

AFRICAN ZOOLOGY:

By DR. SMITH.

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Genus GRAPHIURUS. F. Cuvier.

Incisors 3, *canines* 2, *molars* 14—20. The first molar somewhat linear, the rest cylindrical, and with flat nearly smooth crowns. Ears large and rounded; legs short, fore feet with four toes and a tubercle in place of a thumb, hind-feet with five toes; nails strong, curved, and acute. Tail flattened horizontally.

Graphiurus typicus (Cape Graphiurus.) Fur soft and of moderate length; the surface colour of the upper parts of the head, superior parts of the neck, the back, sides, and outer surfaces of thighs, pale grey variegated by an intermixture of rather long, black, somewhat rigid hairs. Centre of muzzle; spaces under eyes and at inner margin of each ear, together with an oblique stripe in front of each shoulder, pure white; upper lip, chin, throat, breast, and lower parts of extremities, either of a dull white tinted with rufous or of a pale ferruginous hue. The grey tint depends upon the tips of the woolly hairs being of that colour; on the outer surfaces of the fore legs close to body, where the tips are principally black, an irregular blotch of that colour is more or less distinct; the bases of all the woolly hairs are bluish black or a dark slate-colour; ears rounded, and both surfaces slightly sprinkled with short blackish hairs; each side of head crossed by a deep black stripe which commences at the anterior margin of the upper lip and terminates below the ear, in its course encircling the eye; whiskers long, mixed black and white. Tail subcylindrical or flattened horizontally; the hairs above and on the sides, long, rigid, and white, except towards their bases, which are blackish; beneath they are entirely black. Length from nose to base of tail six inches; length of tail about five inches.

Inhabits South Africa,—in the forests about the Knysna.

Sciurus ocellaris, Smith, *Zoological Journal*, vol. iv. p. 439.
Graphiurus Capensis, F. Cuvier & Geoff. *Mamm. Ed. Form. Max.*

Genus MYOXUS. Schreber.

Incisors 3, *canines* 2, *molars* 14—20. *Molars* simple with transverse projecting lines; ears large and rounded; fore feet with four toes and the rudiments of a thumb; hind feet with five toes; tail more or less villose, tufted or depressed; fur soft; no cæcum nor large intestines.

Myoxus Avellanarius. (Common Dormouse.) Fur a clear fawn or cinnamon colour above, whitish on the under parts, the throat nearly white. Tail about the length of the body, flattened horizontally, the hairs distichous. Size of a Mouse.

Inhabits Europe and the Cape of Good Hope.

Mus Avellanarius minor, Ray. *Mus Avellanarius*, Lin. *Sciurus Avellanarius*, Erxleb. *Myoxus Muscardinus*, Gm. *Muscardin*, Buff. *Var. b. M. Lalandii*.

Obs. If the *Myoxus Lalandii*, which is said to be found at the Cape of Good Hope, be actually this species, we find it stated to be about twice the size of an European specimen.

Myoxus murinus. Desm. (Cape Dormouse.) Fur rather long and very soft; the surface colour of the upper parts of the head and neck, the back, the sides, and the outer surfaces of the extremities towards the body, pale brown-grey or mouse-coloured; the sides of the face below the eyes, the under parts of the neck, the breast, belly, and lower parts of extremities white; whiskers long and blackish; colour immediately in front of each eye inclined to black; ears thin, rather rounded, and almost bare. Tail flattened horizontally, and of a dark mouse-colour, variegated on the sides by an intermixture of white hairs. In some specimens the edges of the lips, the throat, the breast, the insides of the fore legs, and even the feet, are tinted with ferruginous. Length from nose to root of tail about four inches; length of tail about three inches and a quarter.

Inhabits South Africa,—in forests.

M. Erythrobrachus, Smith, *Zoological Journal*, vol. iv. p. 433.

Obs. The Dormouse which was carried from the Cape by De Laland, and which has been considered in Europe to be a variety of the *Myoxus Avellanarius*, is probably no other than the present species, if so, the common Dormouse is probably not found here.

Genus PETROMYS. Smith.

Incisors 3, *canines* 0, *molars* 14,—20. *Incisors* smooth in front, the upper ones notched on the posterior surface at the points; *molars* with slightly concave crowns, the inner edge of each in the upper jaw, and the outer edge of each in the lower, cut by a deep transverse fissure. *Muzzle* rather acute; *ears* moderate, roundish, and nearly naked. *Tail* shorter than the body, and thickly covered with rigid hair, tip tufted; *fore-feet* with four toes; *hind-ones* with five; *nails* short, curved, and covered by rigid hairs; *form* robust.

