



XIII.—On some genera and species of South-American Aviculariidæ

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Molars of the ordinary character, not as in *F. mystax* *.

Dimensions of the type (measured in skin):—

Head and body 190 millim. ; tail 155 ; hind foot (s. u.) 41.

Skull : greatest length 46 ; basilar length 34 ; length of upper molar series (*mp*¹ and 3 molars) 7·5.

Hab. Forçados, Lower Nigeria.

Type. Immature male. B.M. no. 2. 11. 2. 15. Original number 10. Collected 31st December, 1901, by Dr. W. J. Ansorge.

This species differs from *F. pyrrhopus* and *F. leucostigma* by the almost complete suppression of the red of the cheeks, limbs, and flanks, and the whiteness of its light dorsal lines, from *F. mystax* by these lines being much more conspicuous, and by its white under surface, and from *F. mandingo* by its generally darker colour.

XIII.—On some Genera and Species of South-American Aviculariidæ. By R. I. ПОЦОК.

Genus AVICULARIA, Lam.

Avicularia minatrix, sp. n.

♀. — *Colour.* Carapace and upperside of appendages covered with olive-grey hairs, showing a delicate tinge of pink ; a conspicuous fringe of pink hairs at the extremity of the tibial and protarsal segments of the legs on the dorsal side, a similar but shorter and less noticeable fringe on the extremity of the patella ; hairy fringe at the extremity of the tarsus much less noticeably red than that of the protarsus ; sternum, coxæ, and underside of abdomen sooty black, upperside of abdomen vividly black and red ; the median line occupied by a broadish black stripe, whence five pairs of black stripes pass transversely over the sides of the abdomen ; the spaces between these stripes red, hence the lateral surface of the abdomen might be described as ornamented with alternate bands of black and red ; the red stripes wider dorsally ; the black stripes are narrowest at their point of origin from the median stripe.

Carapace as long as patella + tibia + tarsus of palp, almost half the length of the third leg (measured from the base of the femur), and slightly longer than patella + tibia of first or

* Cf. de Winton, Ann. & Mag. Nat. Hist. (7) ii. p. 10 (1898).

fourth leg and than protarsus + tarsus of the fourth; its width equal to patella + tibia of second leg.

Legs 4, 1, 2, 3, fourth exceeding first by about half the length of its tarsus.

Measurements in millimetres.—Total length 33; carapace 13.5; first leg 33, second 30, third 28, fourth 35; patella + tibia of fourth 12.5, of first 12.

Loc. Duaca, Estrado Lara in Venezuela. A single adult female.

This species may be known by the unusual shortness of its legs and the coloration of the abdomen, which suggest that of the young *A. avicularia*. In no other species known to me is the carapace longer than the patella + tibia or protarsus + tarsus of the fourth leg. In the presence of a pale fringe at the extremity of the tibiæ and protarsi of the legs may be seen similarity to *A. Walckenaerii*.

Genus PSALMOPÆUS, Poc.

Psalmopæus ecclesiasticus, sp. n.

♂.—*Colour.* Carapace covered with a thick felting of olive-yellow hairs, shining with silky lustre, similar hairs present also upon the upperside of the basal segments of the legs and palpi and upon the summit of the mandibles; prevailing tint of legs mouse-brown; upperside of abdomen with its greyish integument covered with erect bristles of a dark brownish hue; ventral surface sooty velvety black; scopulæ olive-grey.

Carapace a little longer than wide, its length equal to that of tibia of second leg, a little less than that of fourth, and shorter than protarsus of fourth by about one fourth of its length, and about as long as patella + tibia of palp and as femur of third leg.

Legs long, 4, 1, 2, 3, thickly fringed; patella + tibia of second as long as those of fourth; first leg (from base of femur) about four and a half times as long as carapace.

Palp (from base of femur) about twice as long as carapace; palpal organ long, distinctly longer than patella of palp and about half as long as the carapace, the bulb less globular and the spine much longer than in *P. Cambridgii*; viewed from the outside, the posterior border of the spine is continuous with that of the palp.

Stridulating-spines on maxilla consisting of a row of nearly a dozen spines, which, except for their thickness and darker colour, are but little differentiated from the oral fringe; on the

mandible there are a few stout but apically setiform spines on the proximal side of the oral fringe.

♀.—Resembling the male, but with shorter limbs; carapace about as long as patella + tibia of third leg, shorter than those of fourth by about one fourth of the tibia.

Measurements in millimetres.—♂. Total length 35; carapace 15.5; palpus 31; first leg 71, second leg 66, third leg 56, fourth leg 68 (all from base of femur); protarsus of fourth 18, of first 15.5; patella + tibia of first 26, of fourth 23.5; palpal organ 7.

♀. Total length 39; carapace 17; palpus 33; first leg 58, second leg 55, third leg 47, fourth leg 57; patella + tibia of first 22, of fourth 20.5.

Loc. N.W. Ecuador, Rio Sapayo, 450 feet (type); also Carondelet, 60 feet.

Both sexes of this species may be distinguished from those of the Trinidad form *P. Cambridgii*, Poc., by having the stridulating-spines on the palpus only about twelve in number, short, of tolerable even thickness throughout, and not separated from the oral fringe. In *P. Cambridgii* the spines are much more numerous, long, distally incrassate, and forming a strongly curved series remote from the oral fringe. Again, the male of *P. ecclesiasticus* has longer legs than that of *P. Cambridgii*, the carapace in the latter being a little longer than the tibia of the fourth leg, equal to its protarsus, longer than the tibia of the second; the palpal organ is about one third the length of the carapace and equal to the patella of the palp.

Psalmopæus plantaris, sp. n.

♀.—*Colour* (dry specimen). Carapace and upperside of limbs covered with olive or greenish-yellow hairs; protarsi and tarsi richer reddish brown, with a very distinct pale, probably pinkish patch at the extremities; a similar but double patch at the extremity of the tibia; sternum, underside of abdomen and of palpus, and first two pairs of legs velvety brown (probably black).

Carapace a little shorter than patella + tibia of first leg, as long as those of second, longer than protarsus + tarsus of first. Anterior median *eyes* about three fourths of a diameter apart and about half their own radius from the laterals.

Legs hirsute, like those of *Avicularia*, not nearly so strongly fringed as those of *P. ecclesiasticus* or *P. Cambridgii*; the scopulæ very broad, that of protarsus of first as broad as long; anterior legs shorter; fourth leg a little longer than first,

patella + tibia of fourth a little longer than those of first, also its protarsus + tarsus longer than those of first.

Stridulating-organ like that of *P. Cambridgii*, but the spines on the maxilla less numerous, being only about twelve in number and shorter.

Measurements in millimetres.—Total length 23; carapace 14.5; first leg 42, second leg 38.3, third leg 35.5, fourth leg 43.5; patella + tibia of first 16, of fourth 15.5; protarsus + tarsus of first 14, of fourth 16.

Loc. Cauca in Colombia (received from M. Goudot in 1846).

This species is easily distinguishable from *P. Cambridgii*, which in the structure of its stridulating-organ it more nearly resembles than does *P. ecclesiasticus*, by the shortness of its anterior legs as compared with the posterior.

Psalmopæus emeraldus, sp. n.

♀.—*Colour* (dry specimen) a tolerably uniform deep olive-brown above, sooty black below.

Carapace almost as long as patella + tibia of first or of fourth leg, a little longer than protarsus + tarsus of first and almost as long as those of fourth.

Legs of first and fourth pairs subequal, patella + tibia of first subequal to those of fourth, protarsus + tarsus of fourth a little longer than those of first.

Stridulating-bristles on maxilla not isolated from the oral fringe, distally on the same straight line with them and but little differentiated, those at the proximal end longish and slender, much like the rest of the series, not short, thick, and curved as in *P. ecclesiasticus*.

Measurements in millimetres.—Total length 28; carapace 13; first leg 37, fourth leg 38; patella + tibia of first 13.5, of fourth 13.8; protarsus + tarsus of first 12.5, of fourth 14.

Loc. Colombia, emerald-mines at Muzo, in the valley of the Meta, an affluent of the Magdaleine (*I. da Costa*).

Easily distinguishable from *P. ecclesiasticus*, which it approaches in the structure of its stridulating-bristles, by the greater shortness of its legs, &c.

The females of the foregoing species may be distinguished as follows:—

- a. Stridulating-spines on maxilla in the same straight line as the edge of the oral fringe and scarcely separated from it.
- a¹. Carapace scarcely longer than femur of first or fourth leg, much shorter than their patella + tibia. *ecclesiasticus*.

- b*¹. Carapace much longer than femur of first or fourth leg and slightly exceeding their patella+tibia . . . *emeraldus*.
- b*. Stridulating-spines on maxilla forming a convex curvature, the middle of which is remote from the oral fringe and nearer the coxal groove.
- a*². Carapace as long as tibia+ $\frac{1}{2}$ patella of first leg, shorter than protarsus+tarsus of first or second; patella+tibia+protarsus+tarsus of first longer than those of fourth *Cambridgii*.
- b*². Carapace as long as tibia+ $\frac{3}{4}$ patella of first leg, longer than protarsus+tarsus of first or second; patella+tibia+protarsus+tarsus of first shorter than those of fourth *plantaris*.

Genus EPHEBOPUS, Sim.

Ephebopus, Simon, Pocock, Ann. & Mag. Nat. Hist. (7) viii. p. 547 (1901).

Ephebopus fossor, sp. n.

♀.—*Colour* like that of *E. murinus* (= *Santaremia Pocockii*), but the longitudinal bands on the legs less conspicuous and narrower, those on the anterior patella being separated throughout their length; furthermore the legs are ornamented with distinct transverse bands on the distal ends of the patellæ, tibiæ, and protarsi.

Carapace as long as patella+tibia or protarsus+tarsus of fourth leg, slightly less than tibia+protarsus of first and than patella+tibia+tarsus of palp; *eyes* of anterior line subequal and subequally spaced, the medians separated by a space which is equal to about three fourths their diameter.

