Colour. Upper parts very dark greyish fulvous, becoming more fulvous posteriorly. Dorsal area heavily lined with black, so as to be nearly black in old specimens, and quite black in young ones, in which it is sharply defined from the lighter lateral colour. Sides dull fulvous brown, rather darker than in allied forms. Underparts dull grey (grey no. 7), darker and less sharply defined than in melanotis. Ears black, their white edge more conspicuous than in melanotis. Feet dull whitish above, the dusky of the ankles trespassing a little on the metatarsals. Tail heavily haired, black above, white on sides and below.

Skull practically as in melanotis, but the muzzle and

frontal region inappreciably narrower.

Measurements of the type:—

Total length 169 millim.; head and body 94; tail 75;

hind foot, s. u. 20, c. u. 21; ear 18.

Skull: greatest length 26.5; basilar length 20; nasals  $11 \times 3$ ; interorbital breadth 3.9; palate length 10.9; palatal foramina  $5.8 \times 2$ ; length of upper molar series 3.7.

Hab. Santa Barbara camp, southern slope of Mt. Orizaba,

at 12,500 feet.

Type. Old male. B.M. no. 3. 3. 4. 23. Collected 21st July, 1902.

Four specimens, two old and two immature.

This animal may be regarded as a saturate mountain ally of the species described as P. melanotis from Las Vigas by Allen and Chapman \*, with which it may hereafter prove to intergrade. The darker colour, and especially the heavy blackening of the back, is equally conspicuous in the old and young specimens. The type is quite strongly fulvous on the rump, but this peculiarity is not observable in the other examples.

## Sciurus igniventris tædifer, subsp. n.

Coloured in all respects like the typical S. igniventris of the Rio Negro, as described by Wagner †, with the exception

LXX. — New Forms of Sciurus, Oxymycterus, Kannabateomys, Proechimys, Dasyprocta, and Caluromys from South America. By OLDFIELD THOMAS.

<sup>\*</sup> Bull. Am. Mus. ix. p. 203 (1897). The British Museum possesses an adult paratype of this animal.

† Abh. Ak. Münch. v. p. 276 (1850).

that the hairs of the terminal half of the tail, broadly ringed subterminally with black in *igniventris*, are wholly red beyond their basal 4 inch, which is dark brown. A very few hairs at the extreme tip of the tail are, however, indistinctly black-ringed. Size rather less than in the typical form, and ears apparently rather shorter.

Dimensions of the type (measured in skin):—

Head and body 285 millim.; tail 285; hind foot (s. u.)

(wet) 59; ear (wet) 31.

Skull: greatest length 65; basilar length 50; zygomatic breadth 36.5; diastema 17.8; palatal foramina 4.5; length of upper tooth series 10.1.

Hab. Sabaña Grande, near Bogota.

Type. Male. B.M. no. 98. 7. 3. 6. Collected 15th May, 1896, by Mr. G. D. Child, and presented by Oldfield Thomas.

This is the squirrel which, in 1900 \*, I assigned to the true S. igniventris, but further study and material induce me to think it represents a definable local form.

#### Sciurus castus, sp. n.

Allied to S. pyrrhonotus, Wagn., but with white belly. General colour above grizzled tawny ochraceous, darker and greyer on the head. Ears, cheeks, and upper surface of fore limbs richer tawny. Outer side of hips and upper surface of hind feet deep ferruginous red. Chin tawny, otherwise the whole of the under surface and the inner sides of the limbs pure sharply defined white. Basal two inches of tail like back, the hairs of the remainder blackish brown, broadly washed terminally with bright rufous.

Dimensions of the type (measured in the flesh):—

Head and body 244 millim.; tail 250; hind foot (s. u.) 60; ear 30.

Skull: greatest length 65; basilar length 48.5; length of upper molar series (true molars only) 8.

Hab. of type. Chimate, Bolivia, 68° W., 15° S., on the

Upper Rio Beni. Alt 700 m.

