

But the Hami Pikas differ so constantly from it in the cranial characters above described, that they clearly cannot be referred to it; and as there is no indication of intergradation I cannot now call *hamica* a subspecies of *pallasi*, although this may possibly prove hereafter to be the proper relative position of the two forms.

Externally I can find no difference between the two animals which might not be explainable as due to the deteriorated condition of the type.

Mr. Carruthers informs me that there are no Pikas in the main Thian Shan range, and from the decided Altai relationship of the Hami Mts. in other respects, I think it probable that, when certainly identified, *O. pallasi* will prove to be an inhabitant of the Altai area.

46. *Ochotona (Pika) alpina*, Pall.

♂. 189, 190, 191; ♀. 192, 193. Tannu-ola Mts., N.W. Mongolia. 6000–8000'.

♂. 197, 198, 199. Kunderlun Mts., Atchit Nor, N.W. Mongolia. 8000'.

These specimens agree very well with an example from Tyehta, on the Katun R., W. Altai, received from the Tomsk Museum, and nearly a topotype of the species.

47. *Ochotona (Pika) hyperborea*, Pall.

♂. 182\* (skull only). Syansk Mts., W. of L. Baikal. 5000'.

The animal belonging to this skull measured:—

Head and body 155 mm.; hind foot 25; ear 18.5.

48. *Lepus* sp.

♀. 204. Atchit Nor, N.W. Mongolia. 4500'.

♂. 229 (and extra skull). Upper Black Irtysh R., E. Dzungaria. 1000'.

♂. 256. Bogdo-ola Mts., S.E. Dzungaria. 6000'.

XLI.—*Three small Mammals from S. America.*

By OLDFIELD THOMAS.

*Vampyrops zarhinus incarum*, subsp. n.

General characters as in true *zarhinus*, with which it shares the small separated incisors and all other characters of importance; but size markedly less, the skull smaller in all

dimensions, and the teeth much smaller. An indistinct dorsal stripe present.

Dimensions of the type (measured on the spirit-specimen):—

Forearm 36 mm.

Head and body 53; ear 13; nose-leaf 9.2; third finger, metacarpal 37, first phalanx 13.5; lower leg and foot (c. u.) 23.5.

Skull: greatest length 20 (22 in *zarhinus*); basal length 15.8; zygomatic breadth 12.3; mastoid breadth 10.5; palatal length 9.2; front of canine to back of  $m^3$  7; combined length of  $m^1$  and  $m^2$  on outer edge 3.2 (3.7 in *zarhinus*); front of lower canine to back of  $m_3$  7.8.

*Hab.* Pozuzo, Peru.

*Type.* Adult male. B.M. no. 12. 1. 15. 1. Collected by L. Egg. Presented by Oldfield Thomas.

*Blarina equatoris*, sp. n.

Near *B. meridensis*, but with smaller skull and teeth.

Size, as judged by skull, smaller than in *B. meridensis*, about equalling that of *B. thomasi*. Colour and length of tail absolutely as in *meridensis*, *B. thomasi* differing by its shorter tail.

Skull and teeth essentially as in *B. meridensis*, but smaller throughout.

Dimensions of the type (measured in flesh):—

Head and body 82 mm.; tail 32; hind foot 14; ear 5.

Skull: condylo-basal length 21.6; condylo-incisive length 22.5; greatest breadth 10.7; palate, length 9.5, breadth across molars 5.8; front of  $i^1$  to back of  $m^3$  9.4; combined length of  $p^4$ ,  $m^1$ , and  $m^2$  on outer edge 5.2.

*Hab.* Ecuador. Type from Sinche, Guabanda, 4000 m. Other specimens from Mt. Pichincha, Quito.

*Type.* Old male. B.M. no. 99. 9. 9. 3. Original number 136. Collected 17th December, 1898, by Perry O. Simons. Presented by Oldfield Thomas.

The three South-American species of *Blarina* are exceedingly closely allied to each other. *B. meridensis* is the largest and has a comparatively long tail; *B. thomasi* is smaller, with a short tail, and with the brain-case more abruptly swollen than in the other two; the present species agrees in shape of skull and length of tail with *meridensis*, but is even slightly smaller than *thomasi*.