Legs 4, 1, 2, 3, fourth exceeding first by about the length of half its tarsus; tibia of first with a pair of inferior apical spines, of second with a single apical spine on inner side, of third and fourth unspined; protarsus of first and second unspined apically beneath, of third and fourth with a single pair of apical spines.

Labium flat.

Measurements in millimetres.—Total length 33; carapace 14; palpus 23; first leg 37.5, second 35, third 32, fourth 39 (all from base of femur).

Loc. Rio Sapayo, N.W. Ecuador, 450 feet.

The Amazonian form *E. murinus* (= *Pocockii*) may be distinguished as follows from the new species here described:—the legs have thicker longitudinal bands and scarcely developed transverse bands; the labium is convex; the eyes compact, the anterior medians being barely a radius apart; the tibiæ of all the legs have a pair of inferior spines, the protarsi of third and fourth have four or five apical spines below.

Genus ACANTHOSCURRIA, Auss.

Acanthoscurria antillensis, sp. n.

? *Mygale Blondii*, Walck. Ins. Apt. i. p. 210 (1837) (in part).

♀.—Integument covered with hairs of a rich olive-brown hue, a pair of pale patches (probably pink in colour when fresh) on the head; legs marked with indistinct pale longitudinal lines, but scarcely distinctly banded at the ends of the segments; bristles on legs greyish in colour, not long and not numerous.

Carapace with the cephalic area noticeably higher and narrower than in *A. geniculata* and *A. Brocklehursti*, as long as patella + tibia of fourth leg, a little shorter than those of first leg, and a little longer than protarsus + $\frac{1}{2}$ the tarsus of the fourth, shorter by $\frac{1}{4}$ of the tarsus than the patella, tibia, and tarsus of palp, and shorter than the femur + $\frac{1}{2}$ the patella of the first; distance from the fovea to the anterior border less than protarsus of fourth and barely exceeding patella + tibia of palp.

Eyes of anterior line subequal, subequally spaced, medians about a diameter apart, posterior median eyes close to the posterior laterals, much closer than to the anterior medians; the two laterals less than half a diameter apart.

Legs 4, 1, 2, 3 in length; spines on anterior tibiae very short, protarsus of first spined only at apex; fourth leg about three times as long as carapace; third leg less than two and a half times as long; palp more than one and a half times as long.

Stridulating-organ consisting of about 25 long plumose spines on the trochanter of the palp and of long plumose and simple acuminate spines on the first leg. Inner side of coxa, trochanter, and femur of first leg and outer side of the corresponding segments of the palp clothed with simple hairs and bristles.

Measurements in millimetres.—Total length 55; length of carapace 24, from fovea to anterior edge 17; width 21; length of first leg 65, second 60, third 57, fourth 69; patella + tibia of first 24, of fourth 23; protarsus of fourth 19.

Loc. Lesser Antilles: St. Lucia (*G. A. Ramage* and *Miss Alexander*); Point Michel, in Dominica (*G. A. Ramage*).

This species has a higher narrower head than the South-American species of the genus with which I am acquainted. In the length of its legs it resembles *A. geniculata*.

It is, perhaps, to this species that must be referred the specimen from St. Vincent, and possibly the one from Mar-

tinique, which Walckenaer referred, though no doubt erroneously, to *Mygale Blondii*, a species hitherto known only with certainty from Cayenne (Ins. Apt. i. p. 210, 1837).

Acanthoscurria tarda, sp. n.

♀.—Nearly allied to *A. Brocklehursti*, F. Cambridge (P. Z. S. 1896, p. 739, pl. xxxiv. fig. 18), from Para, but differing in the characters pointed out in the diagnosis as well as in having shorter legs, and the white stripes at the ends of the leg-segments less distinct.

Carapace as long as patella and tibia + $\frac{1}{4}$ the protarsus of the fourth leg and as protarsus and tarsus of that leg, and considerably longer than patella and tibia of first leg.

Eyes of anterior line widely separated, the medians larger than the laterals, separated by a space exceeding their diameter and by about a diameter from the laterals; posterior medians much closer to the posterior laterals than to the anterior medians; space between the two laterals almost or quite equal to the long diameter of the anterior lateral.

Measurements in millimetres.—Total length 62; length of carapace 26, width 23; length from fovea to anterior border 19; length of first leg 63, second 58, third 55, fourth 66.5; patella + tibia of first 23.5, of fourth 21.5; protarsus of fourth 17.3.

Loc. Rio Teffe, on the Amazons (*Dr. Bach*).

A. ferina, Simon (Ann. Soc. Ent. Fr. 1892, p. 282), is based upon a male specimen also from Teffe; but the difference in size and situation of the eyes between that specimen and the type of *A. tarda* is too great to permit one to suppose that they are sexes of the same species. According to Simon, the eyes of the anterior line are large, subequal, and narrowly separated, the posterior medians are narrowly separated from the anterior medians, and the two laterals are very narrowly separated from each other.

Acanthoscurria suina, sp. n.

♀.—*Colour*. Hairy clothing a tolerably uniform yellow-brown, the legs indistinctly banded longitudinally and with narrow pale transverse bands at the distal ends of the segments.

Carapace longer than patella and tibia of first or fourth, as long as protarsus and tarsus of fourth leg, almost as long as the three distal palpal segments, almost as long as femur and patella of fourth leg, but scarcely exceeding femur and half the patella of first, distance from fovea to anterior border exceeding patella and tibia of palp and protarsus of fourth leg;

cephalic region high and narrow, as in *A. antillensis*; eyes of anterior line subequal, subequally spaced, the medians barely a diameter apart, posterior medians nearer to the laterals than to the anterior medians, the two laterals separated by a space which is equal to the long diameter of the posterior laterals.

Legs 4, 1, 2, 3, fourth exceeding first by about one fourth the length of its tarsus, fourth a little more than two and a half times the length of the carapace, third a little more than twice the length. Stridulating-organ consisting of twenty or more rather slender and short plumose bristles, with a few longer spines intermixed on the trochanter of the first leg and about the same number of short plumose bristles on the trochanter of the palp. No other plumose hairs on these appendages.

Measurements in millimetres.—Total length 39; length of carapace 19, width 16.5; length from fovea to anterior border 13; length of first leg 47, second 41, third 38, fourth 48.3; patella and tibia of first 18, of fourth 16; protarsus of fourth 14.5.

Loc. Uruguay.

Acanthoscurria sternalis, sp. n.

♀.—Prevailing colour a tolerably uniform mouse-brown; abdomen more velvety black above and below, clothed above with long reddish bristles.

Carapace as long as patella + tibia of first leg, very slightly longer than those of fourth, as long as protarsus + $\frac{1}{2}$ tarsus of fourth, slightly longer than tibia + protarsus of second, as long as femur + $\frac{1}{2}$ patella of first and as femur + $\frac{3}{4}$ patella of fourth.

Eyes of anterior line subequal, subequally spaced, distance between medians rather less than their diameter; the posterior medians nearer to the posterior laterals than to the anterior medians; distance between the two laterals on each side slightly less than long diameter of posterior lateral.

Legs 4, 1, 2, 3, fourth exceeding first by more than half its tarsus; fourth nearly three times the length of the carapace, first more than two and a half times its length.

Palp with femur posteriorly without plumose bristles, those on the trochanter stout, curved, plumose, and up to about twenty in number; a few slender plumose bristles on the adjacent area of the coxa inferiorly. Femur of first leg with thickish plumose scopula in its basal half, the plumose hairs becoming more and more scanty distally; a small pad of plumose hairs on the distal third of the coxa in front below

the groove and proximally passing into stout spines; on the anterior side of the trochanter there are a few longish spines and some thinner plumose bristles.

Sternum very convex, both longitudinally and transversely, the middle of its surface projecting considerably below the level of the lower side of the coxæ.

Measurements in millimetres.—Total length 38; carapace 17.5; first leg 47, second 42, third 39, fourth 51; patella + tibia of first 17.5, of fourth 17; protarsus + tarsus of fourth 21, of first 16.

Loc. Tucuman, 450 m. in the Argentine.

This species differs from all known to me in the strong and extraordinary convexity of its sternum. Apart from this feature it would fall alongside *A. Brocklehursti* in the subjoined table, but differs in other respects from that species.

The females of the species of the genus known to me may be diagnosed as follows:—

- a. Sternum quite flat, higher than inferior surface of coxæ.
 - a¹. Patella, tibia, and protarsus of legs with broad pale distal band; anterior side of femur of first leg and posterior side of femur of palp with feathery scopula extending nearly to distal end of segment *geniculata*, C. K.
 - b¹. Patella, tibia, and protarsus of legs with at most a narrow distal band; anterior side of femur of first leg and posterior side of femur of palp without feathery scopula or scopulate only at base.
 - a². Anterior side of first leg studded at base with plumose hairs in addition to those constituting the stridulating-apparatus.
 - a³. No plumose bristles on posterior side of coxa and femur of palp; anterior median eyes less than a diameter from each other and from the laterals; legs longer *Brocklehursti*, F. Cb.
 - b³. Some plumose bristles present upon the posterior side of the coxa and femur of palp; anterior median eyes more than a diameter from each other and from the laterals; legs shorter *tarda*, sp. n.
 - b². Anterior side of first leg without plumose hairs, apart from those forming the stridulating-organ.
 - a⁴. Legs longer, fourth about three times as long as carapace, which is only as long as its femur and half the patella, &c. *antillensis*, sp. n.
 - b⁴. Legs shorter, fourth about two and a

- half times the length of the carapace,
 which is almost equal to its femur and
 patella *suina*, sp. n.
- b. Sternum strongly convex, projecting mesially
 below the inferior surface of the coxæ *sternalis*, sp. n.

Genus PHORMICTOPUS, Poc.

Phormictopus, Ann. & Mag. Nat. Hist. (7) viii. p. 545 (1901).

The name and synonymy of the type of this genus is, I believe, as follows:—

Phormictopus cancerides (Latr.).

Mygale cancerides, Latr. Gen. Crust. et Ins. i. p. 83 (1806).

