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**Part 3.**

*A Sketch of the Progress and present State of Geographical Discovery in the African Continent, made from the Colony of the Cape of Good Hope.—By J. C. CHASE.*

[Continued from page 137.]

IN the year 1824, the excellent and zealous Missionary at the Kuruman station, the Rev. Mr. Moffatt, visited at Melita, the capital of the Chief of the Bawanketz tribe, the celebrated and much dreaded Makkabba, whom the commercial jealousy of the surrounding clans had represented as a monster of cruelty, a character which, upon acquaintance, proved to be totally false. It is, to be regretted that the itineraries and observations of this Missionary have not been laid before the public, as from his perfect knowledge of the language, his frequent journies into the interior, and his known shrewdness and ability, he must be in possession of a rich store of information; but there unfortunately appears to be a decided aversion on the part of the various Missionary Societies to publish the knowledge gained by their respective agents, who possess such superior opportunities of acquirement. The avidity, however, with which ELLIS'S "Polynesian Researches" have been received, it is to be hoped, will induce others of this most devoted and praiseworthy class of men to step forward and gratify public curiosity, which cannot fail to add largely to the list of supporters to the Missionary cause,—the cause of our common faith, which we are enjoined to extend.

In the same year Mr. GEORGE THOMPSON visited Leettakoo and the neighbouring Districts, but the approach of the devastating Mantatees, then on their road to the Batlapees, arrested his progress, and his discoveries were confined chiefly to some new points along the banks of the Gariep.

As far back as the year 1818 an experiment was made by the Colonial Government to open a trading intercourse with the Griquas and Corana tribes, by the establishment of a Fair

## AFRICAN ZOOLOGY:

By DR. SMITH.

*Continued from page 160.*Genus PEDETES. *Illiger.*

*Incisors*  $\frac{2}{2}$ , *canines*  $\frac{0}{0}$   $\frac{0}{0}$ , *molars*  $\frac{4}{4}$   $\frac{4}{4}$ ,—20. *Lower incisors cut obliquely, and not pointed; cheek teeth formed of two elliptical parts, united at their internal extremity and separated above by a deep furrow; head short, large, and flat; muzzle obtuse, terminated by small nostrils at right angles; ears long, narrow, and pointed; eyes large; whiskers large; anterior feet with five toes and long, narrow, curved nails, channelled beneath; posterior feet with four toes, the external very small, the intermediate of the other three much the largest, the rest equal, all furnished with straight, broad, triangular nails; tail long and villose.*

*Pedetes typicus* (Cape Pedetes.) Hair moderately long and rather rigid. Colour of upper and lateral parts of head, neck, back, sides, and outer surface of extremities towards body, tawny or a pale fawn colour, in the male distinctly sprinkled or pencilled with black; upper lip, angles of mouth, lower jaw, under surface of neck, inner surfaces of anterior extremities, feet, breast, belly, inner sides of hinder extremities, and a vertical stripe on each flank, pure white; cheeks more or less varied with white; inner surfaces of ears naked, except towards tips where there is a thin coating of fine white down; outer surfaces towards bases covered with long hair of the same colour as that of the back, the remainder flesh-coloured with a thin sprinkling of short brownish hair, the margins fringed with white hair. The entire of the first third of tail and the upper surface of the second third the colour of the back, the sides and lower part of the latter portion white, the last third black and tufted; claws of fore-feet blackish, those of hind-feet light horn-coloured. Length from nose to base of tail twenty-two inches; length of tail about nineteen inches.

Inhabits South Africa.—Eastern districts of the Colony.

*Yerbua Capensis*, Sparm. and R. Forster. *Mus Caffer*, Pallas, *Gliræ*. *Depus Caffer*, Thunb. in *Mem. de l'Acad. de Petersb. tom iii. p. 309.* Gmel. *Helamys Capensis*, F. Cuvier, in *Dict. de Sc. Nat. tom xx. p. 344.* Spring-Haas or Spring Hare of the Cape Colonists.

## FAM. CUNICULARIDÆ.

## Genus BATHYERGUS. Illiger.

*Incisors*  $\frac{3}{2}$ , *canines*  $\frac{0}{0}$ , *molars*  $\frac{4}{4}$ ,—20. *Incisors projecting in front of the lips, upper ones plain or each with a longitudinal groove in front; molars without true roots, indented on the edges; body thick and cylindrical; head thick; muzzle truncated; eyes very small; no external ears; legs short; soles of feet and toes margined with rigid hairs; toes five, armed with nails fitted for digging; tail short, depressed, and margined with long stiff hairs.*

*Bathyergus maritimus*, Illiger. (Cape Sand Mole.) Fur short and silky; colour of the upper parts of head and body, blue-grey with a rusty tint, which is generally most distinct upon the top of the head and back of the neck; lower parts dull grey, in some specimens with a faint rufous tinge: hair of the tail reddish white; the rigid hairs margining the sides of feet and toes white; whiskers light grey-white; eyes black; point of nose flesh-coloured; cutting-teeth pure white, those of the upper-jaw each with a broad, deep, longitudinal furrow. Ear openings oval and with a bare flesh-coloured margin. Length from nose to root of tail about fourteen inches; length of tail an inch and a half. When the fur is reversed it is found to be slate-coloured, except towards the surface.

Inhabits South Africa,—the sand-flats near Cape Town.

*Mus maritimus*, Gmel. *Mus suillus*, Schreb. *Arctomys maritimus*, Thunb. in *Mem. de l' Acad. de Petersburg*, tom iii. p. 308. *Grande taupe du Cap*, Buff. *Suppl.* Sand Mole of the Cape Colonists.

*Bathyergus Capensis*, Desm. (Cape Spotted Mole.) Fur rather long and very soft; the surface colour of the upper and lateral parts light rusty brown or dark grey, on the upper and lateral parts of the head passing into dull black; lower parts of sides and belly reddish white; muzzle, upper lip, spaces round angles of mouth, lower lip, chin, circumferences of eyes and ear openings, together with a portion of the top of the head, pure white; rigid hairs of tail, side of feet, and toes white; claws horn-coloured; cutting-teeth white, and plain in front. Beneath the surface the fur is dark slate-coloured, excepting where the pure white marks occur, in which situations it is white throughout. Length from nose to base of tail about eight inches; length of tail three quarters of an inch.

Inhabits South Africa.

*Mus Capensis* Pallas, Gmel. Bodd. *Taupe du Cap de Bonne Esp.* Buff. *Georychus Capensis*, Illiger. *Bathyergus Capensis*, Desm. *Mam. No. 520.* Blesmol of the Cape Colonists.

*Bathyergus caecutiens*, Lichtenstein. (Blind Land Mole.) Fur short and silky, surface colour of the upper and lateral parts of head and body rusty brown or rusty grey, in some lights, with a splendid greenish gloss; under-part greyish white with a faint rusty tint; rigid hairs of tail reddish white, those of sides of feet white; nails light horn-coloured; eyes extremely small; incisors pure white, and all plain in front. The entire of the fur, except towards the surface, light blackish green, palest on the sides and under-parts of the body. Length from nose to base of tail about five inches and a half; length of tail half an inch.

Inhabits South Africa,—rare near Cape Town,—common in gardens in the District of Uitenhage.

*Bathyergus Hottentotus*, Less. et Garn. *Bullet. de Science Nat.* viii. p. 77. 80. *Bathyergus Ludwigii*, (young,) Smith, *Zoological Journal*, vol. iv. p. 439.