Petromys typicus. The colour of the upper and latter parts of the head and neck, the shoulders, anterior part of the back, and outer surfaces of anterior extremities towards body, a dull

brownish grey or an obscure pale slate colour freely pencilled with tawny, and slightly with black; the rest of the back, sides, and posterior extremities, dull chesnut. Chin, under parts of neck, breast, belly, and the lower parts of the anterior extremities, dull white, more or less tinged with tawny or pale rufous; apex of muzzle deep chesnut; whiskers long, rigid, and black; ears thick, blackish, and almost naked. Tail cylindrical, and thickly covered with stiff black hairs, which are rather long at the point, elsewhere short; cutting-teeth of a yellowish tint. The bases of most of the hairs are of a bluish grey colour. The surface colours vary considerably in different individuals, but the upper and anterior parts always exhibit more or less of a bluish grey tint, and the hinder parts a distinct or obscure chesnut shade. Length from nose to root of tail about eight inches; length of tail about six inches.

Inhabits South Africa,—rocky mountains of Namaqualand.

Obs. I have placed this genus in the Sciuridæ, under an impression, that when the various species which are at present included in the genus *Sciurus* shall have been properly examined, several subdivisions will require to be established, some one of which may probably stand in close affinity with *Petrog.*

FAM. MURIDÆ.

GENUS ARVICOLA. Desmarest.

Incisors 2, *canines* 2, *molars* 16.—16. *Molars without true roots and with flat crowns, marked by zig-zag plates of enamel; the first tooth the largest; ears short, round, and hairy; fore-feet with four toes and short nails, hind-feet with five toes closely covered with hair. Tail about half the length of the body, ringed, and more or less covered with short stiff hair.*

Arvicola Niloticus, Desmarest. (Egyptian Vole.) Ears large and round; thumbs of fore-feet very small; hairs rigid and black towards their bases; surface colour of back red-brown, of under-parts yellowish grey; muzzle reddish; the inner sides of extremities whitish; the toes reddish grey; tail moderately hairy, and almost as scaly as in the rat. Length from nose to base of tail seven inches; length of tail four inches and a half.

Inhabits Egypt,—about the sides of rivers.

Hypudaeus Niloticus, Brants. *Geslacht der Muizen*, p. 87.
Lemus Niloticus, Geoffroy, *Description de l'Égypte*.

GENUS OTOMYS. Smith.

Incisors 2, *canines* 2, *molars* 16.—16. *Upper jaw—incisors plain in front or each with a longitudinal groove; the first molar the largest, the last much the smallest, the crowns, particularly of the first and second, much broken by subcircular or irregular*

concavities, each of which is surrounded by a narrow raised rim. Lower jaw—incisors plain in front; the first molar the largest, the last much the smallest; the crowns marked and divided somewhat like those in the upper jaw. Head large and deep; muzzle narrow; ears large; legs short; fore-feet with four toes; hind-feet with five, the innermost one very small; tail short and covered with very short hair; form rather robust.

Otomys typicus, Smith. Hair rather long and very soft; colour above a very pale red-brown, here and there faintly clouded or sprinkled with black; cheeks a pale fawn-colour; centre of muzzle freely sprinkled with dark bluish black; upper lip, spaces about angles of mouth, chin, lower surface of neck, belly and extremities dull white; tail thinly covered with very short, fine reddish white hair; ears very large, and both surfaces thinly sprinkled with fine short hair, which on the inner surfaces whitish and on the outer brownish black. Superior incisors yellowish, each with a well marked longitudinal groove on its anterior surface; lower ones white and smooth. Whiskers composed of long fine hairs, some white and some black. The hairs of the head and upper parts of the body are of a dark slate colour towards their bases, those of the lower parts are of the same colour, only lighter. Length from nose to base of tail four inches; length of tail an inch and a half.

Inhabits South Africa,—District of Graaff-Reinet.

Otomys albicaudatus, Smith. Hair rather long and very soft: colour above grey with a faint brownish tint, and slightly pencilled with black; cheeks, chin, and under-surface of neck dull white-grey or pale brown-grey; upper lip, lower parts of sides, belly, vent, and extremities dull bluish white, the latter in some specimens reddish white; claws nearly colourless, and completely covered by long white hair; tail cylindrical and closely covered by very short fine white hair; ears very large, their points rounded, their inner surfaces thinly covered with fine short dull white hair, their outer surfaces with a sprinkling of short blackish hair. Whiskers reddish white, some of the hairs black towards their bases. Incisors yellowish and not grooved. All the hairs on the head and body dark slate-coloured towards their bases. Length from nose to root of tail five inches and a half; length of tail two inches.

Inhabits South Africa,—District of Albany.

Genus EURYOTIS. Brants.

Incisors 2, canines 2, molars 11,—16. Incisors of upper jaw each with a longitudinal groove in front, those of the lower jaw grooved or plain; molars with true roots, the crowns com-

posed of narrow very distinctly marked transverse laminae, each lamina with a more or less distinct central furrow extending from its outer to its inner extremity; the first molar of upper jaw the smallest, the third the largest; in the lower jaw the first is the largest and the third the smallest; ears large and rounded; upper lip cleft; form robust; legs short, anterior feet with four toes, posterior ones with five; tail much shorter than the body, surrounded with scaly rings, and freely covered with short rigid hair.