Mygale Erichsonii, C. L. Koch, Die Arach. ix. p. 28, fig. 709 (1842);
 id. Uebersicht &c. v. p. 72 (1850) (*Lasiadora*).

Crypsidromus intermedius, Auss. Verh. z.-b. Wien, xxv. p. 180 (1875).

Hab. San Domingo (Haiti).

The British Museum has adult males and females ticketed "Haiti" and "Port au Prince, Haiti." Probably to this species is to be assigned the specimen from San Domingo referred to *Mygale Blondii* by Hahn (Monogr. Spinnen, i. p. 1, 1820). Under the name *Schizopelma Erichsonii*, Banks (Proc. U.S. Nat. Mus. xxiv. p. 218, 1901) has recently recorded a species from Porto Rico which he identifies with *Mygale Erichsonii*, Koch. Since a single tibial apophysis, to mention no other feature, is characteristic of the male of *Schizopelma*, and since the species described as *Mygale Erichsonii* by Koch has a couple of such apophyses, Mr. Banks's determination is certainly erroneous.

The species named *Crypsidromus intermedius* by Ausserer, the type of which is in the British Museum, is based upon immature and mutilated specimens apparently referable to this species.

The genus *Phormictopus* also embraces the form described by Ausserer as *Lasiadora cauta* (Verh. z.-b. Wien, xxv. p. 191, 1875), for which, unfortunately, no locality is as yet known.

The males of the two species that I refer to this genus may be diagnosed as follows:—

- a. Femur of first leg without plumose hairs on the inner side; femur of third leg not noticeably swollen; protarsus of first strongly convex above, tibia concave; spine of palpal organ smooth along its convex side *cancerides* (Latr.), Poc.

- b. Femur of first leg with plumose hairs internally, of the third leg noticeably swollen; protarsus and tibia of first straight; spine of palpal organ serrulate along its convex side. *cautus*, Auss.

Genus PAMPHOBETEUS, Pocock.

Pamphobeteus, Pocock, Ann. & Mag. Nat. Hist. (7) viii. p. 545 (1901).

Pamphobeteus antinous, sp. n.

Colour blackish, the integument thickly covered with short olive-black hairs, showing a characteristic tufted or woolly appearance; upperside of femora of legs with bright steel-blue lustre; some long foxy-red bristles on the abdomen and legs.

Tibial spurs and protarsus of first leg practically as in *P. nigricolor*; palpal organ differing from that of the previously recorded species in having the spine broad and spatulate and oval in its distal half, where it is broader than at the base, the median crest resembling that of *P. nigricolor*.

Measurements in millimetres.—Total length 50; carapace 29; first leg 92, second leg 88, third leg 85, fourth leg 104; patella + tibia of first 30, of fourth 32; protarsus of first 21, of fourth 30; femur of first 26, of fourth 27.

Loc. Madre de Dios, in Bolivia.

This species is possibly based upon the unknown male of the species from Bogota, described by Ausserer as *Lasiadora ferox*, which also has a woolly clothing. The Museum possesses larger specimens than the type, but unlocalized. One of these gives the following measurements:—Total length 65 millim.; carapace 33; first leg 98, fourth leg 110.

Pamphobeteus insignis, sp. n.

♂.—Closely allied to *P. nigricolor*. Prevailing colour of the hairy clothing a deep olive-brown, with a beautiful bluish-purple bloom on the upperside of the body and limbs. Distinguishable from *P. nigricolor* by the form of the palpal organ. In *P. nigricolor* the spine is lightly convex when viewed from one side; when viewed from its concave aspect it is straight and is bordered by sharp crests which converge to the point; in the distal half of this area there arises a median crest, which is high, lies obliquely, and has a distinctly convex edge. In *P. insignis*, on the other hand, the spine is less curved and the median crest is not confined to the distal end of its subs spatulate portion, but runs throughout its length.

Measurements in millimetres.—Total length 48; carapace 26; first leg 81, second leg 78, third leg 76, fourth leg 93; patella + tibia of first 28, of fourth 30; protarsus of first 18, of fourth 26; femur of first and of fourth 24.

Loc. Cauca (*I. da Costa* (type) and *M. Goudot*).

Pamphobeteus ornatus, sp. n.

♂.—Closely related to *P. nigricolor* and *insignis*, but with a pinky-red bloom on the upperside. Structurally the protarsus of the first leg is more arcuate, its upperside being evenly though lightly convex, and the lower tibial spur is more on a level with the upper, so that when viewed from the inside no "daylight" is visible between them. The spine of the palpal organ is considerably shorter, more curved, less spatulate, and not so strongly crested as in either of the other species. Trochanter of palp covered behind with a pad of slender but strongly plumose bristles like feathery down.

Measurements in millimetres.—Total length 54; carapace 27; first leg 87, second 83, third 80, fourth 99; patella and tibia of first 29, of fourth 31; protarsus of first 21, of fourth 31; femur of fourth 25.

Loc. Rio Dagua in Colombia.

The males of the genus known to me may be diagnosed as follows:—

- a. Integument covered with close woolly hairs; spine of palpal organ broad and spatulate; (with steel-blue lustre above) *antinous.*
- b. Integument, at least of legs, not noticeably woolly; spine of palpal organ attenuate.
 - a¹. Dorsal surface with rosy-pink bloom; spine of palpal organ less strongly crested; a thick pad of finely feathery or downy hairs on posterior side of the trochanter of the palp *ornatus.*
 - b¹. Dorsal surface with bluish-purple bloom; spine of palpal organ strongly crested.
 - a². Spine more curved, the median crest of its concave (anterior or spatulate) side short, high, convex, and limited to the distal extremity; the long hairs on the posterior side of the trochanter of the palp delicately plumose, but without thick cluster of fine barbed hairs *nigricolor.*
 - b². Spine straighter, the median crest long, not high, and extending throughout the length of the spine; posterior side of trochanter of palp furnished distally with a cluster of very fine, close-set, delicately barbed hairs *insignis.*

In addition to the type species, *P. nigricolor*, Auss., and the others described above this genus contains those named by Ausserer *Lasiadora fortis* and *ferox*, of which only female examples are known (Verh. z.-b. Wien, 1875, pp. 192-194).

Lasiadora Augusti and *L. vespertinum*, Simon, from Los Puentes, near Quito, in Ecuador, no doubt also belong to the genus *Pamphobeteus*. The former, according to Simon, differs from *P. nigricolor*, Auss., in its smaller size, in being tinted with reddish violet, and in having a sinuous palpal spine. *P. vespertinus* is covered with reddish pubescence, and further differs from *P. Augusti* in having the spine of the palpal organ thicker, lightly dilated and lanceolate, and furnished with a higher and obtuse triangularly elevated median spine.

Genus XENESTHIS, Simon.

Xenesthis monstrosus, sp. n.

♀.—*Colour*. Hairy clothing of body and limbs deep olive-black and woolly; a pair of purplish-red patches on the head, but otherwise without red pubescence.

Measurements in millimetres.—Total length 74; carapace 32; first leg 76, second leg 70, third leg 71, fourth leg 89; patella and tibia of first 28, of fourth 29; protarsus of first 16, of fourth 25.

Loc. New Granada.

This species is nearly allied to *X. immanis*, Auss. (= *colombiana*, Sim.), which the British Museum possesses from Bogota in Colombia (Keyserling Coll. and *L. Greening*), and Tachiro in Venezuela (*Mr. Higgins*). The females of the two, however, may be contrasted as follows:—

- a. Legs much longer, the fourth rather more than three times as long as the carapace, the first about twice and two thirds as long; carapace equal to patella and tibia of first or fourth leg, a little longer than protarsus of fourth *immanis*, Auss.
- b. Legs much shorter, the fourth considerably less than three times, the first less than twice and a half as long as the carapace; carapace distinctly exceeding patella and tibia of first or fourth, as long as the fourth protarsus + more than half the tarsus .. *monstrosus*, Poc.

The type of *X. immanis*, Auss. (♀), gives the following measurements for comparison:—

Total length 65 millim.; carapace 29; first leg 80, second

leg 74, third leg 73, fourth leg 92; patella + tibia of first 28·5, of fourth 28; protarsus of first 16, of fourth 27.

Besides the type the British Museum has two additional females of *X. immanis*; these resemble the type in relative measurements.

Genus CYRTOPHOLIS, Sim.

Cyrtosternum, Auss. Verh. z.-b. Wien, 1875, p. 176 (nom. præocc.) (type *cursor*, Auss.).

Cyrtopholis, Simon, Hist. Nat. Araign. i. p. 143 (1892) (type *innocuus* (Auss.), Sim.).

Lyrosceles, F. Cambr. Ann. & Mag. Nat. Hist. (7) vii. p. 324 (1901) (type *Bonhottei*, F. Cambr.).

Simon proposed *Cyrtopholis* to replace *Cyrtosternum*. He drew the characters of the genus from an unnamed species from St. Thomas and from specimens he identified with *Crypsidromus innocuus*, Auss., a Cuban species. The type of *Cyrtopholis*, then, is the species represented by the specimens referred by Simon to *innocuus*.

The type of *Cyrtosternum*, namely, *cursor*, from San Domingo, was unknown to Simon. As has already been pointed out by myself (Ann. & Mag. Nat. Hist. (6) xvi. p. 226, 1895) and Mr. F. Cambridge (Biol. Centr.-Amer., Araneidea, vol. ii. p. 29, 1897), Ausserer based the genus upon the strong convexity of the sternum, not, as Simon states, upon the curvature of the anterior ocular line. The types of *C. cursor* are in the British Museum and are doubtfully adult females. Apart from the convexity of the sternum, I can find no character with pretensions to be of generic value between this species and the others here referred to *Cyrtopholis*. But to regard this as of generic value complicates the question of names, for it entails the ascription of a new generic name to replace *Cyrtosternum*, since the species from which the characters of *Cyrtopholis* were taken have the sterna flat. That this species is congeneric with the type of *Lyrosceles*, F. Cambr., with which the other Antillean species known to me agree, is very probable. I have acted upon this probability in the generic synonymy given above; but should this supposition prove erroneous the matter may be easily rectified, since the type species to which the three generic names have been given are settled.

