

brought over in the same manner as *Planorbis dilatatus* and *Physa heterostropha*.

P. Brownii, Petterd, from Tasmania, more closely resembles this species than any other with which I am acquainted, and it is curious that the other species of *Paludestrina* (*P. Jenkinsi*), added of recent years to the British fauna, should also have an extremely close Tasmanian representative in *P. Legrandiana* of Brazier.

The present species may be thus described:—

Paludestrina Taylori.

Animal with the foot pale beneath, oblong, rounded behind, somewhat auriculate anteriorly, with the front edge straightish or even slightly sinuated. Proboscis cleft beneath in front, blackish above and at the sides, pale at the end; body also blackish at the upper part of the sides. Tentacles moderately long, scarcely tapering, rather obtuse at the tips, semitransparent, with a dark streak on one or both sides; eyes coal-black, large, slightly prominent at outer base of tentacles, with a sulphur-coloured spot above each.

Shell subcylindrical, turreted, umbilicated, brownish or olive horn-colour, obscured by a blackish earthy deposit; whorls four in number, very convex, separated by a deep suture, clean specimens exhibiting fine lines of growth; aperture broadly ovate, a little narrowed above; peristome continuous, outer margin simple, columellar edge slightly thickened and faintly reflexed.

Length $2\frac{1}{2}$ –3 millim., diam. $1\frac{1}{3}$.

Operculum paucispiral, thin, horny, slightly concave exteriorly.

The sulphur spots above the eyes are a very striking feature in this mollusc, and under the microscope have a granular and even almost luminous aspect. The small size, besides the other characters mentioned, readily distinguish this from the other British species. I have much pleasure in associating with this form the name of its discoverer.

XXIV.—*New South-American Sciuri, Heteromys, Cavia,*
and Caluromys. By OLDFIELD THOMAS.

Sciurus griseogena meridensis, subsp. n.

Precisely similar in size and general colour to the typical form, but the fur very much longer (hairs of back about

20 millim. in length), the belly-hairs plumbeous basally below their vivid fulvous-rufous tips, the separation of the belly from the body-colour less sharply defined, and the ears edged with bright rufous. Patch behind base of ears dull yellowish.

Dimensions of the type (measured in skin):—

Head and body 220 millim.; tail 220; hind foot, s. u. 48, c. u. 52; ear 20.

Skull: greatest length 52; basilar length 39; greatest breadth 30·5; nasals $16 \times 7\cdot3$; interorbital breadth 15·4; palate from henselion 23; diastema 13; length of upper tooth-row (crowns) 8·7.

Hab. Escorial, Sierra de Merida. Alt. 2500 m.

Type. Male. B.M. no. 98. 7. 1. 33. Collected 16th November, 1896, by S. Briceño.

This is evidently simply a highland form of *S. griseogena*, of which the type came from "Venezuela."

Sciurus (Microsciurus) otinus, sp. n.

Similar to *S. (M.) isthmus*, Nels., in all respects externally, except that the ears, instead of being like the crown (or rather more ferruginous) on both surfaces, are internally blackish towards their edges, and externally are white, contrasting markedly with the general colour. Their extreme edge, however, is black, the white hairs having fine black tips. Orbital rings scarcely perceptible. Caudal hairs ringed with black and pale yellow, their tips yellowish white.

Nasals of about the same length as in *S. isthmus*, but their posterior edge, instead of forming a round-angled **W**, is shaped like an open inverted **V—Λ**—the lines of the **Λ** being continuous behind with those bounding the premaxillary processes posteriorly. Incisors of the usual size.

Dimensions of the type (in skin):—

Head and body 130 millim.; tail (c.) 112; hind foot, s. u. 33, c. u. 36; ear 13.

Skull: tip of nasals to front of interparietal 33·3; zygomatic breadth 22·7; nasals 10 (diagonally) $\times 5\cdot1$; interorbital breadth 13·3; diastema (to *p.*⁴) 8·9; palate from henselion 14·2; combined length of large premolar and three molars 5·1.

Hab. Medellin, Colombia.

Type. Female. B.M. no. 76. 8. 8. 6. Collected by Mr. J. K. Salmon. Two specimens examined.

In the second specimen the ears are not so markedly white as in the type, but the cranial characters are quite similar.

S. (M.) similis, Nels.*, from Cali, Colombia, of which the Museum possesses a skull, differs by its unusually slender incisors, these being only 1.4 millim. in depth as against 2.0. *S. chrysurus*, Puch.†, the only other allied species, may be distinguished by its golden or ferruginous tail.

Heteromys australis, sp. n.

A large dark species, with naked soles, allied to *H. melanoleucus*.

Fur close and crisp, rather short, spines about 8 millim. long by 0.5 millim. broad. General colour dark smoky grey, as in the allied species, the hairs of the back finely tipped with yellowish, the spines greyish white with black tips. Ears short, practically naked, black, finely edged with white. A tuft of stiff hairs just in front of the ears black, but in some cases white. Muzzle, throat, pouches inside and out, belly, and inner sides of limbs white. Lower part of forearms indistinctly slaty greyish all round, which colour runs on to the median part of the metacarpals, the remainder and the digits white. Posteriorly also the metatarsus is indistinctly brown, the toes being white. Tail thinly hairy, the rings of scales showing through, brown above, white below, the two colours not sharply defined.

Skull stoutly built, broad in proportion to its length; its detailed characters apparently much as in the allied species.

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

Head and body 135 millim.; tail 137; hind foot, s. u. 30, c. u. 33; ear 15.