Euryotis typicus, Smith. Hair long and soft on the body, rather shorter and more rigid on the head. The upper and lateral parts of the head and body tawny or yellowish brown, freely pencilled with black, which is produced in some measure by the tips of many of the tawny-coloured hairs being of a blackish colour, but chiefly by a free intermixture of a series of entirely black hairs which are longer and more rigid than the general covering; under-parts and extremities dull white or yellowish white with a dusky coloured tint shining through it. Front teeth nearly orange-coloured, and each with a longitudinal groove on the anterior surface. Whiskers pale black; ears rounded, projecting considerably beyond the hair and rather fleshy; inner surfaces with a thin covering of very short tawny hair; outer surfaces, especially towards margin, with a sprinkling of short, blackish hair; claws light horn-coloured and but slightly covered with hair; tail with scaly rings and a scanty covering of short rigid hairs, above brownish black, beneath yellowish or tawny white. The bases of most of the hairs on the body slate-coloured. Length from nose to base of tail seven inches and three quarters; length of tail about four inches.

Inhabits South Africa,—marshy grounds,—near Constantia, and along the western coast.

Euryotis irrorata, Brants. *Het Geslacht der Muisen*, Berlyn, 1727. *Mus irroratus*, Licht. *Vley-muis of the Cape Colonists*.

Euryotis unisulcatus, F. Cuvier. Hair of body long and moderately soft, of head and sides of neck short and rigid. The upper parts of the head, the back, and the upper portion of the sides pale tawny or light yellowish brown, freely pencilled or sprinkled with black, the latter principally produced by an intermixture of hairs which are entirely black and much longer and more rigid than those which are marked with the tawny colour: the upper lip, the sides of the head, and neck, the lower parts of the sides, the chin, the throat, the breast, the belly, and the extremities, dull white, pencilled more or less distinctly on the sides of the head and neck, and on the

outer surfaces of extremities towards body, with brown-black or dusky; whiskers black; ears rounded and fleshy, inner sides towards margins thinly covered with a short tawny hair, outer sides towards margins with a fine, short, blackish hair; tail with distinct scaly rings and a thin covering of short rigid hair, above brownish black, beneath tawny white; claws pale horn-coloured and slightly covered with dull white hairs; front teeth yellowish, the upper ones, each with a longitudinal furrow towards its external edge. The bases of all the hairs of the body, except the long black ones, slate-coloured; many of those, which are partly tawny, have the tips brownish or dull black. Length from nose to base of tail seven inches and a quarter; length of tail three inches and a quarter.

Inhabits South Africa,—District of George.

Euryotis Brantsii, Smith. *Male*.—Hair of body of moderate length and rather rigid, of head and sides of neck short and very rigid. The muzzle, forehead, top of head, back of neck, and back, reddish white or greyish white, here and there tinted strongly with fulvous, and every where freely pencilled with black, the latter is produced principally by most of the hairs being tipped with that colour, though partly also from a slight intermixture of hairs entirely black and longer than the general covering. The sides of head, neck, and body dull white; outer surfaces of extremities and feet white with a tawny tinge. Front teeth yellow, upper ones, each, with a distinct longitudinal groove in front near the outer edge, lower ones with a very slight groove almost upon the edge. Whiskers large and blackish; ears rounded and rather fleshy, inner surfaces with a thin covering of short tawny hair, outer surfaces with long whitish hair towards their base, and short tawny and black hairs towards circumference; claws nearly black and without covering; tail with a moderately dense coating of short rigid hair, blackish above and tawny or tawny-white beneath. The bases of the hairs of the body blackish blue. Length from nose to root of tail eight inches; length of tail three inches and a half. *Female*.—The upper parts strongly tinted with a pale fawn-colour, and scarcely pencilled with black; the sides reddish white, the under-parts and extremities dull white.—Rather smaller than the male.

Inhabits South Africa,—plains in the interior.

Vlakte Muis of the Colonists.

Note. This species is named in honour of Mr. Brants, who, in his excellent Treatise on the *Muridae*, first indicated the genus. The rage for changing names has led to the substitution of *Otomys* for *Euryotis*, which, however, ought not to be admitted considering the last has the claim of priority.

Genus CTENODACTYLUS. Gray.

Incisors $\frac{1}{2}$, *canines* $\frac{2}{3}$, *molars* $\frac{1}{2}$.—16. *Upper jaw*—*Incisors* stout, square, and truncated; *molars* oblong, flat, and plain, on the inside, with one indentation on the outer side. *Lower jaw*—*Incisors* slender and pointed; *molars* somewhat diamond or lozenge-shaped, with one indentation between each of the four angles, but more particularly of the first and second. All the feet with four toes and small curved nails, the two innermost toes of the hinder feet have each a double small deeply pectinated bony plate on its inner side. Tail very short.