Cyrtopholis cursor (Auss.).

Cyrtosternum cursor, Auss. Verh. z.-b. Wien, 1875, p. 176.

Loc. San Domingo.

The only specimens of this species available for examination

have the tarsal pad of the fourth leg divided by a band of bristles; but since these examples are doubtfully mature, the carapace measuring only 13 millim. in length, these characters cannot be relied upon as of any systematic value.

Cyrtopholis Bonhotei (F. Cambr.).

Lyrosceles Bonhotei, F. Cambr. Ann. & Mag. Nat. Hist. (7) vii. p. 324, pl. vii. figs. 6, 6 a (1901).

Loc. Nassau, in the Bahamas (*J. L. Bonhote*).

Cyrtopholis venatorius (Linn.) *.

Aranea venatoria, Linn. Syst. Nat. ed. 12, p. 1035 (in part.).

Mygale bartholomæi, Latreille, Nouv. Annales Mus. i. p. 71 (1802); Walck. Ins. Apt. i. p. 214 (1837).

? *Mygale incana*, C. Koch, Die Arachn. ix. p. 70, fig. 735 (1842).

Crypsidromus gypsator, Becker, Ann. Soc. Ent. Belg. xxii. p. 85, pl. ii. fig. 11 (1879).

Cyrtopholis antillana, Thorell, Bih. Sv. Vet.-Akad. Handl. xx. pt. iv. no. 4, p. 25 (1894).

? *Cyrtopholis* sp., Simon, Hist. Nat. Araign. i. p. 143 (1892) (in note).

Loc. Lesser Antilles.

* Linnæus based *Aranea venatoria* upon two species—the well-known form which Latreille made the type of his genus *Heteropoda* under the name *venatoria* and the West-Indian Aviculariine *Cyrtopholis*. The latter is indicated in the last of the four references Linnæus cites, the remaining three referring to the species of *Heteropoda*. This overwhelming preponderance of references in favour of *Heteropoda* no doubt influenced Latreille in his determination of the species *venatoria*. Unfortunately Fabricius antedated Latreille, and in 1793 assigned the name *regia* to the species Latreille called *venatoria*, thus by unconscious elimination fixing the name *venatoria* on to the second species included by Linnæus under that name.

Further confusion was created by the action of Fabricius in ascribing the name *venatoria*, whether intentionally or not is no matter, to a species not referred to by Linnæus under *venatoria*. Linnæus included the spider from Antigua described by Browne ('Jamaica,' p. 420) as *Tarantula rufescens major* &c., and represented on pl. xlv. fig. 2, but not the *Tarantula major subhirsuta sub terram nidulans* described on the same page and represented by fig. 3 on the same plate. It was upon this last-named species that Fabricius fixed the name *venatoria*; hence the fixation is without value and is null and void. So far as any action taken by Fabricius in the matter is concerned, the only reason that can be alleged for setting aside Latreille's interpretation of the name *venatoria* is that given above, namely, the previous ascription of the name *regia* to the same species by Fabricius. If this be considered sufficient, then the name *venatoria* falls upon the Antigua Aviculariine belonging to *Cyrtopholis*.

I believe, however, that Linnæus himself was the first to give a second name to the species he first referred to *venatoria*. Immediately following the diagnosis of *venatoria* is that of *Aranea ocellata*, which is almost certainly based upon the male of the species that Fabricius named *regia*. The size, ocelliform spots on the femora, paired patches on the carapace,

The British Museum has specimens that I refer to this species from Montserrat (*Sir A. Alderley*) and Antigua (*C. A. Barber, W. R. Forrest, J. W. Gregory*), and also an immature female ticketed with the MS. name *Crypsidromus alticeps*, Keys., from the last-named island. The type of *gypsator* was also from Antigua. The specimens described by Latreille and Thorell were from St. Bartholomew, the species named *incana* by C. Koch, and the one mentioned but not described by Simon, from St. Thomas. In Browne's 'History of Jamaica,' p. 420, pl. xlv. fig. 2, this species is figured and briefly described as a native of Antigua. This figure formed part of the basis of the species named *Aranea venatoria* by Linnæus.

Cyrtopholis femoralis, sp. n.

♂.—Much smaller than *C. Bonhottei* and *C. venatorius*. Integument deep castaneous, covered with yellowish-brown hairs, with long pale bristles on the abdomen.

Carapace as in *C. venatorius*; eyes also almost as in that species, those of the anterior line slightly procurved, laterals a little larger than medians, medians barely a radius apart.

In spine-armature of *legs* and proportion of leg-segments closely resembling *C. venatorius*, except that the femur of the third is considerably more thickened relatively, the width being considerably more than one third the length of its

and the locality (China) all fit the male of *regia*, though the phrase "black ring on the abdomen" is puzzling.

The earlier synonymy of the species involved is, I believe, as follows:—

1. *Cyrtopholis venatorius* (Linn.).

Aranea venatoria, Linn. Syst. Nat. ed. 12, p. 1035. no. 34 (1766) (in part., *i. e.*, refs. to Browne's 'Jamaica,' p. 420, pl. xlv. fig. 2).

2. *Heteropoda ocellata* (Linn.).

Aranea venatoria, Linn. Syst. Nat. ed. 12, p. 1035. no. 33 (in part., *i. e.*, refs. to Gronovius, Sloan, and Merian).

Aranea ocellata, Linn. *ibid.* no. 34 (♂).

Aranea regia, Fabr. Ent. Syst. ii. p. 408 (1793) (♀).

Heteropoda venatoria, Latreille, Thorell, et alii (olim).

Heteropoda regia, Fabr., L. Koch, Simon, &c.

3. *Pachylomerus nidulans* (Fabr.).

Aranea venatoria, Fabr. Syst. Ent. p. 439 (1775) (nec *venatoria*, Linn.).

Aranea nidulans, Fabr. Mant. Ins. i. p. 343 (1787).

Aranea venatoria, Fabr. Ent. Syst. ii. p. 408 (1793).

upperside (3:7.8); the protarsal scopulæ are more scanty and the tarsal scopulæ of the third and fourth legs divided by a narrow band of bristles. *Palpal organ* constructed practically as in *C. venatorius*. Protarsus of first leg straight, not arcuate.

Stridulating-organ practically as in *C. venatorius*.

Measurements in millimetres.—Total length 21; length of carapace 10, width 2; length of first leg 33, second leg 31, third leg 29, fourth leg 36; patella and tibia of first and fourth 12.5; protarsus of fourth 11.

Loc. Montserrat (*Sir A. Alderley*).

A smaller species than *C. venatorius*, presenting many features of the young of the latter, in conformity with the well-known biological law.

Cyrtopholis agilis, sp. n.

♂.—About the same size as *C. femoralis*. Integument covered with brown hairs with a golden lustre.

Carapace considerably shorter than patella and tibia of first or of fourth legs and distinctly shorter than protarsus of fourth; cephalic region moderately high; eyes of anterior line more widely spaced than in *C. femoralis*, the medians about a diameter from each other, but rather less than that from the laterals.

Legs 4, 1, 2, 3; tibia of first armed with about five spines, two inner and three outer, one of the latter being apical; the spurs stout, bluntly rounded, the inferior expanded at the distal end; protarsus lightly arcuate, unspined (? except at apex); tibia of second with eight spines; protarsus with one external spine at base of scopula, which does not reach base of segment; third and fourth legs more numerous spined; femur of third scarcely incrassate; tarsal scopula of fourth incompletely divided by a band of setæ.

Palp with two internal tibial spines; palpal organ with the spine more filiform than that of *C. Bonhotei*.

Stridulating-organ consisting of about nine clavate plumose bristles on the trochanter of the first leg and about three similar bristles on the trochanter of the palpus.

Measurements in millimetres.—Total length 18; carapace 9.5; width of carapace 8; length of first leg 34, second 32, third 29, fourth 37; patella and tibia of first and fourth 12; protarsus of fourth 10.5.

Loc. San Domingo.

To the genus *Cyrtopholis* I also refer the following species:—

Cyrtopholis pernix, Auss. Verh. z.-b. Wien, 1875, p. 178
(*Crypsidromus*); F. Cambridge, Biol. Centr.-Amer.,
Araneidea, ii. p. 31, pl. ii. fig. 14 (1897) (*Hapalopus*).

Loc. Pic d'Orizaba, Mexico.

The following is a key to the species known to me, the characters being mostly taken from specimens of the male sex:—

- a. Sternum strongly convex *cursor*, Auss.
 b. Sternum flat.
 a¹. Eyes of anterior line only a little procurved,
 nearly straight by their centres; stridulating-
 bristles on first leg spatulate (*i. e.*, expanded
 and compressed), those on palp few and not
 plumose; spine of palpal organ with strong
 keel..... *pernix*, Auss.
 b¹. Eyes of anterior line more strongly procurved,
 stridulating-organ consisting of lightly clavate
 plumose bristles on first leg and palp; spine of
 palpal organ without strong keel.
 a². Small, carapace up to 11 mm. long.
 a³. Femur of third leg scarcely swollen, inferi-
 rior tibial spur distally incrassate and
 rounded *agilis*, sp. n.
 b³. Femur of third leg much swollen, inferior
 tibial spur distally narrowed *femoratis*, sp. n.
 b². Large; carapace not less than 16 mm. long.
 a⁴. Colour a tolerably uniform brown, with
 golden lustre; legs with pale bands; spine
 of palpal organ strongly compressed *venatorius*, Liun.
 b⁴. Colour mostly black; carapace thickly
 coated with golden-grey hairs; spine of
 palpal organ not compressed *Bonhotei*, F. Cb.

Genus CITHAROSCELUS, Pocock.

Citharoscelus, Pocock, Ann. & Mag. Nat. Hist. (7) iii. p. 347 (1899).

