffam appellant; hæc equum parvum elegantissimumque representare videtur;' p. 236. There is every reason to believe, that the giraffe seen by Prosper Alpinus was very young, and had by no means acquired its full growth. The same remark may be made with regard to the skin described by Hasselquist, which he says was of the size of a small camel.

† The fore-feet of the giraffe are twice as long as those behind, which, by supporting a long straight slender body, enables the fore part of the animal to a prodigious height. Its head nearly resembles that of a stag, except that its blunt horns

likewise agree, that, on account of this disproportion, it cannot run quickly; that its dispositions are extremely mild; that, by this quality, as well as by other physical habits, and even by the form of the body, it approaches nearer to the nature of the camel than any other animal; and that it is one of the ruminating animals, and, like them, wants the cutting teeth in the upper jaw. We likewise learn, from the testimony of some voyagers, that this animal is found in the southern parts of Africa, as well as in those of Asia*.

From what we have related, it is evident, that the giraffe is a peculiar species, and very dif-

ferent from the camel. Its horns exceed not half a foot in length. Its ears are long, like those of a cow, and it has no teeth in the upper jaw. Its hairs are round and fine, its limbs slender, resembling those of a stag, and its feet are like those of a bell. Its body is very slender, and the colour of its hair resembles that of the lynx. In manners and dispositions, it resembles the camel; *Voyage de Villamont, p. 688.*—I saw, at the castle of Cairo, two giraffes. Their neck was longer than that of the camel, and they had two horns of half a foot in length, on the top of the head, and a small one on the front. The two fore-legs were very long, and the hind ones remarkably short; *Cyénographie du Levant, par Thérout, p. 142.*

* In the island of Zanzibar, in the neighbourhood of Madagascar, there is a certain quadruped called *graffe* or *giraffe*, which has a neck about a fathom and a half in length, and its fore-legs are much longer than those behind. Its head is small, and of different colours, as well as the body. This animal is very mild and tame, and never injures any person; *Descript. des Indes Orientales, par Marc Paul, liv. iii. p. 116.*—Giraffa animal adeo sylvaticum ut raro videri possit. . . . homines vident in fugam festare, tametsi non sit malitiae velocitatis; *Leon. Afric. Descript. Afric. tom. ii. p. 745.*

ferent from all others. He seems, however, to make a nearer approach to the camel than to the stag or the ox. It is true the giraffe has two horns, and the camel has none: But the other resemblances are so numerous, that I am not surprised to see the appellation of *Indian camel* bestowed on him by some travellers. Besides, we know not the substance of which the horns of the giraffe are composed; and, consequently, we know not whether by this part he approaches nearer to the stag or to the ox: They may, perhaps, be a substance very different from either. They may be composed of a congeries of hairs, like the horns of the rhinoceros; or they may be a substance of a peculiar texture. Nomenclators seem to have been first led into the blunder of ranking the giraffe with the stags; by the pretended passage of Belon, quoted by Gesner, which, if real, would be decisive of the point: They appear likewise to have misunderstood what has been mentioned by authors concerning the hair of these horns. They imagined that these writers had said, that the horns of the giraffe were clothed with hair, like the new sprung horns of the stag; and hence concluded that they were of the same nature. We see, on the contrary, from the notes above quoted, that the horns of the giraffe are only surrounded with hair, and have a tuft of large coarse hairs at the point, and not clothed with a down or velvet, like those of the stag. From this circumstance,

it

it is not improbable, that the horns of the giraffe are composed of a congeries of hairs nearly in the same manner as those of the rhinoceros: Their blunt or truncated points seem to favour this idea. Besides, if we consider that, in all animals, which carry *wood* instead of horns, as the elk, the rein-deer, the stag, the roebuck, &c. this *wood* is always divided into branches or antlers, and that, on the contrary, the horns of the giraffe are simple, and consist but of one stem, we will be convinced that they are not of the same nature, unless analogy, in this instance, be entirely violated. The tubercle on the front, which appears to be a third horn, strengthens this opinion. The two horns, which are not pointed, but blunt at the extremities, are perhaps only tubercles; of a greater length than the former. The females, according to the testimony of all travellers, have horns as well as the males, only they are somewhat smaller. If the giraffe really belonged to the deer kind, analogy would again suffer violation; for, among all the animals of this kind, none of the females, except the female rein-deer, have horns, and we have given the reason of this phenomenon. On the other hand, as the giraffe, on account of the excessive height of its limbs, cannot feed upon herbage, but with great difficulty; as its chief and almost only food consists of the leaves and buds of trees, it may be presumed, that the substance of the horns, which are the most conspicuous