Ctenodactylus typicus, (Masson's Comb-Rat.) Fur soft and silky; the upper parts pale fulvous brown; the hair very thin, pale lead-coloured at the base, pale fulvous at the end, with very short blackish-tips, especially on the head; the chin, throat, inner sides of limbs, and beneath, whitish, with the same lead-coloured base to the hairs. The head rather small, and densely hairy; muzzle very small and black; mouth rather small; the cutting teeth exposed, rounded, smooth, and white; whiskers twice as long as the head, rigid and black; two or three long slender bristles over the eyebrows; eyes moderate, rather nearer the ears than the end of the nose; ears rounded, externally covered with dense short fur like the body, internally nakedish, black, and with a distinct helix. The limbs short; feet covered with short rather depressed hair; fore feet short; toes free, the two middle ones nearly equal, the inner rather shorter, and the outermost shortest of all; the claws short, subequal, incurved, black, and not so long as the hinder ones; the hinder feet large with naked soles; toes free, the three inner equal, the outer rather the shortest. Tail cylindrical, ending in a parcel of rigid black-tipped hairs. Length from nose to base of tail nine inches; length of tail one inch.

Inhabits Barbary.—South Africa.?

Mus Gundi, Rothman. *Arctomys Gundi*, Gm. *Syst. Nat.* vol. i. p. 163. Gundi Marmot, Penn. *Zool.* vol. ii. p. 137. *Ctenodactylus Massonii*, Gray, *Spicilegium Zoologica*, p. 11.

Obs. Although Mr. Gray remarks, that a specimen of this animal is marked in the British Museum as from the Cape of Good Hope, yet I am inclined to believe it does not occur here. The description given by him of the peculiar digital appendages, which occur on the hinder feet, and which have been entered amongst the generic characters, does not exactly correspond with that of the accurate observer and describer of animal structures, Mr. Yarrell, it may be necessary to record the differences, and that cannot be better done than in the words of the latter, as we find them in the Proceedings of the Committee of Science and Correspondence of the Zoological Society of London, part i, p. 49. Speaking of the *Ctenodactylus Massonii*, Mr. Yarrell observes,—“The general external resemblance to the well-known *Lemmings* has been noticed, but

these examples have but four toes on each foot, with one small naked pad under each toe: the two middle toes are the longest and equal, the outer toe the shortest, the inner toe intermediate in length, and on the hind foot of remarkable structure. Immediately above a short curved nail there is a transverse row of horny points forming a pectinated apparatus; above this is a second parallel row of stiff white bristles; and over this, a third row of bristles, which are much longer and more flexible: there are thus three distinct parallel rows of points of unequal firmness. The toe next the inner one has two small fleshy tubercles above the nail, covered by two rows of bristles, the under one short, the upper long; it has no horny points. The two outer toes, without tubercles, have each only one tuft of long bristles." The same Naturalist, in page 50 of the work quoted, makes the following valuable remarks:—"Some peculiarities observed in these little animals are worthy of notice. The molar teeth, as before stated, presented the singular anomaly of those of the upper jaw being different in their structure and surfaces from those of the lower jaw. The former, in their crowns, are very similar to those figured by M. F. Cuvier, as peculiar to his genus *Helomys* (*Pedetes*, Illig.); while those of the lower jaw somewhat resemble the teeth of the various species of *Arvicola*. The stomach, in form and pyloric contraction, is like the same organ in the *Lemmings* (*Lemmus*), *Jerboas* (*Dipus*), and *Gerbills* (*Gerbillus*). The *cæcum* resembles that of the Guinea-Pig (*Cobaya*), *Agouti* (*Dasyprocta*), and *Marmot* (*Arctomys*); while the sacculated form of the colon is found in the common House-Rat (*Mus decumanus*, L.)"

Genus *Mus*. Linnaeus.

Incisors $\frac{2}{2}$, *canines* $\frac{0}{0}$, *molars* $\frac{11}{16}$. *Molars with tuberculous crowns; ears oblong or rounded; anterior feet with four toes and a wart, hind-feet with five toes, all armed with nails; tail long, naked, and scaly; scattered hairs longer and stiffer than the fur intermixed with it, and which in some species amount to a kind of spines.*

Mus decumanus, Pallas. (Norway Rat.) Fur above, grey-brown pencilled with black; sides reddish white; belly dull white. Length from nose to base of tail about eight inches and a half; length of tail about seven inches.

Inhabits South Africa.—Houses in the Colony,—the open country immediately around Port Natal.

Mus decumanus, Pallas, *Gires* 91, 40. *Desm. Mammal.* p. 299 and 473.