? *Grammostola* + *Homœomma*, Simon, Hist. Nat. Araign. i. pp. 162,
163 (1892).

This genus contains the following species:—

Citharoscelus spatulatus (F. Cambridge).

? *Mygale rosea*, Walck. Ins. Apt. i. p. 213 (1837); Guérin, Voy.

'Favorite,' v. pt. 2, p. 165, pl. xlviii. fig. 1 (1839) (*nec roseus*, Simon).

? *Mygale rosea*, C. Koch, Die Arachn. ix. p. 59 (1842).

? *Mygale rubiginosa*, Nicolet in Gay's Hist. de Chile, Zool. iii. p. 330
(1849).

Eurypelma spatulatum, F. Cambridge, Biol. Centr.-Amer., Araneidea, ii. p. 24, pl. i. figs. 19, 19 a, b (1897).

Citharoscelus Kochii, Pocock, Ann. & Mag. Nat. Hist. (7) iii. p. 348 (1899); F. Cambridge, Journ. Linn. Soc., Zool. xxvii. p. 16, pl. ii. figs. 13-15 (1899); Pocock, Fitzgerald's Highest Andes, p. 359 (1899).

Loc. Chili: Valparaiso, Santiago, Coquimbo.

This species, whatever its true name may be (for a discussion of which see *infra*, p. 105), is one of the commonest Chilean species of Aviculariidae.

The locality "Mexico" assigned to the type of *Eurypelma spatulatum* is no doubt an error. The specimen upon which this species was based formed part of the late Count Keyserling's collection. This collection also contained an example of *Paraphysa manicata*, another common Chilean species, ticketed Mexico.

Citharoscelus Gossei, Pocock.

Citharoscelus Gossei, Pocock, Fitzgerald's Highest Andes, p. 359, figs. 2-2 a, b (1899).

Loc. Argentine Republic: Lujan.

Citharoscelus mollicomus (Auss.).

Eurypelma mollicomum, Ausserer, Verh. z.-b. Wien, xxv. p. 198 (1876).

The stridulating-organ consists of a thick cluster of slender bristles, forming a subquadrate pad upon the distal third of the posterior side of the coxa of the palp, and a cluster of similar bristles above and below the suture at the distal end of the coxa of the first leg.

In addition to the type specimen from Uruguay, the British Museum has examples (♂, ♀) taken between Porto Alégre and Uruguana in Rio Grande do Sul (*J. Blakesley*).

Citharoscelus Jheringii (Keyserling).

Eurypelma Jheringii, Keyserling, Brasilianische Spinnen, p. 19, pl. i. fig. 4 (1891).

Loc. Taquara, Rio Grande do Sul (*H. von Jhering*).

Citharoscelus actæon, sp. n.

♂.—*Colour.* Integument of carapace and mandibles blackish, clothed, like the legs, with short golden-brown hairs; legs thickly clothed with reddish-brown bristles; numerous

fiery-red bristles on upperside of abdomen; coxæ, sternum, and lower side of abdomen black.

Carapace about as wide as long, as long as patella and tibia of fourth leg, a little shorter than those of second, and barely exceeding protarsus and tarsus of first; fovea deep, a little recurved; ocular tubercle high, nearly round.

Eyes small, those of anterior line procurved, subequal and subequally spaced, medians about two diameters apart, posterior lateral eyes larger than the rest.

Legs 4 and 1, 2, 3; patella and tibia of first almost as long as protarsus and tarsus of first; protarsal scopula of first covering more than half the segment, of third about half, of fourth nearly one third of the segment; legs weakly spined, except the protarsi of third and fourth, one spine at the base of the protarsus on the first and second; tibiæ almost unspined. Protarsus of first leg lightly bowed. Upper tibial spur of first leg rounded at apex, with one or two spines lying along its underside; lower spur strong, directed vertically downwards, then curving forwards at the tip, which is armed above with a short spine, there is also a spine on its outer side.

Palpal organ piriform, the spine attenuate, pointed, with slight spiral curvature and strong external crest.

Stridulating-organ consisting of very many simple incrassate but apically attenuate bristles, those on the coxa of the first leg being situated below the suture.

Measurements in millimetres.—Total length 58; carapace 31; first leg 94, second leg 87, third leg 76, fourth leg 95; patella and tibia of first 36, of fourth 31; protarsus of fourth 25.

Loc. Brazil (*Mornay*). A single adult male.

Citharoscelus alticeps, sp. n.

♂.—*Colour.* A blackish-grey clothing of short hairs covering the body and limbs; the margin of the carapace, the abdomen, and limbs covered in addition with reddish-grey setæ; pale lines conspicuous on the patella, but not so noticeable on the other segments.

Carapace noticeably longer than wide, its length a shade less than that of the fourth protarsus, the width considerably less than the patella and tibia of the third leg, and less than the distance between the posterior border of the carapace and the ocular tubercle; fovea deep and wide, grooves strong.

Head very high and convex, rather wide in front; tubercle low, distinctly wider than long. *Eyes* of the anterior row

strongly procurved, the anterior edge of the medians being a little behind the centre of the laterals, nearly evenly spaced and a little unequal in size, the medians being the larger and separated from each other by a space which equals their diameter; posterior medians much smaller than the anterior medians, but not very widely separated from them, closer to the posterior laterals, which are about as large as the anterior laterals, and separated from them by a space which is quite equal to the long diameter of the latter*.

Legs long and slender, 1 and 4, 2, 3; tarsi of fourth longer than of first, patella and tibia of first considerably longer than of fourth: *protarsal scopula* of first covering three-quarters of the segment, with a pair of long spines at its base; that of the second covering two thirds, with three to five long spines at its base; that of the third covering half the segment, with many basal spines; that of the fourth covering about one fifth of the segment, which is elsewhere strongly spined: *tibiae* of all the legs and of the palpus spined; an anterior spine on the patella of first and second legs.

Spurs on the first *tibia* well developed, the upper stout, straight, cylindrical, blunt, and bearing a long sinuous spine on its underside, the lower crescentically cylindrical, curved, with a stout spine on its apex; the *protarsus* distinctly but slightly bowed at its proximal end.

The *palpal organ* piriform, terminating in a delicate hair-like process; at the base of the narrower portion the organ offers a spiral twist; there are externally two keels, the lower of which is very conspicuous.

Stridulating-organ consisting of a large cluster of fine close-set bristles clothing the distal third of the posterior surface of the coxa of the palp, and of two smaller clusters of similar close-set bristles at the distal end of the anterior surface of the coxa of the first leg, one just above and the other just below the suture.

♀ (not quite mature).—*Carapace* like that of the male, but a little wider in proportion to its length, especially the cephalic region, mandibles wider at the base; length of carapace equal to that of patella and tibia of fourth leg and exceeding the protarsus, its width exceeding the patella and tibia of the third leg. *Eyes* as in the male described.

* One male example from the same bottle, and unmistakably belonging to the same species, which has been dried, has the anterior median eyes much smaller, being smaller than the anterior lateral and separated by a space which considerably exceeds a diameter. This circumstance shows how very careful one should be in the use of ocular characters for the distinction of genera and species.

Legs 4, 1, 2, 3, the fourth exceeding the first by about half the length of its tarsus; protarsal scopulæ a little shorter on all the legs; patella and tibia of first and fourth about equal.

Measurements in millimetres.—♂. Total length 37; length of carapace 17, width 14.5; length of first leg 62, second 57, third 53, fourth 63.5; patella and tibia of first 22, of fourth 20; protarsus of fourth 17.

♀. Total length 30; carapace 15; first leg 41, second leg 38, third leg 36, fourth leg 45.

Loc. Uruguay; without further history.

Key to the foregoing species:—

- a.* Stridulating-bristles few in number, large and red distally *spatulatus*, F. Cb.
- b.* Stridulating-bristles numerous and close-set, those on the posterior side of the coxa of the palp forming a large quadrate area on its distal third.
- a*¹. Protarsus of first leg scopulate almost to base; ocular tubercle very high *mollicomus*, Auss.
- b*¹. Scopula on first protarsus not nearly extending to its base; ocular tubercle normal.
- a*². Protarsus of first leg (in male) strongly arcuate; some short stout spines on the posterior side of the coxa of the palp beneath the stridulating-bristles *Gossei*, Poc.
- b*². Protarsus of first leg (in male) less arcuate; no spines beneath the stridulating-bristles on the coxa of the palp.
- a*³. Carapace as long as protarsus of fourth leg *alticeps*, sp. n.
- b*³. Carapace longer than protarsus of fourth leg.
- a*⁴. Carapace longer than wide; protarsal scopula of first leg covering less than half the lower side of the segment; a thick cluster of stridulating-bristles above the suture on the coxa of the first leg. *Jheringii*, Keys.
- b*⁴. Carapace as wide as long; protarsal scopula of first leg covering more than half the lower side of the segment; only a few bristles above the suture on the coxa of the first leg *actæon*, sp. n.

Genus BRACHYPELMA, Sim., emend.

Brachypelma, Simon, Hist. Nat. Araign. i. p. 168 (1892).

A scopula of plumose hairs upon the anterior side of the trochanter of the first leg and on the inner side of its femur, at least in the females; also upon the posterior side of the

trochanter of the palp. Coxa of first leg clothed anteriorly with long hairs, many (? all) of which have thickened spiniform bases.

Type *B. œmilia* (White).

Also contains *Brachypelma vagans* (Auss.), *B. albiceps*, nov.* (♀ nec ♂), *B. Smithii* (F. Cambr.), and others from Mexico.

Distribution. Central America.

Genus SPHÆROBOTHRIA, Karsch.

In *Sphærobothria* (male) the femur, trochanter, and adjacent area of the coxa of the first leg and the corresponding areas on the posterior side of the coxa and trochanter of the palp are scopulate.

In the female the scopulate hairs on the first leg are much less richly developed.

Type (and only known species) *S. Hoffmanni*, Karsch.

Distribution. Guatemala, &c.

Genus PARAPHYSA, Simon.