Type. Female. B.M. no. 1. 2. 1. 7. Original number 1229. Collected 19th September, 1900, by Mr. P. O. Simons.

A second specimen collected by Signor L. Balzan, also in the province of Yungas, is rather redder on the back, but has the same pure white belly.

This fine squirrel is evidently the Beni representative of S. pyrrhonotus, Wagn. (type locality, Borba, on the Lower Madeira), from which it differs by its pure white, instead of "weisslichgelb oder ockergelb," under surface.

<sup>\*</sup> Ann. & Mag. Nat. Hist. (7) vi. p. 137.

#### Oxymycterus delator, sp. n.

A large species of a uniformly blackish colour.

Size fairly large. Fur close and straight; hairs of back about 10 millim. in length, their ends with a slight metallic sheen. General colour of whole upper surface very dark, darker than in any other species of the genus, nearly approximating to Ridgway's "clove-brown," not rufous at all. This is when viewed from behind and above, but if the specimen is held between the light and the observer, with its nose towards him, its upper surface appears blackish with a purplish sheen. Sides scarcely lighter than back. Under surface dull cream-buff with the slaty bases of the hairs showing through. Head like back, a small lighter patch behind and above each eye. Lips and chin dull soiled buffy. Ears small, well-haired, blackish. Arms and legs smoky grey; hands and feet dark brown with some shining lighter hairs on the metapodials. Tail thickly and uniformly haired, black above, rather lighter below.

Skull not specially developed in the muzzle, narrow and elongated, the brain-case being unusually narrow, high, and rounded in section; zygomata but little expanded. Palatal foramina ending opposite the first third of  $m^1$ ; posterior nares

slightly behind the back of  $m^3$ .

Dimensions of the type (measured in the flesh):-

Head and body 155 millim.; tail 106; hind foot, s. u. 26,

c. u. 28.5; ear 17.

Skull: greatest length 34.5; basilar length 28; zygomatic breadth 14; nasals  $12.1 \times 3.5$ ; interorbital breadth 5.1; brain-case breadth 13.4; palate length 13.4; diastema 8.5; palatal foramina  $7.1 \times 2.9$ ; length of upper molar series 5.

Hab. Sapucay, Paraguay.

Type. Adult male. Original number 880. Collected

24th October, 1902, by Mr. William Foster.

This very remarkable Oxymycterus is readily distinguishable from all its allies by its uniformly dark colour, in which respect it is only approached by the otherwise widely different O. juliacæ, Allen.

# Kannabateomys amblyonyx pallidior, subsp. n.

General characters as in K. amblyonyx, but colour paler

throughout, the belly being almost white.

Size as in K. amblyonyx. General body-colour dull buffy yellowish, not dissimilar to that of young examples of the type form, but very different from the strong ochraceous of adults. Head grizzled grey and black, without yellowish suffusion; ear-tufts grey; light patches behind ears yellowish

white; sides of muzzle brown; lips, chin, chest, and inner sides of limbs white. Belly whiter than "cream-buff," that of amblyonyx being "buff" or "ochraceous buff." Hands and feet coarsely grizzled grey, the digits white. Tail dull brown, lightening to white terminally, its under surface white all along. In the type there is an intermediate piece of the tail abruptly white all round, but this is probably an accidental variation; the extreme tip of the tail appears to be lost, so that I cannot say what is the colour of the terminal pencil.

Skull apparently quite as in true amblyonyx. Dimensions of the type (measured in the flesh):—

Head and body 250 millim.; tail 315; hind foot, s. u. 51, c. u. 52; ear 23.

Skull: greatest length 64, basilar length (c.) 49; length of upper molar series 15.

Hab. Sapucay, Paraguay.

Type. Old female. Original number 886. Collected 14th November, 1902, by Mr. William Foster.

"Caught in monte.—Pregnant: one at birth."—W. F.