Obs. This species, not originally a native of Africa, is subject to considerable variation, both in respect of size and colour.

Mus variegatus, Brants. (Grizzled Rat.) Hair closely applied to the skin and of moderate length, towards the bases bluish black, towards the points brown, grey, or yellowish, which tints produce a variegated colour. Body moderately long; ears covered with short brownish blue hairs; forehead flat; molars with tuberculous crowns and true roots; tail short and so thickly covered with short rigid hairs that the rings are

scarcely visible; feet covered with short hair of the same colour as the back, that on the toes darker. The thumb of the fore-foot is very short and with a rudimentary nail. Length from nose to base of tail seven inches and a half; length of tail about five inches.

Inhabits Egypt, Nubia, and Arabia,—in the fields.

Hypudaus variegatus, Licht. *Doubl. Verz. p. 2.*

Mus Pumilio, Sparm. (Cape Striped Mouse.) Hair moderately long and rigid. The colour of the upper and lateral parts of the head and neck, of the back, sides, and outer surfaces of extremities towards body, subferruginous or yellowish brown, freely pencilled with black and sparingly with white; chin, lower parts of neck, breast, belly, and inner surfaces of extremities, white, more or less mottled with rufous; hind-feet a pale ochre-colour. Between the hind-head and the root of the tail four parallel, longitudinal, black stripes, and three dull white or reddish white ones; ears moderate and rounded, their inner surfaces covered with short, rufous or chesnut-coloured hair, their outer surfaces by a mixture of short rufous and black hairs; and at the base of each a more or less distinct white spot; eyes large, deep black-brown, and surrounded by a narrow indistinct circle of white hairs; whiskers long and black; upper incisors white; tail scaly, annulated, and sparingly covered with short hair, black above, and ochry-coloured on the sides and under parts. The hairs of the upper and lateral parts of the body are blackish towards the bases, subferruginous or whitish towards the middle, and most of them with black points; the bases of the hairs on the under part are a dull black. Length from nose to base of tail five inches; length of tail four inches.

Inhabits South Africa,—common in most parts of the colony.

Var. A.—Greyish pencilled or variegated with subferruginous and white colours; a distinct white ring round each eye; outer and inner surfaces of ears covered with fine short rufous or chesnut-coloured hairs, those of the former intermixed with white ones. Upper incisors a dull orange-colour. Hairs moderately rigid.

Inhabits South Africa,—Namaqualand,—rather rare.

Var. B.—Only a single black stripe along the centre of the back.

Inhabits South Africa.

Lineated Mouse, Shaw, *Gen. Zoology*, vol. ii. part 1. p. 69. t. 133. Striped Mouse of the Cape Colonists.

Obs. In this species not only the shades but even the very colours themselves vary considerably in different specimens: those described are the most prevailing.

3 *Mus Alexandrinus*, Geoff. (Rat of Alexandria.) Head shorter than in the *Mus Decumanus*; ears larger, brown, and quite naked; nose sharp; whiskers long and black; upper parts of body grey-brown with a reddish tint; under-parts ash-grey passing into yellow; tail scaly, nearly naked, and marked by 130 or 140 rings. The bases of the hairs are slate coloured, and the tips of most of them are of a rusty tint; the longest hairs have brown points, which are compressed and marked with a furrow along the middle. Length from nose to base of tail six inches; length of tail eight inches.

Inhabits Egypt,—about Alexandria.

Geoff. *Mem. de l'Hist. de Egypte*, pl. 5. fig. 1. Desm. *Mamm.* No. 475. Brants, *Het Gestacht der Muizen*, p. 106.

Mus musculus, Linnæus. (Common Mouse.) Fur yellowish brown above, mixed with black hairs; beneath iron-grey. Length from nose to base of tail three inches and a half; length of tail about three inches.

Inhabits South Africa,—in houses.

Mus domesticus vulgaris, Ray. *Mus Sorex*, Briss. *Regn. Animal.* p. 169. *Mus musculus*, Linn. *Syst. Nat.* ed. 12. Erxleb. Bodd. Gmel. Schreb. tab. 18 Desm. *Mamm.* No. 478. Le Souris, Buff. *Hist. Nat.*

Obs. This species has doubtless been introduced into South Africa by European ships.

Mus Colonus, Licht. Hair moderately long and very soft; body thick in proportion to its length. Colour above grey tinted with yellowish brown, especially towards the root of the tail; sides and cheeks pale tawny; upper lip, chin, throat, breast, belly, extremities, and space round base of tail, white; nails covered by long white hairs; ears moderate, oval; inner surfaces covered with a fine short reddish white hair; outer surfaces thinly sprinkled with short blackish brown hairs; whiskers moderate, hairs black towards roots, whitish towards tips; point of nose reddish white; tail distinctly ringed, and thinly sprinkled with short hair, brownish above, and dull white beneath. The bases of all the hairs on the body are slate-coloured. Length from nose to base of tail three inches and a half; length of tail two inches and a half.