Paraphysa, Simon, Hist. Nat. Araign. i. p. 166 (1892).

Specimens that I refer to *Paraphysa manicata*—a species which is abundant in Chili—have the anterior side of the coxa, trochanter, and base of femur of first leg uniformly clothed with long bristles, similar in form and subequal in length. Similar bristles are present upon the posterior side of the trochanter of the palp. The character of the genus taken from the small number of labial cusps has little systematic value, the number of cusps varying from seven to over thirty.

Type *P. manicata*, Sim.

Genus PHRYXOTRICHUS, Simon.

Phryxotrichus, Simon, Hist. Nat. Araign. i. p. 163 (1892).

In *P. auratus*, the only species known to me which appears to fall certainly into this genus as diagnosed by Simon, the palp and first leg are clothed with hairs, somewhat similar in form and situation to those of *Paraphysa*; but the bristles on the coxa and trochanter of the first leg are more aciculate.

* For *B. pallidum*, ♀, from Guerrero, which was doubtfully assigned by Mr. F. Cambridge to the ♂ from Chihuahua.

Phryxotrichus auratus, sp. n.

? *Phryxotrichus roseus* (Walck.), Simon, Hist. Nat. Araign. i. p. 169 (1892).

? *Orthotrichus vulpinus*, Karsch, Zeits. ges. Naturwiss. liii. p. 390 (1880).

♀.—*Colour*. Integument black or deep blackish brown and clothed with short black woolly hair; the margin of the carapace, the upper surface and sides of the abdomen, and the legs clothed with bright golden-yellow bristles; a sooty-black tarsal and protarsal stripe; the carapace, sternum, coxæ, and lower side of the abdomen black.

Carapace nearly circular, about as broad as long; the length almost equal to that of patella and tibia of fourth or of second leg, considerably less than those of first, less than protarsus and tarsus of fourth, exceeding those of first; head broad and high; ocular tubercle a little wider than long. Eyes small, those of anterior line procurved, subequally spaced, distance between the medians greater than their diameter; anterior laterals a little larger than anterior medians, posterior medians almost as large as anterior medians and smaller than posterior laterals.

Legs 1, 4, 2, 3 in length, almost without spines, the tibiæ with at most a pair of inferior apical and the protarsi (except of fourth) with one (on third leg two) at base and one at apex of scopula, the latter being not always visible, the protarsus of fourth armed in addition with four internal and one external spine. Palp with three inferior apical tibial spines; tarsus of fourth as long as of first; claws untoothed; protarsal scopulæ of first and second covering two thirds the lower side of the segment. *Labial teeth* about 6-12 (♀ ♂).

♂.—Like the female in colouring and spine-armature of legs.

Carapace as long as patella and tibia of third leg, a little longer than tibia of first, shorter than tibia and protarsus of first or fourth.

Legs 1, 4, 2, 3; tarsus of fourth slightly shorter than that of first, protarsal scopulæ of first and fourth covering about one half the segment.

Tibial spurs of first leg small, the upper cylindrical, unarmed; the lower directed nearly vertically downwards and inwards, relatively straight but bent quite at the apex, where it is tipped with a single long spine.

Palpal organ with bulb piriform and spine attenuate, apically pointed, with slight spiral twist and spirally crested.

Measurements in millimetres.—♀. Total length 33; cara-

pace 16; first leg 47, second leg 43, third leg 40, fourth leg 46.

♂ (type). Total length 35; carapace 19; first leg 67, second leg 58, third leg 53, fourth leg 61.

Loc. Chili: Santiago (*G. A. J. Rothney*, type, ♂); Valdivia (♀).

According to Simon (*Hist. Nat. Araign.* i. p. 169), *Phryxotrichus* is represented by a single species, *P. roseus*, Walck., of which *rubiginosus*, Nic., and *vulpinus*, Karsch, are synonyms; he adds, moreover, that the species is very common in Chili. Judging by the Chilian material preserved in the British Museum, the commonest species of Aviculariidae in that country is the form to which I have given the name *Citharoscelus Kochii*, on the supposition that it may be the same as the species identified by C. Koch as *Mygale rosea*, Walck. Now *Citharoscelus Kochii*, although abundant in Chili and of a beautiful pinky-red hue with silky lustre, well deserving the epithet *rosea*, does not present the characters of the genus *Phryxotrichus*, and therefore cannot be the *roseus* of Walckenaer, if we are to accept Simon's determination of the latter species. Unfortunately, Simon does not give reasons to support his determination of *rosea*, Walck. The diagnosis of *rosea* is plainly inadequate; nevertheless it states that the abdomen and carapace are covered with hairs of a delicate red with rosy lustre—a statement applicable in all particulars to the male of *Citharoscelus Kochii*. Walckenaer speaks, moreover, of the similarity in colour between the carapace and abdomen as distinctive of *rosea* as compared with his *versicolor*.

Now, since the specimens here described as *P. auratus* are in no sense of the word "rosy red" and have the carapace and abdomen dissimilarly coloured, I find it impossible to refer them to *roseus* of Walckenaer, although it is highly possible, perhaps probable, that they may prove to be specifically identical with the specimens identified by Simon as *roseus*—the specimens, in fact, from which the characters of *Phryxotrichus* were taken. Two considerations, however, militate against this view—namely, that in the female of *P. auratus* the fourth leg is shorter than the first, the tarsi of the two being equal, whereas in Simon's *P. roseus* the fourth leg is longer than the first, but has a shorter tarsus.

In many respects the very inadequate description of *Orthotrichus vulpinus*, Karsch, based on a spider from Valparaiso (*Zeits. ges. Nat.* liii. p. 390, 1880), applies to the example of *P. auratus*; but the phrase "tibia iii. deutlich bestachelt" forbids the identification of the two, although I confess to a

strong suspicion that Dr. Karsch may have made an error in the particular named*.

* Since writing these comments I have received from M. Simon his report upon the Arachnida of the 'Hamburger Magalhaensische Sammelreise,' Hamburg, 1902. On p. 5 of this work two species of Aviculariinae are enumerated under the names *Phryxotrichus chilensis*, Mol., and *Citharoscelus Kochii*, Poc.

As synonyms of the first are quoted *Mygale rosea*, Guér., *M. rosea*, C. Koch, ad part., ? *M. rubiginosa*, Nic., ? *Orthotrichus vulpinus*, Karsch, and *Phryxotrichus roseus*, Sim. Of the second, ? *M. chilensis*, Mol. (pars), ? *M. rosea*, Walck., C. Koch (saltem ad part.), *Mygale rosea*, Nic.

The following criticisms must be offered to this suggested synonymy:—

The species, whatever be its identity, that was described by Molina was named in the first instance *Mygale scrofa* (Sagg. Stor. Nat. Chili, 1782, pp. 214–215 & 347). In a later edition of the same work this name was changed to *chilensis* (op. cit. ed. 2, p. 185, 1810). But whether *M. scrofa* is assignable to *Phryxotrichus*, *Paraphysa*, or *Citharoscelus*, or to some other genus, no word in the diagnosis clearly indicates. The use of the words "bruno veluttato" and "fusco," as applied to the colour, points to a brown species like *Paraphysa manicata*, rather than to a pinkish-rosy form such as the *Mygale rosea* of Walckenaer, Guérin, and Koch. Again, the synonymy given by Simon suggests that *M. rosea*, Walck., and *M. rosea*, Guérin, were based upon species belonging to different genera, whereas Guérin's words leave no doubt whatever that the two authors described the same specimen. Nor does there appear to be any reason to think that Walckenaer and Koch had more than one specimen before them, and thus confounded more than one species under the name "*rosea*," as is suggested by Simon's insertion of the words "saltem ad part."

Comparing the figures and descriptions of *M. rosea*, given by Walckenaer, Guérin, and Koch, one can hardly help believing that these authors had examples of one and the same species in their hands; and I should have unhesitatingly adopted the name *rosea*, Walck., for the type species of the genus *Citharoscelus*, had it not been for Simon's citation as type of the genus *Phryxotrichus*, *M. rosea*, Walck., which he presumably knew, assigning to the latter characters not possessed by the type of *Citharoscelus*. However that may be, it is quite evident that the correct names of the three commonest species of "*Mygale*" inhabiting the best-known localities in Chili, namely the species I have described as *Citharoscelus Kochii*, *Phryxotrichus auratus*, and the one I determine as *Paraphysa manicata*, are still wrapped in obscurity.

To avoid future confusion, it may be well to point out that the type of *Phryxotrichus* should be the species represented by the specimen Simon determined as *Orthotrichus vulpinus* of Karsch, when he proposed *Phryxotrichus* to replace the preoccupied generic name given by Karsch (Ann. Soc. Ent. Fr. 1888, p. 222). Simon himself now admits the uncertainty of his determination. Should the two species prove to be generically, as well as specifically, separable, a second name must be substituted for *Orthotrichus*. Further, Simon subsequently cited *M. roseus*, Walck., as the type of *Phryxotrichus* (Hist. Nat. Aragn. i. p. 163, 1892), evidently supposing *vulpinus* and *roseus* to be synonyms. It appears now, from his latest contribution to the synonymy, that he is doubtful even about the generic identity of the two.

I have discussed this question at some length because it furnishes an admirable instance of the confusion that may arise from guessing at the identity of another author's species. Far better propose a new specific name than wrongly determine and describe a previously established form.

Phryxotrichus parvulus, sp. n.

Colour. Carapace black, clothed with long silky hairs; legs covered with greyish-yellow hairs; coxæ and sternum reddish brown; lower side of abdomen black.

Carapace longer than wide, its length less than that of patella and tibia of first or of fourth leg, equal to those of second. Ocular area much more compact than in *P. auratus*, about twice as wide as long, medians about a diameter apart, rather less from the laterals, which are larger and half their diameter from the posterior laterals; posterior medians a little smaller than posterior laterals.

Labium bearing about 20 teeth.

