

5. On some new and little-known Spiders (*Araneidea*).  
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(Plate LII.)

The four Spiders described below are from widely separated localities—Ceylon, Borneo, and South America. For two of them (of the families *Myrmecidae* and *Gasteracanthidae*) it seems to me that two new genera are needed. Of the other two the females have already been described, but the males, now described and figured, are new. The Spider on which one of the new genera is based—*Friula* (*Gasteracanthidae*)—is of exceptional interest; it was received by me many years ago from the collection of the late Mr. Wilson Saunders, with an almost illegible, and to me wholly unintelligible, little ticket attached to it, so that I neither knew the name of the captor nor the locality. Not long since I had an accidental clue to it which on being followed up resulted in these particulars being cleared up, and there is no doubt that this Spider was found at Sarawak by Dr. A. R. Wallace. It is with much pleasure that I have now conferred upon this singular form the name (so well known and valued by every biologist) of its captor.

Order ARANEIDEA.

Gen. nov. *AETIUS* (fam. *Myrmecidae*).

*Cephalothorax* much longer than broad; lateral marginal impressions at the caput slight; fore margin broadly but slightly roundly truncated. Posterior extremity rather drawn out into a somewhat tapering but truncated covering to the fore part of the connecting pedicle, which last is long, cylindrical, and corneous. Upper convexity moderate, profile slightly and uniformly curved; normal grooves and indentations very slight.

*Eyes* widely separated, in two transverse curved rows; the anterior row much the shortest and very slightly curved, the convexity of the curves of both rows directed forwards; the posterior row is double the length of the anterior and strongly curved. The four central eyes form a quadrangle broader than long, and its fore side shortest. The four laterals form a very large quadrangle whose relative proportions are similar to those of the central one, and the line formed by the laterals on each side is rather longer than that of the anterior row. The fore-central eyes are largest, the hind-laterals (apparently) the smallest.

*Legs* not very long; rather slender, not very unequal in size, 4, 2, 1, 3. Spines few and slender. Tarsal claws 2, with a small claw-tuft on a supernumerary or claw-joint.

*Palpi* short, slender; digital joints as long as, or a little longer



than, the radial and cubital together, enlarging or clavate at the fore extremity, which ends with a small untoothed claw.

*Falces* short, moderately strong, straight, subconical.

*Maxillæ* rather long, straight; broadest and rather roundly truncated at their extremity, and obliquely on the inner corners.

*Labium* broader than long; apex rounded.

*Sternum* longer than broad, its edges very strongly and distinctly emarginate, with prominent angular chitinous points running (when looked at from below) beneath the margin proper, to and between the bases of the coxæ of the third and fourth pairs of legs; a very narrow stripe, also of a similar chitinous kind, runs backwards between the posterior coxæ from the hinder point of the sternum.

*Abdomen* connected with the cephalothorax by a long cylindrical pedicle running into a strong circular socket, which forms part of a large coriaceous plate including the spiracular opening and enclosing the covering of the genital aperture. The abdomen is of an elongate or oblong-oval form, broadest and well rounded behind, and slightly constricted transversely at the middle; spinners very small, compact, and enclosed in a round sheath-like socket.

*AETIUS DECOLLATUS*, sp. n. (Plate LII. fig. 1.)

*Adult female* length 4 lines.

*Cephalothorax* black, with a short white pubescence on the sides of the thorax, and the greater part of the thorax bright yellowish red, leaving a broad, irregular, lateral black margin. The surface is covered thickly with small tuberculous granulosities.

*Legs* orange-yellow, the femora (excepting the anterior extremities, and a longish patch on the upperside of those of the fourth pair, which are reddish) being black, the genuæ and tibiæ of the fourth pair being also suffused with blackish. The femora are granulose. The spines beneath the tibiæ and metatarsi of the first and second pairs are in a longitudinal series of 3 pairs on the tibiæ and 2 pairs on the metatarsi.

*Palpi* yellow; the humeral joints suffused with blackish.

*Falces* similar in colour to the cephalothorax.

*Maxillæ* and *labium* deep brown, tipped with a paler hue.

*Sternum* dull orange-yellow.