Inhabits South Africa.—Eastern districts of the Colony.

Obs. I am in doubt whether the species now described be the *Mus Colonus* or not. Without good figures, or very detailed descriptions, it is quite impossible to discriminate with any degree of certainty, the smaller species, at least, of this genus. The length of the specimen in my possession is inferior to the one described by Brants, but that may possibly depend upon the mode in which the skin has been prepared.

Mus Gentilis, Lichtenstein. Hair long and close; ears short; head moderately large, long and sharp; nose projecting; ears round, small, naked, and closely applied to the head; body long and slender; fore-feet very short, hind-feet moderately long with naked soles and small white nails; tail moderate, ringed, nearly naked, and of a blackish colour. Hair long and soft, the whole of the upper parts brown-grey, the under-parts white, and the colours in some (perhaps males) are separated from each other by a rusty tint; feet whitish. Length from nose to base of tail three inches and a half; length of tail two inches and a half.

Inhabits Egypt and Nubia.

Brants, *Het Geslacht der Muizen*, p. 126.

Mus Cahirinus, Geoffroy. (Cairo Rat.) Above dark blue-grey or grey-brown, lighter on the sides; beneath, dirty greyish; hinder part of the back with flat bristles intermixed with the hair, grey towards their bases, reddish brown towards and at the tips; head long and pointed; nose elongated with a moderately strong hairy crest; ears large, oval, and hairy; feet whitish brown; whiskers dark brown; tail greyish brown, marked with scaly rings, and nearly naked. Length from nose to base of tail four inches; length of tail three inches and a half.

Inhabits Egypt,—in houses at Cairo.

Echimy's d' Egypte, Geoff. *Mem. de l'Institut. d' Egypte*, part *Hist. Nat.* pl. 5, fig. 2.

Mus dimidiatus, Cretzschmar. The whole of the upper parts a reddish straw-yellow; the under parts and a spot under and behind each ear, white; teeth yellow; on the head a slight intermixture of black hairs; whiskers mixed black and white; ears dark brown with a slight sprinkling of fine white hairs; hinder part of back and flanks with some bristly hairs which appear flattened near their points; towards bases silvery-grey, towards points red-yellow or grey, seldom white. Tail with scaly rings, and between them some short whitish hairs; upper surface of tail brown, under surface white; feet white; eyes dark brown. Length from nose to base of tail about four inches; tail the same.

Inhabits Nubia and Sinai,—frequents rocky situations.

Mus Dolichurus, Smuts. (Long-tailed Mouse.) Hair long and moderately soft; the surface colour of the upper-parts clear rufous brown, freely pencilled with black on the forehead, crown, and centre of back; sides of body inclined to rufous

yellow; under-parts, extremities, and upper-lip, white; upper incisors a dull orange-colour, lower ones yellow; whiskers long; hairs black towards roots, white or nearly colourless towards tips; ears broad and round, both surfaces with a thin sprinkling of very short tawny-white hairs; nails light horn-coloured and covered with white hair. Tail with distinct scaly rings and a thin covering of short rigid hair, which is most abundant towards the point, above brownish black, beneath and on sides dull white. The bases of all the hairs of body a pale slate-colour. Length from nose to base of tail six inches; length of tail six inches and a half.

Inhabits South Africa,—district of Uitenhage.

Mus Verroxi, Smith. (Verreaux's Mouse.) Hair of moderate length and soft. Upper and lateral parts a pale fawn colour with a dull mouse or slaty tint more or less distinctly visible under it; lower parts bluish white; apex of muzzle, upper lip and lower parts of extremities nearly pure white; ears long, oval, and both surfaces thinly covered with short brownish black hair, whiskers long and brownish black; tail reddish brown distinctly annulated, and with a sprinkling of fine very short white hairs, which increase in number and length near the point. Claws commonly concealed by stiff whitish hairs. Length from nose to base of tail five inches and a half; length of tail six inches. The bases of all the hairs in this species are a dull slate colour, and the forehead in some specimens is thinly pencilled with black.

Inhabits South Africa,—near Cape Town.

Mus Natalensis, Smith. (Natal Mouse.) Fur long and moderately soft. The surface colour of the upper and lateral parts of the head and back a pale reddish or yellowish brown, pencilled or freckled with black: the latter variegations are most distinct towards the posterior part of the back, and arise partly from the tips of many of the woolly hairs being of a blackish tint, but principally from the presence of a series of black hairs rather stronger and longer than the fur, being more or less profusely intermixed with it; sides of body and outer surfaces of extremities, towards body, a light tawny or fawn-colour; under-parts of neck, breast, belly, inner sides of extremities, and feet, dull bluish white or white with a faint reddish tint. Tail covered pretty closely with very short, rigid hair, brown above and dull white beneath; ears moderate and ovate; their inner surfaces, particularly towards margins, thinly sprinkled with short tawny hair, their outer surfaces with a few brownish black hairs. Upper incisors a pale orange-colour, lower ones straw-yellow; muzzle slightly elongated. The bases of all the woolly

hair a dark slate-colour. Length from nose to base of tail five or six inches; length of tail about four inches.