Legs 4, 1, 2, 3 in length; tibia and protarsi of third and fourth and tibia of first and second armed with many strong spines; femora also with a few spines; protarsi of first and second with an apical spine beneath, that of the second with one spine at base as well; protarsal scopulæ of first and second covering distal half of segment, protarsal scopula of fourth completely apical; protarsus of first and, in a less degree, of second arcuate; tibial spurs of first leg strong, the lower stout, directed obliquely forwards and downwards, and armed apically with two strong short spines one above the other, the upper spur armed beneath with a strong spine running along its lower side; on the outer side of the tibia at the apex above the base of the lower spur there are three long spines set close together.

Palp with tibia armed with a few spiniform setæ; palpal organ piriform, with a slender attenuate curved spine.

Measurements in millimetres.—Total length 17; carapace 8.5; first leg 24, second leg 23, third leg 20, fourth leg 28.

Loc. Chili: Valparaiso (*Colonel Hayes Sadler*, type).

Except for the small number of labial teeth the two species here referred to *Phryxotrichus* have little in common.

The two may be compared in the male sex as follows:—

- a. Carapace nearly circular, up to 19 millim. long; fourth leg much shorter than first (60:70 millim.); with the exception of numerous spines on the protarsus of the fourth, and a spine or two at the apex of the tibia and on protarsus of first, second, and third, the legs and palpi are unarmed; lower tibial spur directed vertically downwards and tipped with a long forwardly-directed spine, upper spur unarmed *auratus*.
- b. Carapace longer than wide, 8.5 millim. long; fourth leg much longer than first (28:24 millim.); legs strongly spined, with exception of protarsus of first and second which have a few spines only; lower tibial spur stout, directed obliquely forwards and armed with two short spines, the upper spur with one spine *parvulus*.

Genus PTERINOPELMA, Pocock.

Pterinopelma, Pocock, Ann. & Mag. Nat. Hist. (7) viii. p. 551 (1901).

Pterinopelma vitiosum (Keyserling).

Eurypelma vitiosa, Keyserling, Brasilianische Spinnen, p. 21, pl. i. fig. 5 (1891).

Loc. Taquara, Rio Grande do Sul (von Jhering).

Pterinopelma saltator, sp. n.

♂.—*Colour.* Hairy clothing a uniform dark brown, relieved by foxy-red bristles on the abdomen and legs and narrow pale transverse bands at the extremities of the leg-segments.

Carapace considerably longer than wide, cephalic area moderately high; its length less than tibia and half patella of fourth and more than tibia and half patella of first leg, shorter than fourth protarsus, longer than patella, tibia, and tarsus of palp, length from fovea to anterior border scarcely as long as first protarsus; eyes of anterior line subequal, close together, the medians about a radius apart.

Legs long, 4, 1, 2, 3, fourth exceeding the first by more than its tarsus; patella and tibia of first less than of fourth, tibia of first not incrassate, armed with two inner spines and five spines on the outer side, of which four are at the distal end; protarsus of first scopulate to base, with two spines projecting from the scopular hairs; protarsus of second scopulate almost to base, with numerous inferior spines; tibia and protarsus of third and fourth with many spines; protarsus of fourth scarcely scopulate apically. Tibia of first not incrassate, its upper spur cylindrical and blunt with inferior spine; lower spur cylindrical, lightly curved; protarsus of first only lightly convex above. Anterior side of coxa and trochanter of first leg clothed thickly with simple hairs; the posterior side of the trochanter of the palp with scopula of plumose hairs.

Palpi short, projecting just beyond the patella of the first leg, the tibia armed internally with about nine strong spines; bulb of palpal organ subspherical, the spine strong, blade-like, lightly sinuous, apically pointed.

♀.—Stouter than the male, with very short legs; fourth leg stout, less than three times, first leg less than twice and a half the length of the carapace, third leg about twice the length; carapace longer than broad, longer than patella and tibia of fourth, almost as long as protarsus and tarsus of

fourth; scopula on posterior side of trochanter of palp composed of simple hairs.

Measurements in millimetres.—♂ (type). Total length 32; length of carapace 15, width 12; length of head-region 9, palp 21·5, of first leg 48, of second 44, of third 42, of fourth 57·5; patella + tibia of first 16·5, of fourth 18·5; protarsus of fourth 17.

♀. Total length 41; length of carapace 17; width 14; length of head-region 10·8, of first leg 39, of second 35, third 33·5, fourth 47; patella + tibia of first 14, of fourth 16; protarsus of fourth 12.

Loc. Uruguay (type, *Keyserling Coll.* and British Museum); Soriano, Uruguay (*T. Havers*).

This species is remarkable for the length of the fourth leg in the male, and for its stoutness in the female; also for having the patella and tibia of the fourth longer than those of the first leg.

Pterinopelma tigrinum, sp. n.

♂.—*Colour.* Integument clothed with brownish hairs, with a yellowish hue on the carapace and mandibles, and a darker olive-brown on the upperside of the legs and palp, which are banded with yellowish-white stripes, three being on the femur, two on the patella and tibia, and one at the proximal end of the protarsus; in addition to these pale bands there is a narrow pale fringe at the apex of the patella, tibia, and protarsus.

Carapace with head lower than in *Cyrtopholis venatorius*, a little shorter than patella and tibia of first and fourth, a little longer than protarsus of fourth leg. *Eyes* of anterior line more scattered, the medians almost a diameter from each other and quite a diameter from the laterals.

Legs 4, 1, 2, 3; tibia of the first with five spines, the spurs a little longer than in *C. venatorius*, the protarsus not bowed, scopulate to base, spined at apex; the second leg with about six tibial spines and two internal proximal and three apical protarsal spines; tibia and protarsus of third and fourth more numerous spined; all the femora spined at apex; femur of third a little thicker than those of the other legs, its upper surface only lightly convex, its sides subparallel.

Palpus with tibia armed internally with three distal spines; palpal organ shaped somewhat as in *C. Bonhottei*, but the spine much thicker at the base, and its apex more abruptly narrowed. *Stridulating-organ* consisting of a large number of closely-packed slender plumose bristles covering nearly the whole of the area that bears them.

♀.—Like the male in colour; the carapace higher and legs shorter (*cf.* measurements).

Measurements in millimetres.—♂. Total length 30; carapace 16; width of carapace 15; length of first leg 47, second 44·5, third 41, fourth 51; patella and tibia of first 17·5, of fourth 16·5; protarsus of fourth 14·5.

♀. Total length 32; carapace 15; width of carapace 13; length of first leg 40, second 37·5, third 34, fourth 44; patella and tibia of first 15·5; protarsus of fourth 11·5.

Loc. Monte Video (*Keyserling Collection*).

Synopsis of Species of Pterinopelma.

- a. Upperside of patellæ and tibïæ with conspicuous pale yellow bands; plumose bristles on anterior side of coxa of first leg relatively coarse *tigrinum*, sp. n.
- b. Upperside of patellæ and tibïæ not conspicuously banded; plumose bristles on anterior side of trochanter of first leg relatively fine.
- a¹. Carapace much longer than protarsus of fourth leg, &c. *vitiosum*, Keys.
- b¹. Carapace a little shorter than the protarsus of fourth leg, &c. *saltator*, sp. n.

Genus HALALOPUS, Auss.

Hapalopus pictus, sp. n.

Colour. Carapace deep brown, thickly clothed with whitish-grey hairs; legs also deep brown with darker femora, also clothed with whitish hairs; abdomen pale, its upperside ornamented with about half a dozen broad black stripes, which cover most of the dorsal middle line and become narrower on the sides of the abdomen.

Carapace shorter than patella + tibia of first or of fourth leg, equal to those of second, a little longer than fourth protarsus.

Fovea slightly procurved.

Eyes of anterior line larger than those of posterior, procurved, subequal and subequally spaced, medians half a diameter apart.

Legs 4, 1, 2, 3; tarsal scopula of second, third, and fourth legs divided by a narrow band of setæ, the divisional line very narrow on tarsus of third; protarsus of first and second scopulate in distal half, of third and fourth not scopulate; tibïæ of all legs and protarsi of third and fourth with many spines; protarsus of first with two spines, one interior and one subinferior and median at base of scopula; protarsus of third with five inferior spines, three in a line at base of

scopula, and two at its apex. Tibial spurs of first sub-cylindrical, longish, the lower with a subapical superior spine, the upper with a spine lying along its lower surface. *Palp* with four inner tibial spines; palpal organ with its spines short and very robust, abruptly narrowed and pointed at the tip, with a strong spiral crest.

Measurements in millimetres.—Total length 14; carapace 6; first leg 19, second leg 18, third leg 16, fourth leg 21; patella + tibia of first 7·3, of fourth 6·5.

Loc. Caras, in Peru (*P. O. Simons*).

In the banded coloration of its abdomen this species resembles *H. formosus*, Auss. (Verh. z.-b. Wien, 1875, p. 177, pl. vi. figs. 17, 18), from Bogota, and *H. pentaloris*, Simon (F. Cambr. Biol. Centr.-Amer., Araneidea, ii. p. 31, 1897), from Guatemala, &c. It may be distinguished from both by having the keel on the palpal spine not rising into a large compressed tooth.

Genus HOMŒOMMA, Auss.

Homœomma Ausserer, Verh. z.-b. Wien, 1871, p. 210 (nec *Homœomma*, Sim.).

? *Agathostola*, Simon, Hist. Nat. Araign. i. p. 163 (1892).

In his diagnosis of the genus Simon says:—"Calcares [*sic*] tibiales maris sat graciles et subacuti, inferior longior et arcuatus; bulbus angustus, usque ad basin teretiusculus, haud carinatus, apice simpliciter tenuissimus."

As a matter of fact, the tibial spurs are almost exceptionally strong, and the spine of the palpal organ is broad, blade-like, and bent almost at right angles with a spiral twist (see figures published by Koch, Ausserer, and Cambridge). Ausserer's diagnosis may be supplemented as follows:—

The bulb of the palpal organ is furnished above with an upwardly-directed process. The protarsus of the first leg closes between the tibial spurs. There is no stridulating-organ of plumose bristles between the basal segments of the first leg and the palp, these segments being clothed with simple hairs or bristles; protarsus of third leg apically scopulate, of fourth not or scarcely scopulate.