*Abdomen* and connecting pedicle black. On either side of the fore extremity of the upperside is a short, curved, orange-red stripe, the convexity of the curves directed outwards; at the posterior extremity of each stripe is a patch of white pubescence, with a similar transverse stripe of pubescence across the middle and down the sides, and several small spots of the same behind it, in a central row to the spinners, just above which is a tuft of longish white hairs; the fore extremity also of the abdomen is clothed thinly with white pubescence, and there is a lateral slightly oblique stripe of the same halfway between the con-



striction and the spinners; immediately behind the constriction is a broad transverse band of somewhat iridescent greenish scales. The coriaceous plate connected with the sheath of the pedicle is mixed black and reddish, the sheath portion being covered with coarse granulations. The underside is deep black-brown.

*Hab.* Ceylon.

Gen. nov. FRIULA (fam. *Gasteracanthidae*).

*Cephalothorax* as broad as long, upper surface rather flattened, profile forming a gradual, very slightly convex slope from the hinder extremity to the eyes. Caput broad, squarely truncate before. Height of clypeus about one-third that of the facial space. Normal grooves and indentations fairly marked, but not excessive.

*Eyes* small, not differing much in size; in the usual three Epeirid groups, forming a transverse straight line across the whole width of the fore extremity of the caput; each group seated on a strongish tubercular prominence. The central group of 4 eyes forms a square; those of each lateral pair are near together, but not contiguous.

*Legs* short, not very strong, subequal in length, apparently 4, 1, 2, 3, furnished with hairs only, the femora of the first and second pairs granulose.

*Falces* tolerably long and strong, conical, directed backwards.

*Maxillæ* and *labium*: these were difficult to be seen, owing to the specimen having been dried and pinned and the underparts concealed by the folding over of the legs, but they appear to be much like those of *Epeira*.

*Sternum* heart-shaped.

*Abdomen* diamond-shaped, the anterior angle truncated, and the exterior ones each prolonged into a long, strong, cylindrical, granulose lateral spine-like projection, directed rather backwards, and enlarged or clavate at the extremity, which ends in a group of six or seven small conical prominences. The length of each of these spiny projections exceeds the width of the abdomen. The whole surface of the abdomen is chitinous (like *Gasteracantha*), granulose, and marked with numerous sigilliform markings, in number and position as indicated in the figure; at the centre of the upperside is a round shiny boss-like prominence; and the margins of the abdomen are furnished with short tuberculiform spines or prominences, of which the longest and most spine-like are one on each side not far in front of the long lateral projections; between the hinder extremity of the upperside of the abdomen and the spinners are several strong transverse ridges, resembling diminishing repetitions of the upperside, the intermediate spines between that and the first ridge being marked, like the upperside, with sigilliform markings. The spinners are continued in a circular sheath about the middle of the underside.



## FRIULA WALLACII, sp. n. (Plate LII. fig. 2.)

Adult female, length  $3\frac{1}{2}$  lines; length of abdomen  $2\frac{2}{3}$  lines; width of abdomen slightly less than the length; total width to extremity of the lateral projections very nearly 8 lines.

The whole of the Spider is of a dark rich reddish-yellow-brown colour, the sigilliform markings on the abdomen being a little darker than the rest. It is, however, quite possible that in life there might be other tints and colours now lost by age and desiccation.

Although an unmistakably Gasteracanthid Spider, it seems to me impossible to include this remarkable form in any genus as yet characterized.

Found by Dr. A. R. Wallace at Sarawak many years ago, and obtained from the collection of the late Mr. Wilson Saunders. It is only lately that I have been able to ascertain (from Dr. Wallace) that he was the captor of this Spider, and in the locality mentioned.

## LABDACUS, Cambr.

## LABDACUS MONASTOIDES, Cambr. (Plate LII. fig. 3.)

The female of this Spider (described and figured, P. Z. S. 1873, p. 118, pl. xii. fig. 3) was from Rio Grande, Brazil. The male now described resembles the female in general characters, colours, and markings. The length is  $5\frac{1}{2}$  lines, that of the abdomen being  $3\frac{3}{4}$  lines.

*Cephalothorax* longer than broad, oval, truncated at each end; rather flattened above; profile-line to the posterior eyes level, excepting a slight depression at the thoracic junction; height of clypeus less than half the diameter of one of the fore-central eyes; lateral marginal impressions at the caput moderate. Colour brownish yellow, with a black marginal line and dusky converging bars.