*Obs.* In all the species of this genus, not only the intensity of the tints is subject to considerable variety, but even the colours themselves differ slightly in different individuals. Specimens of *Bathyergus maritimus* are often found with the entire of the surface colour a light bluish grey, and others, with the upper parts at least, very deeply tinted with a dull rufous or rusty hue. Examples of *Bathyergus Capensis* are occasionally found with the upper and lateral parts of the head of the same colour as the back; others with those parts very deep black; and some are met with where the colour of the upper parts of the body is a light bluish grey or rusty grey instead of a rusty brown. The *Bathyergus caecutiens* has not unfrequently the upper and lateral parts of the body of a pale rusty grey,—and in young specimens the entire is a moderately dark slate-colour.

*With incomplete clavicles or none.*

### Genus HYSTRIX. Linnæus.

*Incisors*  $\frac{3}{3}$ , *canines*  $\frac{0}{0}$ , *molars*  $\frac{4}{4}$ ,—20. *Molars with flat crowns, but with ridges of enamel; head strong; muzzle gibbous; ears short and rounded, tongue with spiny scales; fore-feet with four toes and a rudimentary thumb, hind-feet with five toes; spines more or less long on the body.*

*Hystrix cristata*, Linnæus. (Crested Porcupine.) Forehead and muzzle covered with dusky brown bristles; top of head and back of neck with a mane of long spinous bristles, reddish white towards points, elsewhere brown black; anterior part of back and upper parts of sides with stiff spines annulated black and white; middle and hinder part of back with short white spines; lower-parts and extremities with short flexible black spines or bristles. Tail armed with strong spines annulated black and white, and at its point furnished with a tuft of hollow membranous cylinders, each of which is attached by a long narrow

peduncle. Eyes black; ears thinly covered on both surfaces with short, black, coarse hair. Length from nose to base of tail about three feet; length of spines of tail about nine inches: some of the spines on back measure about sixteen inches.

Inhabits Africa and Asia,—common in South Africa.

Le Porc-epic, Buff. Eister Vark of the Cape Colonists.

### Genus LEPUS. *Linnæus.*

*Incisors*  $\frac{4}{2}$ , *canines*  $\frac{0}{0}$ , *cheek teeth*  $\frac{6}{3}$ ,—28. *Upper incisors in pairs, two in front and two immediately behind them; the former large and cuniform, each with a longitudinal furrow on its anterior surface, the latter small; the lower incisors square; cheek teeth with small flat crowns with transverse laminæ of enamel; ears and eyes large; fore-legs short with five toes; the hind-legs longer with four toes covered with hair; tail short; teats from six to ten; cæcum very large.*

*Lepus Capensis*, Linnæus. (Cape Hare.) Hair moderately long and slightly rigid; the surface colour of the forehead, crown of head, back, and upper portions of sides, pale tawny or tawny white freely brindled or speckled with black; sides of body and outer surfaces of extremities towards body dull greyish white or pale rufous-white finely pencilled with dusky; lower-parts of legs pale rufous more or less pencilled with dusky; muzzle tawny sprinkled with black; sides of head variegated tawny, dull white, and black; eyes brown, and surrounded by a circle of white hairs with a more or less distinct whitish stripe extending backwards from the outer angle of each in the direction of the ears; nape pale tawny or rufous; upper-lip, angles of mouth, and lower-parts of neck, tawny or greyish tawny, the latter sometimes pencilled with dusky white; chin, breast, belly, and inner-surfaces of extremities, a pale fawn-colour or a light rufous-white; ears with a thin sprinkling of tawny-white down on the inner-surfaces; outer-surfaces towards inner-margins and tips thickly covered with short hair entirely black on the latter and variegated brown and dull white elsewhere; inner margins till near the points fringed with long tawny hair, outer margins with short pure white hair, tips margined with short black hair; soles of feet clothed with coarse rufous-brown hair; tail black above, pure white beneath and on the sides. Length from nose to base of tail about seventeen inches; length of tail about four inches.

Inhabits South Africa.

Vlakte Haas of the Cape Colonists.

*Obs.* A variety of this species is very common in South Africa, in which the lower parts are pure white, and the outer surfaces of legs pencilled dusky and dull white. The colours of the other parts are also subject to slight variations.

*Lepus Ægyptius*, Geoff. (Egyptian Hare.) Fur reddish brown; breast and feet a red fawn-colour; tail black above, white below; ears longer than the head, black at the tips. Length fifteen inches.

Inhabits Egypt.

*Obs.* Some Naturalists consider this as identical with the last species, but as I have no opportunity of comparing specimens from both localities I leave it to be decided by those who possess the necessary means.

*Lepus saxatilis*, F. Cuvier. Hair moderately soft. Forehead, crown, back, and upper portions of sides, finely variegated, black, reddish white, and ferruginous, the latter colour sometimes nearly wanting; muzzle and sides of head bluish white, freely pencilled with black; nape and more or less of sides of neck dull rufous; lower parts of neck, anterior part of breast, lower parts of sides, and outer-surfaces of extremities towards body, greyish white freely pencilled with black, lower parts of extremities dull white pencilled or tinted with brown; chin, hinder part of breast, belly, and inner-surfaces of extremities, white; ears with a thin sprinkling of fine short tawny white hair on their inner-surfaces, on their outer-surfaces towards inner-margins and tips thickly covered with short hair which is variegated black and white in the former situation, and entirely black in the latter, the rest of the outer-surfaces with a thin sprinkling of short tawny or whitish hair; the edges margined with white hair till near the points, where it is black or black and white; in most specimens there is a small white spot on the forehead. Tail white with a black stripe along its upper surface which terminates a little way from the point; soles of the feet clothed with long coarse reddish brown hair; eyes hazel-brown. The bases of the hairs inclined to white. Length from nose to base of tail twenty-four inches; length of tail six inches: length of ears about six inches and a quarter.

Inhabits South Africa,—mountainous situations.

F. Cuvier, *Dict. des Sc. Nat.* xxvi. p. 309. Geoffroy, *Dict. Class.* ix. p. 382. Rheebok Haas and Kol Haas of the Cape Colonists.

*Lepus nigricollis*, F. Cuvier. Top of head sprinkled with yellow; sides red; chin grey; throat white; a greyish white band from the muzzle to the ears; upper part and sides of neck and shoulders bright black. Size of a rabbit.

Inhabits Mauritius, Java, and India.

*Lepus isabellinus*, Cretzschmar, (Isabella-coloured Hare.) Above a dark isabella-colour, variegated on the head and back by an intermixture of a few black hairs; the neck and throat of a lighter tint; chin, belly, inner surfaces of extremities and

a transverse band which in its course encircles each eye white; tail longer in proportion to the body than in the European hare, white with a black-brown stripe on its upper surface. Ears about one-fourth longer than the head, inner and outer surfaces naked, the edges margined with isabella-coloured hair; whiskers black towards base, white towards tips; feet of the same colour as the body; soles clothed with rough reddish hairs, nails black and pointed; eyes bright brown. Length from nose to base of tail sixteen inches, length of tail nearly three inches.

Inhabits sandy flats south-west of Ambukol,—*Ruppell*.

*Lepus Cuniculus*, Linnæus. (Common Rabbit.) Fur rather short and soft; the surface colour of the top of head, and of the back, tawny or pale reddish brown, freely pencilled with black; sides and outer-surfaces of extremities towards body silvery grey, slightly pencilled with black; eyes surrounded by a circle of white hairs; forehead, muzzle, sides of head, and lower parts of neck, pale rufous yellow; back of neck deep rufous; chin, breast, belly, and inner-surfaces of extremities white; fore-legs, towards feet, pale rufous brown; hinder legs, towards feet, dull white with pale rufous tints; soles of feet clothed with coarse rufous yellow hair. Tail white with a black stripe along its upper surface. Length from nose to base of tail about seventeen inches; length of tail two inches and a half; length of ears three inches and a quarter.