cuous residue of the organic particles derived from the food, is analogous to wood, like that of the stag. Time will confirm one or other of these conjectures. A single word more added to Hasselquist's minute description would have determined the genus of this animal. But school-boys, who have only their master's gamut in their heads, or rather in their pockets, must perpetually blunder, and make the most essential omissions; because they renounce that spirit of research which ought to guide every observer, and see only through the false medium of arbitrary arrangements, which prevents them from reflecting on the nature and relations of the objects they meet with, and obliges them to describe upon a bad model. As every object differs materially from another, the whole should be treated in a different manner. A single character happily discovered, is more decisive, and conveys more knowledge of the subject, than a thousand minute and trifling features; for in proportion to their number, they necessarily become equivocal and common, and, of course, superfluous, if not hurtful to the real knowledge of Nature, who sports with the rules we prescribe to her, soars above all methodical distributions, and can only be perceived by the penetrating eye of genius.

SUPPLEMENT.

WE here give the figure of a giraffe from a drawing transmitted to us from the Cape of Good Hope, which we have rectified in some points from the information of Mr. Bruce. With regard to the horns of this animal, we are still uncertain whether they are permanent, like those of the ox, antelope, goat, rhinoceros, &c. or whether they are annually renewed like those of the deer-kind. They seem to grow during the first years of the animal's life; but they never rise to a great height; for the longest which have been seen exceeded not twelve or thirteen inches; and they are generally not above six or eight inches. We are indebted to M. Allamand, a celebrated Professor at Leyden, for the exact knowledge we have obtained concerning these horns. The following is an extract of a letter he wrote on this subject to M. Daubenton, dated October 31, 1766.

‘ I have the honour to inform you, that I am in possession of a stuffed giraffe. Both you and M. de Buffon have expressed a desire to know the nature of its horns. I have cut off one of them, which I send you, that you may have a more exact idea of it. You will remark, that this giraffe was very young. The Governour of the Cape, from whom I re-

ceived

ceived it, writes me, that it was killed when lying near its mother. Its height is about six feet, and its horns, of course, are short, not exceeding two inches and a half. They are every where covered with skin and hairs; and those at the point are much longer than the others, and form a pencil, the height of which exceeds that of the horn. The base of the horn is more than an inch broad, and consequently forms an obtuse cone. To discover whether it was hollow or solid, I sawed it through longitudinally, along with a portion of the skull to which it adhered. I found it to be solid, and a little spongy, because it had not yet acquired all its consistence. Such is its texture, that it appears not to be composed, like that of the rhinoceros, of hairs united together; and it resembles the horns of the stag more than those of any other animal. I would even say, that there is no difference between these two substances, if I were certain, that a horn, lately sent to me under that name, was really the horn of a giraffe. It is straight, half a foot long, and pretty much pointed. There still remain some vestiges of the skin with which it had been covered; and it differs from a stag's horn only in figure. If these observations are not sufficient, I shall with pleasure send you the two horns, that you may examine them along with M. de Buffon. With regard to this animal, I should farther remark,

that

that the alledged difference between its fore and hind legs seems to be greatly exaggerated; for it is hardly perceptible in my young giraffe.

Beside these horns which are found on the head of the female giraffe, as well as on that of the male, there is, at almost an equal distance between the nostrils and eyes, a remarkable excrescence, which seems to be a bone covered with a soft skin, and garnished with smooth hair. This osseous excrescence is more than three inches long, and is much inclined toward the front, or makes a very acute angle with the bone of the nose. The colour of this animal's robe is a bright shining yellow, and the spots are, in general, rhomboidal.

It is extremely probable, from the inspection of these horns, which are solid, and resemble in substance the horns of the stag, that the giraffe may be ranked in the same genus: Of this there could not remain a doubt, if we were certain that he shed his horns annually. But it is now unquestionable that he ought to be separated from the ox-kind, and other animals whose horns are hollow. Meanwhile, we shall consider this large and beautiful animal as constituting a particular and solitary genus, which corresponds very well with the other facts in Nature, who, in voluminous species, never doubles her productions. The elephant, the rhinoceros, the hippopotamus, and perhaps the giraffe, are

animals.

animals forming particular genera, or solitary species, who have no collaterals. This is a privilege which seems to be conferred solely on animals which greatly surpass all others in magnitude.