*Eyes* greatly unequal in size, in three widely separated groups, on black tubercular eminences. The lateral pairs with the hind-central pair form a transverse curved line, whose convexity is directed forwards. The hind-lateral eye is the largest and seated on the outside of a strong hemispherical prominence, at nearly an eye's diameter from the fore-lateral, which is the smallest and placed in front of the same eminence; the hind-centrals are nearly, if not quite, as large as the hind-laterals, they are rather more than a diameter's distance apart. The four centrals form a quadrilateral figure, whose length is greater than its breadth, and its anterior side much the shortest.

*Legs* long, moderately strong, 1, 2, 4, 3; colour yellow; armed with spines, of which those beneath the tibiæ and metatarsi of the first and second pairs are long, strong, and placed in a longitudinal series of 8 or 9 pairs beneath the tibiæ, and 7 or 8 beneath the metatarsi; tarsal claws 3, springing from a small claw-joint.



The superior claws are strongly pectinate, the inferior sharply bent downwards.

The *palpi* are short, strong, similar in colour to the legs, furnished with spiny bristles, mostly at the fore part of the digital joint: the cubital and radial joints are very short; the latter rather the shortest, very prominent beneath, being produced there into a kind of apophysis from the whole underside of the joint, whose extremity is subdivided, its outer limb being the longest. The digital joint is of moderate size, rounded at its hinder extremity, and rather drawn out in a somewhat finger-like form before, and has a somewhat flat but round edged lobe at the base on the inner side. The palpal organs beneath the hinder part of the digital joint are prominent, complex, but tolerably compact.

*Falces* long, strong, straight, porrected, with several strongish teeth on each side of the groove of the fang.

*Maxillæ* long, strong, straight, rather broadest near the extremity, which is rounded on the outer and obliquely truncated on the inner side, with some strong, curved, prominent bristles along the outer sides.

*Labium* much longer than broad, at least two-thirds the length of the maxillæ. Apex slightly hollow-truncate.

*Sternum* somewhat elongate-oval; the anterior extremity is truncated but not broadly, and the posterior half has its sides straight, but converging to an angular point between the inner corners of the coxæ of the fourth pair of legs, which very nearly meet there.

*Abdomen* long, narrow, nearly cylindric, slightly tapering to the spinners, which are small and porrected. Colour dull luteous, with a small elongate fusiform marking at the middle of the fore part on the upperside, indicated by a dark marginal line and a prominent point on each side, whence it tapers to a point at the extremity; between the extremity of this marking and the spinners is a blackish somewhat angular spot, and along each are a few smaller dark spots.

*Hab.* Amazons, where it was taken by Prof. Traill, of Aberdeen, and included among many other Spiders kindly sent to me from that region.

#### STEPHANOPOIDES, Keyserling.

STEPHANOPOIDES BRASILIANA, Keys. (Plate LII. fig. 4.)

Count Keyserling, in 'Die Spinnen Amerikas,' Laterigradæ, 1880, p. 167, pl. iii. fig. 92, describes and figures the female only, from Brazil.

Adult male, length  $3\frac{1}{2}$  lines.

*Cephalothorax* as broad as long; lateral marginal indentations at the caput strong, sides of caput at the margin parallel, fore margin truncated, profile-line strongly curved, most convex at the occiput; surface smooth and polished, normal indentations slight; colour deep rich brown.



*Eyes* unequal in size ; in two curved rows, the convexity of the curves directed forwards, the anterior row much shortest, but more strongly curved. The fore-laterals are largest ; the hind-centrals perhaps slightly the smallest. The four central eyes form a quadrangle longer than broad, and its fore side slightly longer than the hinder one. The lateral pairs are seated on a strong geminated tubercular prominence, and the interval between those of each pair is equal to the diameter of the fore-lateral eye. The interval between the hind-centrals is equal to  $1\frac{1}{2}$  diameters, and each is about 3 diameters from the hind-lateral on its side. The height of the clypeus is less than one-third that of the facial space.

*Legs* very unequal in length, 2-1, 4-3, those of the first and second pairs almost equal and much the longest ; spines not numerous nor very long nor strong ; the fore half of the tibiæ, as well as the metatarsi, of the first and second pairs are densely clothed with prominent black hairs, giving them a strongly tufted appearance. Colour of the first two pairs brown, paler than the cephalothorax, the tarsi and a central annulus on the tibiæ yellow ; the third and fourth pairs also yellow ; the tarsi end with numerous bristly hairs and a claw-tuft.