Skull: greatest length 35; basilar length 24.5; zygomatic breadth 17; length of nasals 14.2; interorbital breadth 9.2; interparietal 4.7 × 9.5; length of palate from henselion 14.2; diastema 9; length of upper molar series (crowns) 4.5.

Hab. St. Javier, Lower Cachabi River, N. Ecuador. Alt. 20 m.

Type. Female. Original number 64. Collected 23rd June, 1900, by G. Flemming and R. Miketta. Fourteen specimens examined.

This is by far the most southern record for the genus *Heteromys*, and is the first discovery of any member of the genus to the west of the Andean chain. The species is allied to the dark naked-footed species *H. longicaudatus*, *anomalous*, *melanoleucus*, &c., but seems to be different from any of them. Among other characteristics its partially dark metapodials would alone distinguish it, as the other members of the group have these parts wholly white.

* Bull. Am. Mus. N. H. xii. p. 78 (1899).

† 'Revue Zoologique,' 1845, p. 337.

Cavia boliviensis littoralis, subsp. n.

Fur short, hairs of back only about 17 millim. in length (apart from the fine elongated points). General colour above similar on the whole to the more northern subspecies, but more finely speckled and also less yellow than in most specimens of the typical form. Hairs of back indistinctly annulated to their bases, the paler slaty bases found in *C. b. leucoblephara* being replaced by alternate lighter and darker rings of grey; subterminal ring buffy, tips black. Rings round eyes lighter than head, but not conspicuously so. Belly dull buffy white, not sharply defined, the bases of the hairs grey. Upper surface of hands and feet buffy, becoming paler terminally.

Skull shaped as in the true *C. boliviensis*, but smaller, although this may be due to immaturity. Nasals narrower and ending opposite the ends of the premaxillary processes. Zygomata less widely expanded anteriorly. Palatal foramina shorter and broader. Bullæ smaller. Incisors very narrow.

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

Head and body 199 millim.; hind foot, s. u. 35, c. u. 39; ear 18.

Skull: greatest length 47; basilar length 38·7; zygomatic breadth 28; nasals 15·6 × 6; interorbital breadth 9·8; interparietal 5·2 × 9; mastoid breadth 20·5; diastema 12·5; palatine foramina 4 × 2·3; length of palate from henselion 20; length of upper molar series 11; combined breadth of lower incisors 2·0.

Hab. Bahia Blanca, Argentina.

Type. Female. B.M. no. 0. 8. 5. 7. Collected 29th September, 1896, by Mr. W. Jex.

A considerable number of specimens of the true *C. boliviensis* have now been received from different localities round Lake Titicaca, collected by Messrs. Pentland, Garlepp, Kalinowski and Simons, and these, like the original series collected by Bridges, vary considerably in their general colour, the whiteness, brownness, or buffiness of their bellies, and even more strikingly in the shape of their nasals. However, none of them agree in the shortness of their fur, the fine speckling of the back, and the annulation of the bases of the dorsal hairs with the Cavy from Bahia Blanca. Specimens from the intermediate localities, representing *C. leucoblephara*, Burm., agree in these characters more with the Titicacan animal.

Owing to the difficulty in determining the age of Cavies, I am not sure as to the exact age of the specimen, but think it would have attained rather larger dimensions.

Caluromys laniger pyrrhus, subsp. n.

General colour of back rich rufous, not unlike that of some of the red *Marmosæ* of the *M. murina* group; a faint trace of the spinal white patch present. Face short-haired, grey, contrasting with the rufous nape and occiput, the median dark line strongly marked. Cheeks and under surface dull buffy white, the hairs almost entirely without slaty bases. Forearm pale greyish, becoming white terminally on the metacarpus. Legs duller grey, continuous with a large greyish patch on the outer side of the hips. Woolly part of tail passing from rufous proximally to brown terminally; extension of fur on upperside of tail only about an inch beyond that on lower side; naked part brown for about 3 inches, then white.

Dimensions of the type (measured in skin):—

Head and body 285 millim.; tail 400; hind foot (s. u.) 42; ear 28.

Skull: basal length 53; zygomatic breadth 34; inter-orbital breadth 10·5; breadth across postorbital processes 17·5; palate length 31; combined length of $mp.$ ⁴, $m.$ ¹, and $m.$ ² ($m.$ ¹⁻³ of Catalogue) 8.

Hab. S.W. Colombia and N.W. Ecuador. Typical locality Rio Oscuro, near Cali, Cauca River, Colombia. Alt. 1000 m. Other specimens from S. Javier, Lower Rio Cachabi, N.W. Ecuador.

Type. Male. B.M. no. 99. 9. 6. 50. Original number 482. Collected June 1898 by Messrs. Batty, Parish, & Co.

Native name "Chucharata" at Cali, "Cucumbi" at S. Javier.

This form of the Woolly Philander differs by its bright rufous colour from the dark *C. l. cicur*, Bangs, of Sta. Marta, Bogotá, and the Oriente of Ecuador, on the one hand, and from the peculiar pale *guayanus* of S.W. Ecuador on the other. Its light forearms and hands also distinguish it from the former, as from the Amazonian *ochropus*, Wagn., and the Peruvian *ornatus*, Tschudi. Perhaps it is really most allied to the Central-American *derbianus*, Waterh., but differs by the reduction of the white dorsal patch to a mere trace, the more defined frontal stripe, and the much darker colour of the woolly part of the tail. The unusually slight difference in the extension of the upper and lower fur on the tail is also a well-marked character common to all the specimens examined.

The Ecuadorean specimens are like that from Colombia in every respect.