Inhabits South Africa,—Robben and Dassen Islands.

Le Lapin, Buff. Rabbit, Pennants, *Quadrup.* ii, p. 103.

*Obs.* It is generally understood that the Rabbit was introduced into South Africa from Europe. The colours vary considerably in different specimens.

*Lepus rupestris*, Smith. (Rock Hare.) Hair rather coarse and of moderate length: centre of muzzle, forehead, and top of head, reddish brown finely pencilled with black; back of neck pale rufous-brown, many of the hairs tipped with dull white; back and upper-parts of sides reddish-brown and black, intimately mixed in nearly equal proportions, each hair being annulated with those colours; lower parts of sides, and under-parts of neck, breast, and extremities towards body, rufous with many of the hairs tipped with obscure white; upper and lower lips white; chin and belly pale rufous-white; sides of head dusky pencilled with reddish white; ears short, inner-surfaces thinly sprinkled with a fine pale tawny down, outer surfaces towards tips and inner margins thickly covered with a fine short hair variegated brownish black and dusky white; eyes brown; whiskers black, some of the hairs tipped with reddish white; lower parts of extremities and base of tail deep rufous; tip of

tail black and bushy. Length from nose to base of tail sixteen inches; length of tail two inches and a half: length of ears three inches and a quarter.

Inhabits South Africa,—rocky situations.

*Obs.* The colours in this species vary considerably, but in all specimens the extremities and base of tail are always dark rufous, and the tip of the latter black or brown-black. The hind-legs are much shorter than in the *true hares*, and its manners connect it closely with the rabbit.

## ORDER EDENTATA.

No incisors in either jaw, canines in some but not in all; some Genera with only cheek teeth, others without any teeth; toes varying in number and armed with strong nails; orbits and temporal fossæ united.

### Genus ORYCTEROPUS. *Geoffroy.*

*Incisors*  $\frac{0}{0}$ , *canines*  $\frac{0}{0}$ , *molars*  $\frac{7}{7}$ —26. *Molars separate, without roots or distinct crowns, formed of bony substance, traversed longitudinally by parallel tubes; head elongated; toes four on the fore-feet and five on the hind-ones; the hind-feet plantigrade; nails very thick and strong.*

*Orycteropus Capensis*, Desm. (Cape Ant-eater.) Hair short, coarse, and scanty upon the body in old individuals, plentiful in young ones: head yellowish brown; body dull brown or rufous brown; extremities black or black-brown, the hair longer than on the body; upper-surface of tail at root the same colour as back, under-surface and elsewhere yellowish white; outer-surfaces of ears towards bases, and inner edges, thinly covered with short, white or tawny hair; eyes dark brown; nails light horn-coloured. Length from nose to base of tail four feet eight inches; length of tail about two feet; length of ears seven inches.

Inhabits South Africa.

*Myrmecophaga Capensis*, Thunb. in *Mem. de l' Acad. de Petersb.* iii. p. 301. Aard Vark of the Cape Colonists.

### Genus MANIS. *Linnæus.*

*Toothless, body elongated, and, together with the tail, covered with hard corneous imbricated scales or plates; muzzle long; tongue protractile; eyes small; feet with five toes; nails of the anterior ones long, and formed for digging. Animal possessing the power of rolling itself into a spherical shape.*

*Manis longicaudata*, Geoff. (Long-tailed Manis.) Body, legs, and tail covered with large pointed striated scales; the



throat and belly covered with hair; nose slender, head smooth, legs short; tail tapered. The colour of the whole animal chocolate. Length from nose to tip of tail fourteen inches; length of tail about forty inches.

Inhabits Central Africa.

*Manis tetradactyla*, Lin. *Syst.* 33. Schreb. ii. 23. *tab.* lxx. Le Phatagin, Buff. x. 119, *tab.* xxxiv. *Manis Africana*, Desm. *Mamm.*

*Manis Temminckii*, (Temminck's *Manis*.) Head short, extremity of muzzle without scales; eyes small; body and tail broad, somewhat depressed and arched above; scales large, their points rounded or semilunar; their outer surface finely striated, longitudinally, and of a dull green-colour tinted with brown, except towards the points, where each is more or less completely margined with yellowish white or pale fawn colour. Tail obtuse at the point, with five distinct rows of scales towards its base, and four towards its extremity; nails pale horn-coloured or yellowish, the three middle ones of fore-feet much the longest. Length from nose to base of tail about seventeen inches; length of tail eighteen inches.

Inhabits Southern Africa,—eastward of Latakoo.

*Obs.* Never having had an opportunity of examining a perfect specimen of this animal I am unable to state what are the appearances of the under-parts of the body, or how many rows of scales exist on the back.

## ORDER PACHYDERMATA.

Two or three kinds of teeth; four extremities with the toes variable in number and furnished with strong nails or hoofs; no clavicles; organs of digestion not formed for ruminating.

### FAM. PROBOSCIDEA.

#### Genus ELEPHAS. *Linnæus*.

*Incisors or tusks*  $\frac{2}{3}$ , *canines*  $\frac{0}{3}$ , *molars*  $\frac{2}{2}$ ,—10. *Tusks slightly arched towards their extremities, composed of ivory-incased with a crust of enamel; molars composed of vertical and transverse laminae covered by enamel; five toes on all the feet; nose elongated into a cylindrical proboscis, with a moveable appendage at its termination, serving the purpose of a finger; head large; neck short; eyes small, lateral; ears extremely flat and very large; body large and massive; tail short, tufted at the end; mammae two.*

*Elephas Africanus*, Cuvier. (African Elephant.) Skin rough and nearly destitute of hair; head round; forehead convex; ears much larger than in the Asiatic Elephant, and descending

as far as the legs; cheek-teeth marked by lozenge-shaped lines of enamel. Length from nose to root of tail about sixteen feet; common height from twelve to thirteen feet at the shoulder, rather less behind.

Inhabits Africa,—common in the Interior of South Africa.

*Elephas Capensis*, Cuvier. *Mem de l' Institut*.

*Obs.* M. F. Cuvier has established a new genus, to receive this species, under the name *LOXODONTA*. *Histoire Naturelle des Mammiferes, avec des Figures originales; dessines d'apres des Animaux Vivans; &c.* Par M. M. Geoffroy Saint-Hillaire et F. Cuvier, Levrasons 52de et 53eme.

## FAM. PACHYDERMATA *proper*.

### Genus HIPPOPOTAMUS. *Linnæus*.

*Incisors*  $\frac{1}{4}$ , *canines*  $\frac{1}{1}$ , *molars*  $\frac{7}{7}$ ,—40. *Upper incisors thick, short, conical, and bent inwards; lower ones cylindrical, directed obliquely forward, the intermediate ones strongest; canines greatly developed, forming strong tusks, curved upwards; the three or four first cheek-teeth conical and simple; the rest irregular, and with flat crowns edged with elevated ridges of enamel; head thick and square; muzzle very large; eyes and ears small; body thick and heavy; legs short, terminated with four toes; tail short; mammæ two, ventral; skin almost without hair.*

*Hippopotamus amphibius*, Linnæus. (Sea Cow.) With the exception of a few scattered bristly hairs upon the lips, forehead, crown of head, edges of ears, and extremity of tail, this animal is entirely without covering. Skin rough and hard; the head, sides, and under-parts of neck, breast, and groins, a dull pink red; belly obscure white tinted with red or reddish white; the rest of body and extremities dusky or greyish black; eyes chocolate brown with a lightish ring round the pupil. Length from ten to eleven feet; height from four to five feet.