In a letter I received from Holland, the subscription of which was illegible, I had the following description of a giraffe:

' Africa produces no animal more beautiful
' or more curious than the giraffe. From the
' point of the nose to the tail, he is twenty-five
' feet long. He has received the name of *Camelopard*, because he somewhat resembles the
' camel in the figure of his head, the length of
' his neck, &c. and because his robe is variegated with irregular spots, like that of the
' leopard. He is found at twenty-four leagues
' from the Cape of Good Hope, and is still
' more frequent at greater distances. The teeth
' of this animal are similar to those of the stag.
' His horns are a foot long: They are straight
' as a man's arm, garnished with hair, and seem
' to be truncated at their extremities. The neck
' constitutes at least one half of the length of
' the animal, which, in figure, pretty much re-
' sembles that of a horse. The tail would also
' be pretty similar, if it were equally furnished
' with hair as that of the horse. The legs are
' like those of the stag; the feet are garnished
' with very black, obtuse, and widely separated
' hoofs. When the animal leaps, he first raises

the

' the two fore feet, and then those behind, as a
' horse would do who had his two fore feet tied
' together. He runs slowly, and with a bad
' grace: He may be easily overtaken in the
' chase. He carries his head always high, and
' feeds on the leaves of trees only, being un-
' able to pasture on the ground, on account of
' his great height. When he drinks, he is obliged
' to rest on his knees. The females are gene-
' rally of a bright yellow colour, and the males
' of a brownish yellow. Some of them are
' nearly white, with brown or black spots.'

Supplement from Schneider's Edition.

' M. de Buffon, with much propriety, blames
' our modern nomenclators, because, when treat-
' ing of the giraffe, they are silent with regard
' to the nature of his horns, which alone can
' form a criterion to ascertain the species to
' which he belongs; and because they give dry
' and minute descriptions, without adding a
' figure. We shall endeavour to supply both
' these defects.

' M. Allamand, professor of natural history
' in the university of Leyden, is in possession of
' the stuffed skin of a young giraffe. He obli-
' gingly communicated to us a drawing of it,
' which we caused to be engraven; and he
' added the following description.

' M. Tul-

‘ M. Tulbagh, governour of the Cape of Good
 ‘ Hope, who has enriched our academical ca-
 ‘ binet with many rare productions of nature,
 ‘ writes me, that the young giraffe in our pos-
 ‘ session was killed by his hunters at a consider-
 ‘ able distance from the Cape, when lying near
 ‘ its mother, whom it still suckled. Hence it
 ‘ appears, that the giraffe is not peculiar to
 ‘ Ethiopia, as Thevenot has alledged.

‘ As soon as I received it, I examined the
 ‘ horns, with a view to elucidate M. de Buffon’s
 ‘ doubt with regard to their substance. They
 ‘ are not hollow like those of oxen and goats,
 ‘ but solid, and nearly of an uniform texture,
 ‘ like those of the stags, from which they differ
 ‘ only in being thinner, straighter, and not di-
 ‘ vided into branches, or antlers. They are
 ‘ totally covered with the skin of the animal;
 ‘ and, for three fourths of their length, this
 ‘ skin is furnished with short hair, similar to
 ‘ that which covers the body. Toward the
 ‘ points, the hair becomes longer, rises about
 ‘ three inches above the blunt end of the horns,
 ‘ and is of a black colour. Hence it is very
 ‘ different from the down on the young horns
 ‘ of the stag.

‘ These horns appear not to be composed of
 ‘ united hairs, like those of the rhinoceros.
 ‘ Their texture is likewise totally different.
 ‘ When sawn through longitudinally, we per-
 ‘ ceive that they consist of a hard plate, which
 ‘ constitutes

‘ constitutes their external surface, and incloses
 ‘ a spongy substance. This, at least, is the case
 ‘ with the horns of my young giraffe. Perhaps
 ‘ the horns of adults are more solid. M. de
 ‘ Buffon is now in a condition to determine this
 ‘ point; for, along with the horns of my giraffe,
 ‘ I sent him another belonging to one more ad-
 ‘ vanced in years, which a friend of mine re-
 ‘ ceived from the East Indies.

‘ Though these horns are solid, like those of
 ‘ the stag, I suspect that the animal does not shed
 ‘ them annually. They seem to be an excre-
 ‘ scence of the frontal bone, like the bone which
 ‘ serves as a nucleus to the hollow horns of oxen
 ‘ and goats; and, consequently, it is impossible
 ‘ that they can fall off. If this conjecture be
 ‘ well founded, the giraffe constitutes a parti-
 ‘ cular genus, perfectly distinct from the animals
 ‘ which shed their horns, and also from those
 ‘ which have hollow but permanent horns.