Inhabits South Africa,—about Port Natal.

Mus Caffer, Smith. (Caffer Mouse.) Hair long and very soft; head slender. Colour above blue-grey or brown-grey; sides and outer surface of hinder extremities the same, only of a lighter tint; the under parts of neck, breast, and belly, the inner surfaces of hinder extremities, the fore legs, and all the feet, greyish white; tail thinly covered with a very short fine hair, greyish white with a faint tinge of brown; ears rather long and of an oval form, the inner surfaces thinly sprinkled with minute white hairs, and the outer ones with blackish hairs; whiskers long, soft, and of the same colour as the back. Length from nose to base of tail three inches and a half; length of tail three inches.

Inhabits South Africa,—Cafferland.

Mus minutoides, Smith. Hair rather short and rigid. Top of head, upper part of neck, and centre of back, finely pencilled black, brown, and tawny, each hair being annulated with two of those colours near the point, the latter in most of them black; face, sides of head, outer surfaces of extremities towards body, and the sides of the body, rufous yellow or fawn coloured, and here and there finely pencilled with black; upper lip, chin, throat, breast, belly, and inner sides of extremities towards body pure white; lower parts of extremities reddish white; tail brownish, distinctly annulated and thinly sprinkled with fine short whitish hair; whiskers pale brown; ears nearly bare, and the few hairs that do occur on them are very short and of a tawny hue. Length from nose to base of tail three inches; length of tail two inches and a quarter. The bases of the hairs on the back and sides are a dark slate colour, those on the under parts are like the tips pure white.

Inhabits South Africa—near Cape Town.

Mus Barbarus, Lin. (Barbary Mouse.) Ground colour fuscous brown above, intermingled with a few yellow hairs, and marked on each side with five or six continuous longitudinal yellowish lines, narrower than the intervening spaces, and blended gradually with the under surface, which is pale, and between the fore legs nearly pure white. Ears moderately large, rounded and covered with so short a fur as to cause them to appear naked. Anterior feet with the outer and inner toes merely rudimentary, so that three only are remarkable, and of these the two inner are the longest; the three middle toes of the hinder feet very long, the inner one rudimentary, and the

outer so short as not to reach the base of the adjoining one. Size intermediate between the domestic mouse and the black rat.—Bennet, *Zool. Journal*.

Inhabits North Africa.

Genus DENDROMYS. Smith.

Incisors $\frac{3}{2}$, *canines* $\frac{3}{3}$, *molars* $\frac{11}{11}$,—16. *Upper-jaw*—incisors each with a deep longitudinal groove on its anterior surface; first molar crowned with eight more or less distinct tubercles, second with three or four tubercles and some cutting laminae, third with two transverse cutting laminae. *Under-jaw*—incisors smooth; first molar with six tubercles, second with four, third with cutting laminae. *Nose* acute, *lip* cleft, *ears* roundish and nearly naked; *tail* annulated, scaly and thinly covered with hair; *fore-feet* with three toes and a small wart in place of a thumb; *hind-feet* with five toes.

Dendromys typicus, Smith. (Cape Tree Mouse) *Hair* long and silky; surface colour of upper and lateral parts of head, neck, body, and outer surfaces of extremities brown-red or ferruginous; the lower parts of the latter paler; upper lip, chin, lower parts of neck, breast, belly, and insides of extremities, a tawny or reddish white: from hind-head to base of tail along the middle of the back, a more or less distinct black line; ears broad, roundish, and very thickly sprinkled with short brownish or black hairs; whiskers black, growing paler towards the tips; eyes black. Tail distinctly annulated; above, rather freely covered with short brownish hairs, beneath with whitish ones. Length from nose to base of tail four inches and a half; length of tail five inches.

Inhabits South Africa,—commonly found upon trees.

Obs. In aged specimens the colour is a clear and deep rufous, and the black dorsal line is generally wanting.