Type. Species represented by specimens identified by Ausserer as *Eurypelma versicolor*, C. Koch.

The synonymy of the type of this genus is, I believe, as follows:—

Homœomma nigrum (Walck.).

Mygale nigra, Walckenaer, Ins. Apt. i. p. 214 (1837).

Mygale (Eurypelma) versicolor, C. Koch, Die Arachn. ix. p. 57, fig. 727 (1842) (nec *versicolor*, Walck.).

Homœomma versicolor, Ausserer, Verh. z.-b. Wien, 1871, p. 211; id. *op. cit.* 1876, pl. vii. fig. 38.

Homœomma Stradlingii, O. P.-Cambridge, Proc. Zool. Soc. 1881, p. 683, pl. lx.

Loc. Brazil: Bahia and Rio Janeiro.

A specimen of *M. nigra*, Walckenaer, preserved in the British Museum, and bearing Walckenaer's ticket, and forming part of the collection of M. Lucien Buquet, may be regarded as the type of the species. I believe it to be the female of the species described by Ausserer as *Homœomma versicolor*, and later by Cambridge as *H. Stradlingii*.

In addition to this specimen, the British Museum has three adult male examples from Brazil.

Homœomma villosum (Keyserling).

Hapalopus villosus, Keyserling, Brasilianische Spinnen, p. 7, pl. i. fig. 2 (1891).

Ischnocholus pilosus, id. *op. cit.* p. 9.

Ischnocholus nigrescens, id. *op. cit.* p. 10.

Crypsidromus perfidus, id. *op. cit.* p. 14.

Crypsidromus funestus, id. *op. cit.* p. 15.

Loc. Taquara, in Rio Grande do Sul (*Dr. v. Jhering*).

For discussion of this synonymy, see Pocock (*Ann. & Mag. Nat. Hist.* (6) xvi. p. 226).

These two species may be distinguished as follows:—

- | | |
|---|-------------------------|
| <p>a. Length of carapace 18 millim.; process on palpal bulb short and conical; protarsus of first leg strongly arcuate *, without inferior basal noduliform prominence; carapace shorter than protarsus of fourth leg; tarsal scopulæ of third and fourth legs not completely divided by a band of bristles</p> | <p><i>nigrum</i>.</p> |
| <p>b. Length of carapace 10 millim.; process on palpal bulb long, cylindrical, with expanded tip; protarsus of first leg scarcely arcuate, with distinct inferior basal prominence; carapace longer than protarsus of fourth leg; tarsal scopulæ of third and fourth legs divided by a band of setæ.</p> | <p><i>villosum</i>.</p> |

Genus METRIOPELMA, Becker.

? *Crypsidromus*, Auss. Verh. z.-b. Wien, 1871, p. 194.

Metriopelma, Becker, C. R. Soc. Ent. Belg. 1878, p. cclvi.

Crypsidromus, Simon, Hist. Nat. Araign. i. p. 143 (1892).

Miaschistopus, Pocock, Proc. Zool. Soc. 1897, p. 769.

Simon regards *Metriopelma* as a synonym of *Crypsidromus*, the type of which, namely *isabellinus*, came from Rio

* C. Koch's figure of *Mygale versicolor* represents the protarsus of this leg as straight.

Janeiro. The male of it, however, is, so far as I can ascertain, unknown, and until it has been determined that the main generic feature of the genus, namely the division of the fourth tarsal scopula, is not due to immaturity, it seems idle to discuss the genus further. Of *Metriopelma* we do know the male.

The genus *Miaschistopus*, which I was led by an error of locality into establishing, is identical with *Metriopelma*.

Metriopelma veloc, sp. n.

♂.—*Colour* deep mahogany-brown, hairy clothing brown with golden reflections.

Carapace scarcely as long as patella and tibia of third leg, a little longer than tibia of fourth, a little shorter than patella, tibia, and tarsus of palp; eyes of anterior line procurved, subequally spaced, the medians a little larger, about half a diameter apart, the posterior edge of the laterals behind the centres of the medians.

Legs long and slender, 4, 1, 2, 3; patella and tibia of first subequal to those of fourth and to protarsus of fourth; first leg with one apical spine on femur, one inferior apical spine on patella, two internal, two external, 2, 2 inferiors on the outer side, and 2, 2 at apex, protarsus armed on inner side with three spines, two in basal half, one apical, on outer side with one submedian, and beneath with three apical and two in basal half externally; second leg armed like the first, except that the protarsus is armed with five inferior spines on proximal side of scopula; third leg with two apical spines on femur, two anterior and one posterior spines on patella, tibia armed like that of first, its protarsus armed with about 21 spines; fourth leg with one femoral and one posterior spine on patella, its tibia and protarsus with more spines than on those of second leg. First leg with tibia and protarsus unmodified; third leg with femur considerably thickened; tarsal scopula of fourth completely divided, of third entire; protarsal scopula of first extending almost to base, of second leaving basal third uncovered, of third covering apical third, of fourth scanty. *Labial* and *maxillary spicules* scanty.

Palp long, extending past patella of first leg, femur and patella unspined; tibia thick, fusiform, with an external apical emargination, armed above with about twelve spines, whereof eight are apical, and beneath with one external and one internal; palpal organ with short, stout, triangular, externally carinate spine.

Measurements in millimetres.—Total length 28; carapace
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15; palp 26; first leg 59, second leg 55, third leg 49, fourth leg 65; patella and tibia of first 21; tibia of palp 9.

Loc. Ecuador: Paramba; Pambelar and Carondelet, both at an altitude of 60 feet (*Rosenberg*).

Metriopelma trinitatis, sp. n.

♂.—*Colour.* Integument deep blackish brown, clothed with yellowish-brown hair.

Carapace a little longer than patella and tibia of third leg, distinctly longer than tibia of fourth, and slightly exceeding patella, tibia, and tarsus of palp; eyes of anterior line slightly procurved, the posterior edge of the laterals behind the centres of the medians.

Legs shorter than in *M. velox*; patella of first with one internal spine and one external apical, its tibia armed with about 25 spines, placed mostly in the basal half beneath and on the inner side; protarsus with one proximal spine beneath. Tibia of second with about twelve spines, three of which are on the inner side; protarsus with three proximal spines beneath; femur of third slightly thickened. Tarsal scopula of third and fourth divided.

Palp with two spines on patella, about 23 internal spines on tibia; tibia with external distal anguliform prominence. Palpal organ piriform, the spine short, pointed, with two strong keels, its convex side forming an even curvature with the curvature of the bulb.

Measurements in millimetres.—Total length 18; length of carapace 9, width 7·8; length of palpus 12·5, of first leg 31, second 29, third 27, fourth 36·5; patella + tibia of first and of fourth and protarsus of fourth 11.

Loc. Trinidad (*Walter Ince*).

M. auronitens, Keyserling (*Brasilianische Spinnen*, p. 16, 1891, sub *Trechona*) is represented by specimens in the British Museum from Rio Grande do Sul. The species described by Keyserling (*loc. cit.*) as *Trechona pantherina* appears to me to be the female of *auronitens*, in spite of a less procurvature of the anterior line of eyes.

M. tetricum, Simon (*Ann. Soc. Ent. Fr.* 1889, p. 212), is represented in the Museum by examples from Caraccas (*Dr. Ernst*), and by examples ticketed West Africa, which served me as the types of the species upon which the genus *Miaschistopus* was based.

M. familiare, Simon (*tom. cit.* p. 211), from Caraccas is distinguishable from *M. tetricum* and *M. velox* by possessing only two or three internal apical spines on the tibia of the

palp, and in having the spine of the palpal organ slender and subfiliform.

The Museum is indebted to Dr. A. Dugès for the specimen here referred to *M. Breyeri*, Becker (Ann. Soc. Ent. Belg. xxi. p. 77, pl. ii. figs. 1-6, 1878), from Guanajuato, the original and only known locality for the species.

The males of the species of *Metriopelma* represented in the British Museum may be tabulated as follows:—

- | | |
|--|---|
| <p><i>a.</i> Eyes of anterior line strongly procurved, posterior edge of laterals far in advance of centres of medians; palpus short, not extending beyond distal end of patella of first leg</p> <p><i>b.</i> Eyes of anterior line less strongly procurved, posterior edge of laterals at most a little in advance of the centres of the medians; palp surpassing patella of first leg.</p> <p><i>a</i>¹. Palp very long, twice as long as carapace and extending as far as apex of tibia of first leg</p> <p><i>b</i>¹. Palp short, less than twice the length of carapace, and not surpassing middle of tibia of first leg.</p> <p><i>a</i>². Tibia of palp longer and thicker than patella of first leg; weakly spined internally, but spined above at apex</p> <p><i>b</i>². Tibia of palp not longer and thicker than patella of first leg; strongly spined internally, but not above at apex.</p> <p><i>a</i>³. Tibia of palp with about a dozen spines, of first leg with about fifteen spines</p> <p><i>b</i>³. Tibia of palp with about twenty-three spines, of first leg with about twenty-five spines</p> | <p><i>auronitens.</i></p> <p><i>Breyeri.</i></p> <p><i>velox.</i></p> <p><i>tetricum.</i></p> <p><i>trinitatis.</i></p> |
|--|---|

XIV.—On some Pleurodiran Chelonians from the Eocene of the Fayum, Egypt. By C. W. ANDREWS, D.Sc., F.G.S. (British Museum, Natural History).

[Plates VII. & VIII.]

In the present paper I propose to give a short account of some Pleurodiran Chelonians collected from the Middle and Upper Eocene beds in the Fayum during the last two seasons. One member of the group, *Stereogenys Cromeri*, has already been described, but from the skull only, and a description of the carapace and plastron probably belonging to that species is given below.

Stereogenys libyca, sp. n. (Pl. VII.)

One of the finest specimens collected during my expedition to the Fayum in the spring of the present year (1902) is a