*Falces* moderately strong, conical, vertical, and similar in colour to the cephalothorax ; at their extremity on the inner side they are densely furnished with strong hairs.

*Palpi* short, strong ; cubital and radial joints short and of equal length, the latter broader at the fore extremity than at the base, but with no apophysis, its anterior side is furnished with spine-like bristles ; the digital joint is of moderate size and regular oval form, pointed before, clothed with short strong hairs ; the palpal organs are simple and not very prominent, consisting of a flattened round lobe surrounded by the almost double coil of a long black-brown tapering spine, beginning at the base and ending at the anterior extremity in a fine point.

*Maxillæ* long, strong, a little inclined to the labium, outer margin hollow, broadest at the extremity, where the outer side is obliquely truncated and the inner rounded.

*Labium* large, higher than wide, about two-thirds the height of the maxillæ, narrowing gradually to the apex, which is truncated and about half the width of the base ; the sides of the labium are slightly convexly curved. The colour of the maxillæ and labium is yellow-brown.

The *sternum* is heart-shaped, yellow-brown, darker on the margins ; it is slightly longer than broad, hollow, truncate at its fore extremity and obtusely truncate at its hinder part. The coxæ of the fourth pair of legs very nearly meet at their hinder extremity, which is rounded on the inner side.

*Abdomen* broadest towards the hinder part, where it is of a somewhat rounded angular form, truncated before, pointed behind, upperside somewhat flattened ; it is of a luteous colour ; on the centre of the upperside are four red-brown spots forming a quadrangle, whose length is greater than its breadth and its



anterior side shortest, the posterior spots are largest; the fore half is bounded by a broadish lateral band of cream-colour, and from the inner extremities of the band a curved narrow tapering stripe of the same hue runs inwards and backwards, but their points do not meet; following this towards the spinners is a curved transverse cream-coloured stripe, being only linear in the middle, close behind which again is a short curved transverse cream line connecting the bases of two triangular patches of the same hue; spinners short, compact, underside dusky, margined with a cream-coloured suffused border. Colulus short, triangular.

Received from Prof. Traill; taken on the Amazons.

#### EXPLANATION OF PLATE LII.

- Fig. 1. *Actius decollatus*, ♀ (p. 1007). 1 *a.* Profile. 1 *b.* Eyes from above and behind. 1 *c.* Maxillæ, labium, and sternum. 1 *d.* Sternum, showing more clearly posterior elongation and angular points. 1 *e.* Genital aperture.
2. *Friula wallacii*, ♀ (p. 1009). 2 *a.* Profile. 2 *b.* Abdomen from behind. 2 *c.* Maxillæ, labium, and sternum. 2 *d.* Lines showing natural length and width of Spider.
3. *Labdacus monastoides*, ♂ (p. 1009). 3 *a.* Eyes. 3 *b.* Palpus. 3 *c.* Portion of palpus. 3 *d.* Labium and fore part of sternum.
4. *Stephanopoides brasiliana*, ♂ (p. 1010). 4 *a.* Eyes from above and behind. 4 *b.* Palpus.

#### 6. On the Genera of Rodents: an Attempt to bring up to Date the current Arrangement of the Order. By OLDFIELD THOMAS, F.Z.S.

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Just over twenty years ago, in 1876<sup>1</sup>, Mr. E. R. Alston contributed to this Society his invaluable paper "On the Classification of the Order Glires," a paper which in its broad outlines has formed the basis for almost every Museum Catalogue, compiler's list, and general text-book that has been written since it appeared. Based as it was on the earlier works of Waterhouse, Gervais, Brandt, and Lilljeborg, Alston's arrangement has in this way received almost universal sanction, and the present writer is far from wishing to alter the essential characteristics of the scheme.

But, owing partly to Alston's not having seen examples of many of the genera included, and partly to the great increase in the number of known forms that has taken place since he wrote, his paper has gradually become somewhat obsolete in its detailed arrangement of the subfamilies and genera, however correct his positions for the suborders and families may still be considered to be.

<sup>1</sup> P. Z. S. 1876, p. 61.