Dendromys Melanotis, Smith. (Black-eared Tree Mouse.) *Hair* rather short and very soft. The upper and lateral parts of the head, the neck, and the body, together with the outer surfaces of extremities, towards the body, bluish grey or mouse-coloured with a faint tint of pale red-brown; on the sides of the body the grey is less distinct and the red is much more evident, but of a lighter and clear hue than on the back; lower parts of cheeks, upper lip, lower parts of neck, breast, belly, and feet, dull white, the latter tinged with light rufous; muzzle greyish white; space in front of each eye dull black; ears rounded and their inner and outer surfaces thinly covered with a fine short black hair; a small white spot immediately

behind the lower edge of each ear; whiskers moderate, hairs black towards their roots, lighter towards their tips. Along the centre of the back, from the shoulder to the tail, a distinct black line; tail scaly and annulated, with a thin covering of short hair which is brownish above and whitish beneath. Length from nose to base of tail three inches; length of tail two inches and a half. The bases of all the hairs are slate-coloured.

Inhabits South Africa,—on shrubs near Port Natal.

FAM. MACROPODA.

GENUS GERBILLUS. *Desmarest.*

Incisors 3, *canines* 0, *molars* 13,—16. *Incisors* curved inwards, each of the upper ones with a longitudinal groove in front: first molar of each side of both jaws with three elevated transverse ridges; second and third of upper jaw, and second of lower, with two, and the last of lower with only one. *Ears* moderate; fore legs short, with four toes; hinder legs long, or very long, with five toes; tail moderate, sub-annulated and thinly covered with hair.

Gerbillus Afer, Gray. (African Gerbille.) Hair rather long and very soft; the top of the head, the upper and lateral parts of the neck, the back, the sides, the tail, and the outer surfaces of extremities, a pale fawn or isabella colour; the back pencilled with black slightly, the top of the head and back of neck freely, indeed on the latter the black may be said to be in some the prevailing colour. Upper lip, chin, under surface of neck, breast, belly, lower parts of sides, inner surfaces of extremities, and upper surfaces of feet, white; face and sides of muzzle dull white freely pencilled with black; whiskers principally black; claws long and horn-coloured; ears broad and slightly inclined to pointed; outer and inner surfaces with a very thin sprinkling of fine short whitish fur. The hairs which are tipped with fawn or isabella colour, are pale slate-coloured towards their bases, those with white tips are of that colour throughout. Length from nose to base of tail about seven inches; length of tail six inches.

Inhabits South Africa.

Spicilegia Zoologica, p. 10. *Meriones Schlegelii*, Smuts, *Mamm. Capens.* p. 41. Duin Rat and Nacht Muis of the Cape Colonists.

Obs. The colours assigned by Mr. Gray are darker than they commonly appear, which may be accounted for by his having described specimens that had been transmitted to Europe in spirits.

Gerbillus Auricularis, Smith. (Kamiesberg Gerbille.) Hair long and soft. The surface colour of the upper parts of the head, the neck, and the back, a pale tawny brown faintly and sparingly pencilled or mottled with dull black; sides of neck and body tawny brown of a lighter tint; cheeks white variegated with clear tawny brown; upper lip, chin, lower parts of neck, breast, belly, and feet, pure white; whiskers dull black, the hairs light towards their tips; behind each ear a distinct, pure white blotch; ears small, oval, and flesh-coloured, the inner surfaces margined with some short whitish hairs, elsewhere bare; the outer surfaces thinly sprinkled with some short brownish black hairs. Tail thickly covered with short stiff hair, above brownish, beneath reddish white; toes short, nails small and covered with white hair. Teeth white, the upper incisors longitudinally grooved in front. Length from nose to base of tail four inches and three-quarters; length of tail two inches and three-quarters.

Inhabits South Africa,—Mountains of Little Namaqualand.

Gerbillus Namaquensis, Smith. (Namaqualand Gerbille.) Hair very long and soft; upper parts of head, neck, and body, subferruginous or fawn coloured, slightly pencilled with black, more particularly on the posterior part of the back; sides of neck and body the same colour, only lighter and without the black pencilling; upper lip, chin, lower parts of neck, breast, belly, and feet, a bluish white; whiskers moderate, the hairs black towards their bases and whitish or colourless towards their points; ears long and very broad, the insides thinly sprinkled with short white hairs towards their margins, the outsides, generally, with thinly scattered short black hairs. Tail with distinct scaly rings and a very scanty covering of short hair, which is black on the upper surface and reddish white beneath; nails short and covered with reddish white hairs; toes short; hinder extremities shorter in proportion than in the two preceding species. Incisors of the upper jaw smooth and orange-coloured. The hairs on the back and sides towards their roots slate-coloured, on the belly and under-parts entirely white. Length from nose to root of tail five inches and a half; length of tail four inches and three-quarters.

Inhabits South Africa,—Little Namaqualand, where it is known by the name of *Nacht Muis*.

Obs. The molars and upper incisors in this species do not exactly correspond in structure with those of the *Gerbillus Afer*; the tail approximates it to the true mice, and the shortness of the hind-legs requires it to be viewed at the least as an aberrant species. When the order *Rodentia* shall undergo a thorough revision, and the numerous species be examined and faithfully compared, the present will doubtless be found to have its appropriate position in a different genus.

(To be continued.)