Though strikingly different in colour, especially in that of the underside, from the true K. amblyonyx of São Paulo, this fine animal is too essentially similar in other respects to be regarded as more than a subspecies. Its discovery, like that of Thrichomys Fosteri, adds a new genus to the known fauna of Paraguay.

# Proechimys vacillator, sp. n.

Allied to P. Cherriei, Thos., but larger, with shorter tail, shorter palatal foramina, and other cranial differences.

Fur of medium length; spines of back about 18 millim.

long. Rump entirely spineless.

General colour above tawny or tawny ochraceous, more or less heavily lined with the blackish tips of the spines. Sides more brownish. Whole of under surface pure sharply defined white. Face dull greyish brown. Outer side of limbs like sides, inner white; hands white; feet white along their inner halves (outer in the prepared skin), pale brownish along their outer, hallucal, halves. Tail well haired, dark brown above, dull white below.

Skull nearly as large as that of *P. cayennensis*; muzzle not so elongated as in that species and the *trinitatis* group. Nasals with their sides more or less bowed outwards, their posterior end narrowing nearly to a point, level with the hinder edge of the pre-orbital bridge. Supraorbital ridges well developed and forming a distinct postorbital angle, but fading away

halfway across the parietals. Palatal foramina short, widely open, extending backward but little more than midway between the premaxillo-maxillary suture and the front of p4; not leading posteriorly into gutters along the palate. Opening of posterior nares narrow, sharply V-shaped, its anterior point in front of the hinder edge of  $m^2$ . Bullæ small, though longer than in Cherriei, the vacuities in front of them widely open.

Molars very small, rounded, one or more of them with three laminæ only, but this character, at first sight so im-

portant, varies within the series.

Dimensions of the type (measured in the flesh):—

Head and body 230 millim.; tail (lost, of another specimen

165); hind foot, s. u. 46, c. u. 51; ear 23.

Skull: greatest length 56.5; basilar length 40; zygomatic breadth 26.5; nasals  $21.5 \times 6.7$ ; interorbital breadth 12.2; palate length 18; palatal foramina  $5.8 \times 3.2$ ; length of upper tooth series 7.5.

Hab. Kanuku Mountains, British Guiana. Altitude 600 feet.

Type. Adult male. B.M. no. 1. 6. 4. 112. Collected 6th December, 1900, by Mr. J. J. Quelch, and presented by Mr. F. V. McConnell.

This is the species assigned provisionally to P. cayennensis in my paper on the mammals from the Kanuku Mountains obtained by Mr. Quelch \*. The Museum has now received a set of spiny rats from Cayenne, topotypical of P. cayennensis, Desm., collected by Messrs Cherrie and Gault, and these show Desmarest's species to be nearly allied to P. trinitatis, with long parallel-sided nasals and large teeth. certainly distinct from the Kanuku animal.

The variation in the number of the laminæ to the posterior molars is very remarkable and will need further specimens for its elucidation. One specimen has all three molars trilaminate, the premolar alone being quadrilaminate, another (the type) has the two posterior molars trilaminate, while a third has the last molar alone of this structure. A fourth specimen, indeed, has all the teeth quadrilaminate, as is usual in the allied species, but this example shows certain other differences which make its identity with P. vacillator a little doubtful.

## Dasyprocta lucifer, sp. n.

A yellow-rumped species allied to D. rubrata, but larger. Size considerably greater than in D. rubrata. General \* Ann. & Mag. Nat. Hist. (7) viii. p. 152 (1901).

coloration as in the Cumaná subspecies flavescens—that is to say, dark punctulated olive-brown, the limbs darkened terminally to black, and the long hairs of the rump rich orange (near "orange-buff"). Chin dull whitish; chest and belly

brown, the latter with a median line of dull yellowish.