Inhabits the rivers of Africa.

*Obs.* Desmaret makes two species of this genus, founded upon the characters of skulls of specimens from different parts of Africa. The one he calls *H. Capensis*, the other *H. Senegalensis*.

### Genus SUS. *Linnæus*.

*Incisors*  $\frac{1}{8}$  or  $\frac{5}{8}$ , *canines*  $\frac{1}{1}$ , *molars*  $\frac{7}{7}$ ,—42 or 44. *The lower incisors directed obliquely forwards, the upper ones conical; canines projecting out of the mouth, the upper ones frequently bent upwards; molars tuberculous; four toes on all the feet, the two middle ones only touching the ground, armed with strong hoofs; nose elongated, cartilaginous: mammæ twelve. Body covered with a thick skin furnished with a bristly hair.*

*Sus Larvatus*, F. Cuvier. Bristles long, particularly upon the upper parts of the neck and back. Head yellow-white, the forehead more or less pencilled with black; neck and body black, variegated with white, from most of the bristles being of that colour towards the points; extremities almost entirely black; eyes dark brown; canines very strong, those of upper-jaw projecting horizontally beyond the lips, those of lower jaw upwards; between upper canines and eyes a distinct tuberculous elevation covered with hair; ears short and thinly covered, both without and within, with coarse black hair, which is longest at their tips; tail thinly covered with black bristles. Length from nose to root of tail between four and five feet; length of tail about one foot.

Inhabits South Africa and Madagascar.

*Sus Africanus*, Schreb. *Saugth. Tab.* 327. Thunb. in *Mem. de l' Acad. de Petersb.* iii. p. 320. Daniel, *African Scenery*, *Tab.* 22. Bosch Vark of the Cape Colonists.

*Obs.* Scarcely any two specimens of this species exhibit the same colours, some are a brownish black variegated with white, and others are almost entirely of a light reddish brown or rufous tint without the white markings: indeed such are the varieties that it is scarcely possible to say what are the most prevailing colours.

#### GENUS PHASCOCHÆRUS. F. Cuvier.

*Incisors*  $\frac{2}{6}$ , *canines*  $\frac{1}{1} \frac{1}{1}$ , *molars*  $\frac{4}{4} \frac{4}{4}$ ,—30. *The two intermediate lower incisors smaller than the rest, and apart from each other; canines very large and directed upwards; molars composed of cylinders of enamel inclosing the osseous substance; head very large; muzzle very broad; a large fleshy lobe under each eye and a warty excrescence on each side of the muzzle between the eye and the tusks; eyes small; figure nearly that of the Hog.*

*Phascochærus typicus.* (African Boar.) The top of the head, the upper part of the neck and the anterior part of the back, covered with very long and rigid bristles of a black-brown colour, those on the top of the head diverging like the rays of a circle. On the other parts the hair is shorter of a dull brown, slightly inclined to white on the flanks and belly. Tail furnished at the top with a number of blackish brown bristles, elsewhere nearly naked. Length from nose to root of tail about five feet; length of tail about eleven inches.

Inhabits Africa,—interior of the Cape Colony,—rather rare.

*Aper Æthiopicus*, Pallas, *Misc. p.* 16. *tab.* 2. and *Spic. Zool.* ii. p. 3. *tab.* 1. *Sus Æthiopicus*, Gm. Sanglier du Cap Vert or Sanglier d' Afrique, Buffon. *Phascochærus Africanus*, Desm. Vlackede Vark of the Colonists.

Genus RHINOCEROS. *Linnæus.*

*Incisors*  $\frac{0}{0}$  or  $\frac{2}{2}$  or  $\frac{4}{4}$ , *canines*  $\frac{0}{0}$ , *molars*  $\frac{7}{7}$  or  $\frac{6}{6}$ ,—32 or 36. *Incisors unequal amongst themselves where they exist; anterior molars small, posterior increasing progressively; eyes small, lateral; one or two horns placed upon the muzzle; three toes on all the feet; tail short, laterally compressed near the end; mammæ two, skin very thick, naked, and rugous.*

*Rhinoceros Africanus*, Desm. (African Rhinoceros.) Skin rough and knotty but without plaits and folds; colour ashy or ashy brown; a few dark bristly hairs on the edges of the ears and about the bases of the horns; also some stiff hairs on the sides of the tail towards its tip. Upper lip sublongated and pointed; no cutting-teeth in either jaw; two horns on the muzzle, the one behind the other, the foremost much the longest, sometimes measuring two feet in length; skin rough and knotty but without plaits or folds. Length from twelve to fourteen feet; height from seven to eight feet.

Inhabits South Africa.

*Rhinoceros bicornis*, Linnæus. *Rhinoceros Africanus*, Cuvier. *Rhinaster of the Cape Colonists.*

*Rhinoceros simus*, Burchell. Horns two, muzzle truncated, skin without folds; larger than last described species.

Inhabits Southern Africa,—northward and eastward of Latakoo.

Rh. du Burchell, Desm. *Mamm.* p. 401.

Genus HYRAX. *Hormann.*

*Incisors*  $\frac{2}{2}$ , *canines*  $\frac{1}{0}$ , *molars*  $\frac{6}{6}$ ,—32. *Anterior cheek-teeth in the upper-jaw with flat-triangular crowns, the others with the crowns slightly concave; the posterior molars of lower-jaw with a transverse ridge dividing the middle of the crown; body with two kinds of hair, one short woolly and abundant, the other long, bristly and very scanty; fore-feet with four toes, hind-ones with three; nails small, flat, and scarcely covering the upper part of toes; head rather large, nostrils oblique; upper-lip cleft; ears small and rounded; no tail; two pectoral and four ventral mammæ.*

*Hyrax Syriacus*, Gmel. (Syrian Hyrax.) Colours of the upper-parts grey mixed with reddish brown; the under-parts pure white; whiskers and eyebrows long and bristly; on the body similar bristles are thinly scattered amongst the fur; ears rounded and both surfaces covered with hair: hind-feet with only three toes, the middle one the longest. Length from nose to hinder extremity of body seventeen inches.

Inhabits Abyssinia, Arabia, and Syria.—Bruce.

*Agnus filiorum Israel*, Prosp. Alp. *Ægypt*, i. 232. *Daman Israel*, Buff. *Supp.* Ashnoko, Bruce, *Travels* v. 139. *Hyrax Syriacus*, Schreb. *tab.* ccxi. B.

*Hyrax Capensis*, Schreber. (Cape Hyrax.) Hair moderately long and soft; the surface colour of the upper and lateral parts of the head and neck, of the back, sides, and outer surfaces of extremities, dusky black or brownish black, very freely pencilled with pale tawny, indeed the two colours may be said to be nearly in equal proportions. The mottled appearance arises from most of the hairs being annulated with tawny near their points. Chin, lower parts of neck, breast, belly, and inner-sides of extremities, tawny, yellow-white or dull white, the sides of the former pencilled with black. The bases of the hairs of the upper and lateral parts blackish brown, those of the under parts like the tips. Ears rounded, inner surfaces covered with short whitish hair, outer surfaces with blackish hair; whiskers and eyebrows long, black, and bristly; on each cheek and under lower-jaw, a tuft of similar hairs, and on the neck, body, and outer sides of extremities, others of a like description, are thinly interspersed amongst the general covering and project greatly beyond it. Eyes black. Length from nose to hinder extremity of body eighteen inches; height at shoulder about six inches.

Inhabits South Africa,—rocky situations.