*Marmosa citella*, sp. n.

Like *M. marmota*, but much smaller.

General characters, including colour, length of tail, and

all cranial features, essentially as in *M. marmota*, but size conspicuously less. Ears larger, at least in proportion to general size. Bases of hairs of under surface white, or rather cream-buff, throughout, a narrow line of hairs along the flanks having slaty bases in *marmota*. Muzzle of skull conical, not contracted in front of the orbits.

Dimensions of the type (measured in skin) :—

Head and body 112 mm. ; tail 122 ; hind foot 16 ; ear 26.

Skull : condylo-basal length 29·8 ; greatest breadth 16·8 ; nasals  $12·4 \times 2·7$  ; interorbital breadth 4·7 ; palate length 15·7 ; breadth between outer corners of  $m^3$  9·2 ; combined length of three anterior molariform teeth 5.

*Hab.* Goya, Corrientes, Argentina. Alt. 600'.

*Type.* Adult male. B.M. no. 98. 8. 19. 9. Original number 10. Collected 25th July, 1895, by R. Perrens. Presented by Oldfield Thomas. Five specimens examined.

This is the *Marmosa* which I have previously\* identified as Azara's "Micouré à queue longue," the basis of Oken's *marmota* and Desmarest's *grisea*. But a study of two specimens from Paraguay (one from Sapucay and the other from Asuncion) shows that the Paraguayan form—topotypical of Azara's description—is decidedly larger than that from Corrientes, and I therefore now describe the latter as new.

The Sapucay specimen—a female—has a condylo-basal length of 33·7 mm., three anterior molariform teeth 5·5, and other measurements in proportion. Ears, however, only 25 mm.

## XLII.—Notes on *Fossorial Hymenoptera*.—VIII.

By ROWLAND E. TURNER, F.Z.S., F.E.S.

### *On some new Species from Africa.*

THE types of the species described below are all in the British Museum. Several of the species are from the material collected for the African Entomological Research Commission by Mr. S. A. Neave, and others from the fine collection made in the Mid Zambesi districts by the late Mr. Oscar Silverlock.

\* Ann. & Mag. Nat. Hist. (6) xiv. p. 184 (1894), and (7) x. p. 158 (1902).

The following text is generated from uncorrected OCR.

[Begin Page: Page 408]

408 Mr. O. Thomas on

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Head and body 155 mm. ; hind tooth 25 ; ear 18.5.

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**[Begin Page: Page 409]**

sniaU M-iminals from S. America. 409

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Dimensions of the type (incasiired on tlie spirit-specimen) : —

Forearm 3G mm.

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Dimensions of the type (measured in flesh) : —

Head and body 82 mm. ; tail 32 ; hind foot 14 ; ear 5.

Skull: condylo-basal length 21.6; condylo-incisive length 22.5 ; greatest breadth 10.7 ; palate, length 9.5, breadth across molars 5.8 ; front of *i* to back of *ni* 9.4 ; combined length of *l*, *i*, and *m* on outer edge 0.2.

H(d). Ecuador. Type from Sinche, Guabanda, 4000 m.

Other specimens from Mt. Pichincha, Quito.

Type. Old male. B.M. no. 99. 9. 9. 3. Original number 135. Collected 17th December, 1898, by Perry O. Simons. Presented by Oldfield Thomas.

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410 Mr. R. E. Turner on Fossorial Tlymenopfera.

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Dimensions of the type (measured in skin) : —

Head and body 112 mm. ; tail 122; hind foot 16 ; ear 2G.

Skull : condylo-basal length 29.8 ; greatest breadth 16.8;  
nasals 12.4 X 2.7 ; interorbital breadth 4.7 ; palate length 15.7 ;  
breadth between outer corners of 9.2; combined length of  
three anterior molariform teeth 5.

Hah. Goya, Corrientes, Argentina. Alt. 600'.

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XLTT. — Notes on Fossorial Hymenoptera. — VIII.

By Rowland E. Tucker, P.Z.S., F.E.S.

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