‘ In the middle of the front of adult giraffes,
 ‘ there is a protuberance which seems to be the
 ‘ rudiments of a third horn. No such protube-
 ‘ rance appeared in our giraffe; probably because
 ‘ it was too young.

‘ All the authors, both ancient and modern,
 ‘ who describe this animal, tell us, that the fore
 ‘ legs are twice as long as the hind ones. They
 ‘ could not possibly be deceived concerning a
 ‘ character so striking. But I can affirm, that,
 ‘ in this article, the giraffe must change greatly

‘ in growing ; for, in our young one, the hind
 ‘ legs were equally long with those before. This
 ‘ circumstance, however, prevents not the ante-
 ‘ rior part of the giraffe from being higher than
 ‘ the posterior, which is owing to the difference
 ‘ in the thickness of the body, as may be seen in
 ‘ the figure. But this difference is by no means
 ‘ so great as has been represented.

‘ The neck of the giraffe is the first thing
 ‘ which strikes a spectator. It is longer than
 ‘ that of any other quadruped, not excepting
 ‘ the camel, who, besides, folds his neck in dif-
 ‘ ferent ways, which the giraffe seems to be in-
 ‘ capable of performing.

‘ His colour is a dirty white, interspersed with
 ‘ yellowish spots, very near each other on the
 ‘ neck, more distant on the rest of the body,
 ‘ and of a figure which approaches to a paral-
 ‘ lelogram or rhomb.

‘ The tail is slender, in proportion to the
 ‘ length and stature of the animal. Its extre-
 ‘ mity is garnished with a tuft of black hairs,
 ‘ which are seven or eight inches long.

‘ The mane is composed of reddish hair,
 ‘ three inches long, and inclined toward the
 ‘ hind part of the body. It extends from the
 ‘ head along the neck, and down to the middle
 ‘ of the back ; and, at the distance of some
 ‘ inches, it is again continued ; but the hair in-
 ‘ clines toward the head. It seems to recom-
 ‘ mence near the origin, and to extend to the

‘ extremity

‘ extremity of the tail : But the hairs are short,
 ‘ and scarcely to be distinguished from those
 ‘ which cover the rest of the body.

‘ The eye-lids, both superior and inferior, are
 ‘ garnished with a range of very stiff hairs. There
 ‘ are similar hairs, but thinly scattered, round the
 ‘ mouth.

‘ The aspect of the giraffe indicates a mild and
 ‘ docile animal ; and this is the character given
 ‘ of him by those who have seen him alive.

‘ This description of the giraffe, added to
 ‘ what M. de Buffon has collected from dif-
 ‘ ferent authors, and accompanied with the
 ‘ figure, is sufficient to give us more exact ideas
 ‘ concerning this animal than we had hitherto
 ‘ obtained.’

M. Alamand’s great knowledge and accuracy,
 in every subject of which he treats, are apparent
 from the above description. I would have
 copied his engraving, if his giraffe had not been
 too young. The figure I have given is that of
 an adult. I shall only remark, that I suspect
 the longest of the horns he was so obliging as
 to send me, does not belong to a giraffe. The
 short ones are very thick, while it is very thin,
 in proportion to their respective lengths. In the
 anonymous description above related, it is said,
 that the horns of the adult giraffes are *a foot in*
length, and as thick as a man’s arm. If the horn
 under consideration, which is half a foot long,

really belonged to a giraffe, it ought to be double its present thickness. Besides, this pretended horn of a giraffe is so similar to the first horns of a young stag, that it may be regarded as belonging to the latter animal.

As to the nature of the giraffe's horns, I am inclined to adopt M. Alaman's opinion. The protuberance on the front, which is unquestionably osseous, makes a kind of third horn. The horns adhered to the cranium, without the support of moulds; and, consequently, ought to be considered as osseous prolongations of the bones of the head. The hair which surrounds and overtops them has no resemblance to that which covers the young shoots of the stag, or fallow deer. This hair seems to be permanent, as well as the skin from which it issues. Hence the horn of the giraffe is a bone, and differs from that of the ox by its covering, the latter being surrounded with a horny substance, or hollow horn, and the former with hair and skin.

Plate CCXIV.



A. Hall's Sculp.

GIRAFFE