*Hyrax Capensis*, Pallas, *Miscell.* p. 34. *Tab.* iii. *Specil.* ii. p. 22. *Tab.* ii. Daman Cuvier, *Descrip. Osteol. et Comparat. in Ann. du Mus.* iii. p. 171. *Tab.* xix. xx. Klip Das of the Cape Colonists.

*Obs.* Some Naturalists consider this and the *Hyrax Syriacus* as identical.

*Hyrax arboreus*, Smith. Hair rather long and soft; colour above tawny red, freely mottled or pencilled with black; lower parts of the sides reddish white [with less of the black pencilling; upper and lower lips, chin, and under parts of body, and inner surfaces of extremities, dull white; on the crown of the head, black is the predominating colour; the sides and centre of the muzzle covered with short dusky or reddish white hair; eyebrows white; whiskers long and black; ears short, rounded, and projecting but little beyond the fur; outer surfaces covered with long dusky white hairs, inner surfaces, scantily, with hair of the same tint; on the centre of back, about half-way between head and vent, a narrow longitudinal white blotch, and beneath, about the middle of the lower-jaw, a transverse black stripe; feet and toes covered with a dirty reddish white hair. The two centre incisors of lower jaw with tricuspoid points. A number of strong black hairs, much longer than the general covering, are scattered on the back and sides, and assist in producing the variegated surface colour; the bases of the short

hairs are bluish black. Length from nose to vent twenty-one inches; height at shoulder about seven inches.

Inhabits South Africa,—forests in the eastern parts of the Colony and beyond it;—*rare*.

*Translations of the Linnean Society, vol. xv. p. 468.*

## FAM. SOLIDUNGULA.

### Genus EQUUS. *Linnæus.*

*Incisors*  $\frac{6}{8}$ , *canines*  $\frac{1}{1}$ , *molars*  $\frac{6}{8}$ ,—40. *Eyes large; ears pointed, erect, and moveable; feet terminating in a solid hoof; tail with long hair or tufted towards its extremity; two inguinal mammae; a bare spot on the inner side of each fore-leg, a little above the knee, or on all the four legs.*

*Equus Zebra*, Linnæus. (The Zebra.) Hair short and white, with close narrowish black bands on the body, neck, and legs, and brown ones on the face; nose bay; dorsal line indistinct from the others; belly and insides of thighs without bands. Tail blackish; mane erect, full, bushy, and banded with white; ears white at the tips, and each with two transverse black bands. Length from nose to base of tail nearly seven feet; length of tail about fifteen inches; height at shoulder about four feet.

Inhabits Africa,—mountainous parts of the Cape of Good Hope,—Guinea, “Congo and Abyssinia, *Ludolf.*”

*Equus Zebra*, Lin. *Equus Montanus*, Burchell, *Travels*, i. 139. *Zebra*, Ray, *Quad.* *Zebra*, Buff. *Hist. Nat.*. *Wilde Paard of the Cape Colonists.*

*Equus Quagga*, Pennant. (The Quagga.) Hair short; head, neck, mane, and shoulders, blackish brown, banded with white; on the back and sides the ground colour is paler and the bands are more diffused; rump greyish; dorsal line black, margined on each side with a white line; belly, tail, and legs white; ears each with two irregular black bands and a white tip. About the length of *Burchell's Zebra*, but of a more robust form.

Inhabits South Africa,—plains in the Interior.

*Le Cougga*, Cuv. *Reg. Anim.* 245. *Quacha*, Penn. *Quad.* 14. *Kwagga* or *Couagga*, Buff. *Suppl.* *Quagga of the Cape Colonists.*

*Equus Burchelli*. (Burchell's Zebra.) Hair short; ground colour white; head with numerous narrow brown stripes; nose bay-coloured; the neck and body with alternate transverse stripes of black and brown, the former broad, the latter nar-

row, and nearly fill up the spaces between the black ones. Dorsal line narrow before but gradually widens towards the tail, and is distinctly margined on each side with white. The belly, legs, and tail quite white; the mane alternately banded black and white. Rather smaller than the Zebra.

Inhabits South Africa,—plains towards Latakoo.

*Equus Zebra*, *Male*, F. Cuv. *Menag. Mus.* *Equus Zebra*, Burchell, *Travels*, i. 139.

### ORDER RUMINANTIA.\*

Teeth of three sorts; incisors in the lower-jaw only, usually eight in number, opposed to a callosity in the upper jaw; canines in some species in the upper-jaw, in others, in both, in most none; cheek-teeth or molars almost always six on each side, in both jaws; articulation of the jaw disposed for a grinding motion; no clavicles; extremities disposed for walking; the toes externally, two anterior, rudimentally in most, two posterior, all unguiculated, excepting the posterior of some. Single metacarpal and metatarsal bones to each foot; organs of digestion disposed for chewing the cud; four stomachs; intestines long; mammæ two or four, always inguinal; horny or osseous horns in the males, and often the females of most species. Food invariably vegetable.

### TRIBE CAMELIDÆ.

No horns; no succentorial hoofs; no muzzle; nostrils slit; upper-lip divided, separately moveable, and extensible; horny soles to the feet; toes covered with crooked unguicular claws or nails; canines in both sexes; neck long; limbs long; lower abdomen drawn up under the pelvis, retromingent.

### Genus CAMELUS. *Linnæus.*

*Incisors*  $\frac{2}{1}$ , *canines*  $\frac{1}{1}$ , *false molars*  $\frac{1}{1}$ , *Molars*  $\frac{5}{5}$ ,—36. *Inferior incisors in trenchant quoins, the superior lateral and cuneiform; canines conical, straight, robust; false molars on each side, separated from the other teeth; in the diastema, and uncinated; head long; chaffron convex; no sinus under the eyes; nostrils slit obliquely, and closing at pleasure; eyes prominent; ears small; pores at the back of the head, feet with toes only free, the rest united; neck bent; one or two hunches on the back much developed; callosities on the sternum, and flexures of the extremities; tail reaching to the tarsus; mammæ four; hair*

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\* The descriptions &c. of the animals of this Order, with but few exceptions, have been copied almost *verbatim* from the excellent Monograph of Col. Hamilton Smith, contained in Griffith's Translation of the Animal Kingdom, vol. v.

woolly; the *ventriculus* with membranous cells, one of which is very large to contain water; male organs slender, reversed in a state of repose; scaphoid and cuboid bones of the tarsus separated; stature very large.

*Camelus Dromedarius*, Linnæus. (Dromedary.) Head small; back with a single hunch; ears short; neck long, slender, and bending; hair soft, longest about the neck, throat, and hunch; colour on the latter dusky; on the other parts a reddish ash tint. Tail long, the hair on the middle soft, on the sides long, coarse, and black. Length from nose to base of tail about seven feet six inches; length of tail about sixteen inches; height about four feet eight inches.

Inhabits Northern Africa and Asia.

*Camelus Arabicus*, Pliny, *lib. viii. c. 18.* *Camelus Dromas*, Gesner, *Quad. 159.* *Le Dromedaire*, Buff. Forskal, *iv. No. 12.*

### TRIBE CERVIDÆ.

No horns, or deciduous horns; feet truly bisulcated; structure elegant, slender, mostly with muzzle, suborbital sinus, and with canines in the upper-jaws of the males; succentorial hoofs.