Skull large, long and narrow, especially elongated in the muzzle. Nasals narrow, evenly rounded into a uniform semicircular curve behind, surpassing by 6-7 mm. the premaxillary processes, which are of fair normal breadth. Teeth stout and strong, conspicuously larger than in D. rubrata.

Dimensions of the type (measured in the flesh):—

Head and body 502 millim.; tail 41; hind foot, s. u. 115,

c. u. 128; ear 47.

Skull: greatest length 114; basilar length (c.) 86; zygomatic breadth 49; nasals  $44.5 \times 18$ ; interorbital breadth 31.5; palate length 45; diastema 30; length of upper tooth series ( $p^4$  up and in wear) 20.2.

Hab. Caicara, River Orinoco.

Type. Old female. B. M. no. 88. 12. 1. 21. Original number 11250. Collected 22nd October, 1898, by Mr. G. K. Cherrie.

Native name "Picuré" or "Acuré."—G. K. C.

Exactly as in the case of the Philander Opossums, a form of the small species inhabiting Trinidad (D. rubrata) occurs in Cumaná (subsp. flavescens), while the animal found further east on the Orinoco and in Cayenne is conspicuously larger than either. But in the present case the Cayenne form shows certain differences from the Orinoco one, and may itself be subspecifically separated as

## Dasyprocta lucifer cayennæ, subsp. n.

General colour as in lucifer, but the nape and fore back

nearly uniform brown, scarcely punctulated at all.

Skull readily distinguishable from that of *lucifer*, with which (allowing for age) it agrees in size, by the very different shape of the nasals, which are broad, nearly squarely truncated behind, and scarcely surpassing the premaxillary processes; these latter run to a fine point and are unusually narrow, being only 2.2 millim. broad 8 millim. from their tips.

Dimensions of the type (measured in the flesh):—

Head and body 500 millim.; tail 35; hind foot, s. u. 119, c. u. 136; ear 42.

Skull: greatest length 104.5; basilar length 78; nasals  $35 \times 18.5$ ; interorbital breadth 31; palate length 42; diastema 27; length of upper molar series (milk  $p^4$  still in place) 22.

Hab. Approuague, Cayenne.

Type. Immature female. Original number 1077. Collected 9th December, 1902, by G. K. Cherrie and B. T. Gault.

With most animals the skull-differences above noticed would have necessitated specific separation, without further question, but this part is so variable in *Dasyprocta* that for the present I prefer to leave the Cayenne Agouti with the form to which its general appearance allies it.

#### Caluromys trinitatis venezuelæ, subsp. n.

Agreeing with true trinitatis in essential characters of size

and coloration, but paler and with longer softer fur.

General characters quite as in the Trinidad C. trinitatis, Thos.\* Fur, however, much longer, softer, and woollier, the lengths of the dorsal hairs about 12-13 millim., as compared with 8-9 millim. Colour above, instead of "tawny ochraceous," paler and duller, near Ridgway's "clay-colour"; the crown of the head alone showing a tinge of tawny. Cheeks and under surface, instead of ochraceous buff, dull "creambuff." This latter colour is also more uniformly spread, the whole of the under surface and inner sides of the limbs being alike, while in trinitatis the greyish suffusion of the flanks encroaches on the sides of the middle part of the belly, so as to narrow the clear buffy part to a mere median line.

Skull and teeth as in C. trinitatis.

Dimensions of the type (measured in the flesh):-

Head and body 185 millim.; tail 275; hind foot (s. u.) 31; ear 31.

Skull: greatest length 47; combined length of three anterior molariform teeth 6.7.

Hab. Ypuré, Cumaná, Venezuela. Altitude 2350 feet.

Type. Old female. B.M. no. 0.5.1.57. Collected 8th March, 1899, by E. André.

This mainland form of *C. trinitatis* shows no approximation in size or other characters to the Guianan *C. philander*, L.

<sup>\*</sup> Ann. & Mag. Nat. Hist. (6) xiii. p. 438 (1894).