#### GENUS CERVUS. Linnæus.

*Incisors*  $\frac{0}{3}$ , *canines*  $\frac{0}{0}$  or  $\frac{1}{0}$ , *molars*  $\frac{6}{6}$ ,—32, or 34. The canines in some males compressed and bent back; head long, terminated in most by a muzzle; ears large; pupils elongated; suborbital sinus in most; tongue soft; no gall bladders; four inguinal mammæ. Horns solid, deciduous; existing in the males only, in the females with one exception none, palmated, branched or simple; the horn consisting in a burr, or rose-shaped foot, a beam and branches, or antlers; succentorial hoofs in all.

Sub-genus ELAPHUS.—Horns round; three antlers turned to the front; summit terminating in a fork or in snags from a common centre; suborbital sinus; canines in the males; a muzzle.

*Cervus Elaphus*. (The Stag.) Horns with three anterior antlers, all curving upwards; the summit forming a crown of snags from a common centre; tail middle-sized; lachrymary sinus; muzzle; canines in the males; colour red-brown in summer, brown-grey in winter; pale disk on buttocks.

*Var.* Barbary and Corsican Stag. Browner, smaller, lower; horns terminating in forks? This is the Bukr-al washî, and the female Fortass, or Broad Scalp, because without horns, of the Moors.



Inhabits Europe, Western Asia, Barbary, Corsica.

Elaphos, Arist. Ælian. Cervus, Pliny. Cerf, Buff. G. and F. Cuvier. C. Elaphus, Auctor. Stag, Pent, Shaw. Hirsch of the Germans. Olen, and Jelen, Slavon. Buga of Tartar.

### TRIBE GIRAFFIDÆ.

Frontal processes prolonged in the shape of horns, covered with hairy skin, which is continued from the scalp, and terminated by long hard bristles, in both sexes.

#### Genus CAMELOPARDALIS. *Linnæus.*

*Incisors*  $\frac{0}{8}$ , *canines*  $\frac{0}{0}$ , *molars*  $\frac{6}{6}$ ,—32. *Head long prolonged with tuberculum on the chaffron; osseous peduncles covered with skin, and hairy, terminated by a tuft of bristles; no muzzle; upper-lip entire; no lachrymary sinus; ears long; tongue rough; eyes large, soft, pupil elongated; neck very long; withers much elevated; back oblique; legs slender; no succentorial hoofs: callosity on the breast; tail to the hough; female four teats.*

*Camelopardis Giraffa.* (The Giraffe.) In stature the tallest of mammiferous animals; coat of a dirty white, marked with dark brown, or ferruginous spots or blotches, somewhat tending to symmetrical forms; large and angular in their shapes; short mane on neck and withers, in alternate parts of black and white; tail terminated by a tuft of dark and long hair.

Inhabits Central Africa,—from Caffraria, and the borders of the Gariép, across the deserts to Abyssinia.

*Camelopardalis*, Pliny, Oppian. *Heliodorus*, Gesner. *Anabula*, Seraph. Alb the Great; *Gyraffa*, quam Zurnapa, Græci et Latini *Camelopardalus* nominant, Bellon. Prosp. Albin. *Camelopardalus*, Lin. *Girafra*, *Camelus Indicus*, Johnst. *Giraffa Camelopardalis*, Briss. *Camelopardalis Giraffa*, Auctor. *Giraffe*, Buff. *Giraffa*, Shaw. *Zuraphate*. Arabic. *Seraphah*, Persian. *Jirataka* Lin Amharic. *Zomer*, Hebrew. *Deba*, Chaldaic, Æthiopic. *Nabis*, Pliny. *Naip of the Hottentots*. *Impatoo*, *Bushmen*.

### TRIBE CAPRIDÆ.

Horns persistent, vaginating upon an osseous nucleus, totally or nearly solid; the horny sheath received its increase by annual ringlets at the base, which form in most species annuli, wrinkles, or knots; many striated longitudinally; the horns often

compressed; angular, or sub-angular; animals in general of a light structure, calculated for springing or for swiftness; ears erect, funnel-shaped; pupils oblong; no canines in the mouth; vertebræ of the tail never descending below the hough; stature very various.

### Genus ANTILOPE.\*

*Incisors*  $\frac{2}{2}$ , *canines*  $\frac{0}{0}$ , *molars*  $\frac{6}{6}$ .—32. *Horns common to both sexes, or in the males only; bony core solid, without sinus or pores, round, or compressed, generally standing beneath the frontal crest, variously inflected, mostly distinguished by annuli, with longitudinal striæ between them; sometimes pearly and forked; the chaffron rather straight, with a muzzle, half muzzle, or simple nostrils; lachrymary sinus in most, and in some a suborbital pouch; eyes large, dark; ears in general long, pointed; inguinal pores; a gall-bladder.*

*Sub-genus AIGOCERUS.*—*Horns very large, common to both sexes, pointed, simply bent back, annulated, placed above the orbits. Half muzzle; no suborbital sinus; no inguinal pores; tail descending to the houghs; mane reversed; a white mark before the eyes; throat and under-jaw somewhat bearded; mammae two; stature large; shoulders higher than the croup.*

*Aigocerus Leucophæa.* (Blue Antelope.) Four feet high at the shoulder; horns slightly compressed, scimitar-shaped, about twenty-eight inches long, closely annulated, with twenty to thirty rings; no striæ; ears long; colour silvery blue-grey; spot before the eyes, belly and inside of the limbs, white; short white mane turning towards the head; hide black; tail tufted at the end; appearance of beard on the under-jaw.

Inhabits South Africa,—rare.

Antilope Leucophæa, Auctor. Tzeiran, Buffon. Blaauw Bok of the Cape Colonists.

*Aigocerus Equina.* (Roan Antelope.) Four feet four inches at the shoulder; horns very robust, about twenty-four inches long, strongly bent back, with seventeen to twenty-seven prominent rings, more remote from the orbits; ears nine inches long; hair coarse, undulating, loose, mixed red and white; beneath the throat longer, whiter; white spot round and before the eye, formed of a pencil of long hairs; neck with a short white reversed mane.

Inhabits South Africa,—on the elevated ridge near the sources of the Gariiep, &c.

Antilope Equina. Antilope Ozanne, Geoff. Cuv. A. Aurita, Burchell.

\* When the numerous animals which are included in this genus shall have been more correctly studied in their natural *habitats*, the classification which is at present in use, will doubtless require to be materially altered.

*Aigocerus grandicornis*. (Long-horned Antelope.) Horns three feet and a half long, fifteen inches in circumference at base, curved like a scimitar, compressed, rounded behind, carinated, rough, with oblique wrinkles on the inner surface, furrows on the external.

Inhabits Central Africa? Bornou?

Antilope Grandicornis, Herman. Empalanga? Empabunga? Empalunga? Purchas. De Bry, *Reg. Congo*, p. 22. Korooko of the Bornouese? El Bucher el Achmer of the Arabs? Denham and Clapperton's Travels.

*Aigocerus barbata*. (The Takhaitze.) In size equal to the Equina, with a broad dark nose; white streak before the eye; horns scimitar-shaped, more erect and with fewer annuli; a considerable beard on the chin, and long flowing dark-coloured mane on the neck; colours blue-grey or rufous; no tuft to the tail.

Inhabits the parting ridge of the waters on the south-east coast of Africa.

Takhaitze of Somerville and Daniell.

Obs. It has been surmised that, *The Takhaitze* was no other than the Roan Antelope, and this probability was increased by Mr. Burchell searching in vain for it, where it was said to exist, and finding in its stead the *Equina* already described.

*Aigocerus ellipsiprymnus*, Ogilby. Hair coarse or bristly, on the upper parts moderately long, on the sides and lower parts rather longer, that of the upper parts of the neck and anterior part of the back reversed and directed forwards. Face dark brown, sides of head variegated dull white and brown; lips and chin whitish, eyebrows and space in front of inner canthi pure white; horns somewhat scimitar-shaped, curved forward and outward, the first third slightly compressed, the other two thirds nearly cylindrical, the last six inches smooth, the rest marked by strong irregular annuli; ears fulvous without, whitish within, and margined with dark brown hair; upper parts of neck, back, and upper portions of sides dark dusky brown; lower portions of sides, throat, breast, and anterior part of belly, greyish white, pencilled with dusky brown; hinder part of belly and anterior parts of thighs nearly pure white; anterior part of throat crossed by a broad white band, and the anterior portion of the lower jaw by a narrow white stripe; the hinder portion of back, about six inches before root of tail, marked by a transverse white stripe which is lost on each side upon the posterior and inner parts of the thigh; extremities dark blackish brown; hoofs black; tail tufted, under surface near root white, the rest blackish brown. Length from

horns to base of tail seven feet four inches; length of tail fifteen inches; length of head about fourteen inches; length of horns following the curve thirty inches; length of ears six inches and a half; height at the shoulder three feet ten inches.

Inhabits Southern Africa,—about Latakoo.

*Obs.* Having never had an opportunity of examining a perfect specimen of this animal, I have classed it provisionally in the Sub-genus *Aigocerus*. The description above given has been drawn up from an imperfect skin in the collection of Mr. VERREAUX. Mr. STEADMAN has the merit of having first brought this Antelope under the notice of the Scientific world, and it forms one of the interesting objects in his Collection which is at present gratifying the Admirers of Nature in London, and rewarding him for his activity and enterprize.

**Sub-genus ORYX.**—*Horns common to both sexes; horizontal, very long, slender, without ridges, pointed, black, with annuli somewhat spirally twisted to half or two-thirds of their length; the animals large, with long ears, small or no suborbital sinus, ovine muzzle, darker coloured streak through the eyes, mane on the neck reversed; tail reaching to the houghs, and terminated by a tuft of long hairs; no tufts on the knees, nor inguinal pores? two mammæ. Stature large; general colours of the fur rufous or vinous grey upon a white ground.*

*Oryx Capensis.* (South African Oryx.) Adult male three feet eight or three feet ten inches high, six feet six inches in length; horns three feet long, annulated, with twenty-eight to thirty-three rings, straight or very slightly bent, horizontal, diverging, and sharp at the points; eyes high in the head; black space round the base of the horns, descending in a streak down the forehead; another passing through the eyes, to the corner of the mouth, connected by a third which runs round the head over the nose. The rest of the head and ears white. General colour vinous buff; the breast, belly, and extremities white; a black list from the nape of the neck to the root of the tail; a broad bar of the same across the elbow, passing along the flank, and ending in a wide space on the thigh above the houghs. Black spot upon each leg beneath the joints.

Inhabits South Africa.

*Oryx, Auctor.* Passan, Buffon Resc. Sonnini. Gems-bok of the Cape Colonists.

*Oryx Tao,* H. Smith. (Nubian Oryx.) May be a variety of the *O. Leucoryx*. Near four feet at the shoulders; seven feet in length; horns three feet four inches long, more robust, very spirally annulated, equally curved backwards; nose blunt; the neck longer, the structure more elegant; hoofs low and flat; colour rufous and white, forming a grey on the nose,

temples, cheeks, neck, upper arm and lower part of the thigh; more white over the shoulders, back, flanks, and croup; a slight blackish mark above and beneath the eye, and a broad white streak passing before it to the corner of the mouth; mane and tuft of tail white.

Inhabits Nubia, interior of North Africa.

Tao of the Hebrews and Egyptians. Dante and Lout of Congo? *Leo Afric. de Bry.*

*Oryx Besoastica.* (The Algazel.) This is perhaps another variety. Three feet five inches high at the shoulder; five feet two inches long; horns three feet long, round, slender, bent back, with thirty-six annuli not spiral; forehead narrow; head long; neck short; body clumsy; legs slender; lachrymary sinus beneath the eye; reversed ridge of short white hair on the neck; head white; dark spot at the root of the horns passing down the face, another less distinct through the eyes; body and neck fulvous-grey.

Inhabits the interior of Senegal.

A. Algasel, Fred. Cuvier, A. Besoartria, Licht. Pallas. A. Eleotragus, Schreber? Lichtenst?

*Oryx Addax*, H. Smith. (The Addax.) Three feet seven inches high at the shoulders; three feet eight inches at the croup; horns robust, black, round, divergent, with two and a half spiral turns, thirty-two to thirty-five annuli; some dichotomous, extending three-fourths of the length; two feet four inches long; no lachrymary sinus; eyes large, dark; dark-coloured mane on the neck; tuft of long dark hair on the throat; head thick; forehead flat, covered with dark hairs, and surrounded by a narrow white line passing downwards before the eyes; nose ovine; chaffron, cheeks, and neck, liver coloured grey, diluting on the shoulders, and the rest of the body milk-white; hoofs flat, broad, round, and black; tail and tuft white; female two mammæ; horns equally large. This species passes from the Orygine Sub-genus to the Damaline sub-genus *Strepsiceros*.

Inhabits Nubia.

*Strepsiceros* and *Addax* of Pliny and Caius in Gesner. A. *Addax*, Grætzmer. El Bucher Abiad, of Denham and Clapperton.

Sub-genus GAZELLA.—Horns common to both sexes, placed nearer the orbits, more vertical, bending back, and the points forward, and also turned outwards, and again inwards, constituting a lyrate form; they are black, annulated and striated. These animals have small lachrymary sinus, inguinal pores, ovine nose; mostly tufts on the knees, and dark-coloured bands

on the flanks; eyes very large and dark; tail short and tufted; mammæ two or four. Gregarious on open plains.

*Gazella Pygarga.* (White-faced Antelope.) Adult male three feet eight inches at shoulder; six feet long; horns, twelve to fifteen inches long, seven inches in circumference at base, black, very strong, with ten or twelve semi-annuli on their anterior side, and striated between. A patch of rufous hair at base of the horns, divided by a white streak, which passes down the face to the nose; ears long, reddish outside, sides of the head, neck, flanks and croup, deep purple-brown, the back hoary, bluish white, as if glazed; legs white, no tufts on knees.

Inhabits South Africa.

Antelope Pygarga, Auctor. Nunni of the Booshwanas. A. Dorcas, Pallas. A. Pygarga, Ejusd. A. Pourpree, Desmarests, &c. Bonte-bok and Bles-bok of the Cape Colonists.

*Gazella Mytilopes*, H. Smith. (Broad-hoofed Antelope.) The male unknown; the female two feet eight inches high; four feet two inches long; head nine inches; horns one foot, slender, round, sublyrate, black, with thirteen or fourteen obsolete rings, standing on a broad rufous spot; ears six inches long; no lachrymary sinus perceptible; incipient dark muzzle between the nostrils; space between the eyes, mouth, under-jaw, breast, belly, croup and legs, white; a bar across the nose, neck, shoulders and flanks; lower part of buttocks, fulvous-ochre colour; a space on the withers and back, of a glazed whitish grey, as in the former; small callosities below the knees, and a dark brown spot at the spurious hoofs; hoofs broad, flat, rounded, black, mussel-shaped; body rather heavy; four mammæ.

Inhabits Western Africa.

A. Naso Maculata, Blainv. A. Nez-tache. A. Mytilopes, Nob. MS.

*Gazella Dama.* (Swift Antelope.) Adult male three feet high at the shoulder, extremely light and elegant in structure; head broad; nose ovine, small; horns black, one foot long, with twelve to sixteen annuli, lyrate, points turned forward and inwards; small lachrymary sinus; ears six inches long; tail short; knees covered by two rows of bristly hairs, turned flat upon the joint, the points inwards; the head white, with a spot of bright rufous hair at the base of each horn; ears six inches long, outside at the root rufous, in the middle white, and tips black; the neck, shoulders, and back, whitish rufous; a spot on the throat, the rest of the body, breast, limbs, and tail, white, with a rufous streak upon each of the fore-shanks. The female nearly equal in size to the male; colours similar.

Inhabits the interior of North Africa from Nubia to Senegal.  
*L. Nanguer*, Buffon. *A. Dama*, Auctor. Swift Antelope,  
 Pennant, is the young animal. *A. Ruficollis*, Grætzmer, the  
 adult. *Engry?* of the *Bornouese*. *Ngria?* of the *Byhermese*.

*Gazella Mhorr*, Bennet. Form light and elegant; the head tapers uniformly, with face moderately prolonged, suborbital sinus of small extent; horns black, embedded at their base in long hair, and marked with eight distinct well defined rings, and one or two incomplete ones, which occupy about two-thirds of the entire length, the remainder towards the points being perfectly smooth and shining. They rise upwards from the head, and pass backwards and a little outwards to a short distance beyond the termination of the rings, from which point they form a strong curve forwards, and thus bring the upper and smooth part to a right angle with the rest of the horn, and with the line of profile. Colours of cheeks and neck, outer surfaces of extremities and upper parts of body, a deep fulvous or dull bay, which terminates abruptly in the white of the belly; between the ears and behind the horns it is tinged with blackish or iron grey. The grey occurs again in front of the horns, where it is slightly intermingled with rufous, and is continued in a broad stripe down the middle line of the face to the muzzle. On either side this dark middle streak is bounded by a nearly white but somewhat fawn-coloured streak, proceeding from above the eye to the muzzle. From the inner canthus of the eye a deep grey streak, bordering the last, passes to the angle of the mouth; at its upper part, adjoining the small suborbital sinus, it is nearly black. The same black colour occurs in a corresponding spot above and behind the eye. Immediately adjoining the eye, and surrounding the under lid and outer canthus, is a patch of white; and a large patch of white occurs also under the base of the ear, extending backwards, and being separated in front from that of the hinder part of the eye by the intervention of rather pale rufous proceeding from the cheeks to just behind the base of the horns. The hairs of the base and tips of the ears in front, of their edges, and of two longitudinal lines within them, are white. The outside of the ears is fulvous, with a mixture of blackish, which is considerably increased towards the tips, where the colour is near black. The whole of the lower parts of the sides and under surface, with the inner, the hinder, and the anterior surfaces of the limbs, are pure white. The white of the hinder part of the posterior limbs extends upwards for about four inches above the tail, including the tail and the whole rump, and is prolonged forwards on each haunch in a broad streak about five inches in length. The long hairs of the tip of the tail are

alone fulvous, intermingled with black. The lips and lower jaw, extending to the upper part of the throat, are white. A remarkable white patch is seated about half way down in front of the neck; its form is that of a crescent placed transversely. Length from nose to base of tail four feet two inches; length of tail, exclusive of hair, seven inches: height at the shoulder two feet six inches; height at the loins two feet eight inches.

Inhabits Morocco.

*Gazella Euchore.* (Springer Antelope.) The adult male about twenty-two inches high at the shoulders, twenty-four inches at the croup; head resembling a lamb's; horns brown-black, lyrate, robust, with about twenty complete rings, tips turned inwards or forwards; general colour of the fur pale-dun, with white about the head, limbs, belly, and croup, separated from the dun by a broad band along the flanks, another on the edges of the fold of the croup, and a dark streak through the eye; females similar to the males; horns more slender, with few distant annuli.

Inhabits plains of South Africa.

Antelope Euchore, Forst. et Auctor. Pronkbok, Vosmaer. A. Marsupialis, Zieumer. A. Pygarga, Blumenb. A. Dorsata, Lacepède. Spring-bok of the Cape Colonists. Tsebe of the Caffers.

*Gazella Dorcas.* (The Barbary Antelope.) Adult male less than the Roebuck; horns black, round, lyrated, thirteen inches long, annulated at base, semi-annulated in the middle, with twelve or thirteen bars, points slightly turned forwards, and the sides striated; facial line concave; face rufous, with black in the middle, and edged at the side with yellowish-white, which extends from the orbits to the nostrils; a white and black streak from the eyes to the nose inside; ears streaked with black; eyes large and black; general colour pale fulvous; below white; tail short, tufted with black; brushes on the knees; a broad brown band on the flanks; female with horns more slender, points turned inwards; two mammæ.

Inhabits Northern Africa, Southern Syria, and Persia.

Dorcas, Ælian. A. Dorcas, Pallas et Auctor. Gazal of the Arabs. Tzebi of Scripture. Gazalle, Buffon.

Var? *Gazella Kevela.* (The Kevel.) Adult male equal in size to the former; facial line straighter; horns more robust, compressed at base, longer, with more decided flexures, with twelve to twenty annuli, points turned forwards; orbits larger; eyes fuller, hazel colour; white space round the eyes, broader, and the same colour extending on the nether jaw; streak down the face fulvous; below each eye fulvous-brown, without blackish intermixture; general colour pale fulvous, beneath



white, and on the buttocks separated by a faint streak of brown; the brown band on the flanks sometimes obliterated; tufts on knees; female resembling the former, and in a younger state, often mistaken for the Corinna.

Inhabits South-western Morocco, North Africa, between the Chain of Atlas and the Sahara.

Antilope Kevella, Auctor. Le Kevel, Buffon.

Var? *Gazella Corinna*. (The Corinna.) Adult male somewhat less than the Kevel; horns black, more depressed at base, recumbent, and simply lyrate, slightly tumescent, about seven inches long, closely wrinkled beneath with obsolete small bars in the middle; nose and mouth white; chaffron and streak before the eyes bright fulvous; forehead and general colour pale-fawn, mixed with grey on the flanks; beneath white; a light chestnut band on the flanks; small dark tufts on the knees.

Inhabits Central Africa.

Antilope Corinna, Auctor. Corine? Buff. Korin of the Negroes.

*Gazella Soemmerringii*, Cretzschmar. The upper parts of the neck and body, the cheeks, the middle of the under part of the neck, and the outer surfaces of the extremities, a dull isabella colour; the throat, breast, belly, and inner sides of extremities, a glittering snow-white; the line of union of the two colours distinctly defined; a narrow longitudinal white stripe on the outer surface of each fore-leg, between the knee and the foot; hinder parts of buttocks and space immediately in front of tail white, the hair closely set, velvety, and lying in different directions. Along the centre of the forehead and face a broad sooty-black band, and a narrow one of the same colour crosses each eye and extends downwards to the nose; on the forehead the hair is formed into a curled tuft; beneath the eyes and bases of ears a white blotch; the outer surfaces of ears is an isabella colour, margined towards points with blackish hair, the inner surfaces with longitudinal stripes of white hair. Horns strong, nearly round, and each annulated with sixteen distinctly elevated rings, tips smooth, the first portions of the horns on the same parallel with the head, then they incline backward, and towards the tips they assume a direction inwards and upwards; tail white above with a few black hairs at the point, beneath bare and black; lachrymary sinus about an inch below the eye, and situated in the black band already mentioned. Length from nose to base of tail four feet six inches; length of tail nine inches; height at shoulder two feet seven inches; height at rump two feet eight inches and a half.

Inhabits Abyssinia.

(To be continued.)