

## 21. STREPSILAS INTERPRES.

Two specimens (nos. 500, 501, males) were obtained on the main island. "Stomachs had pieces of shell," &c.—*J. M.*

## 22. NUMENIUS UROPYGIALIS, Gould.

One skin (483), "female."

## 23. TOTANUS INCANUS, Gm.

*Actitis incana*, Finsch et Hartl. Orn. Central-Polyn. p. 182.

One example (502), "female: eyes brown, legs green, bill dark."—*J. M.*

## 24. TRINGOIDES HYPOLEUCOS (Linn.).

One specimen, a female, no. 503 of MS. Cat.

## 25. ANOUS STOLIDUS (Linn.).

A female (no. 485): "eyes black.

"This Tern was most abundant here, and could always be seen in immense numbers, feeding on the shoals of fishes."—*J. M.*

## 26. ANOUS MELANOGENYS, Gray; Saunders, P. Z. S. 1876, p. 670.

One "female" (no. 485): "eyes black." Mr. Howard Saunders has kindly determined the *Laridæ* for me.

## 27. STERNA BEBGII, Licht.

One skin (no. 486): "eyes black."

4. On some new Species of Araneidea, with Characters of two new Genera, and some Remarks on the Families Podophthalmides and Dinopides. By the REV. O. P. CAMBRIDGE, M.A., C.M.Z.S., &c.

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(Plates LVI. & LVII.)

The twelve Spiders included in the following descriptions belong to six widely separated families, and are inhabitants of localities very distant from each other, comprising Australia, India, Ceylon, the west coast of Africa, the island of Samoa, and Brazil.

Of the first family (Gasteracanthides) there are three species, which I have, for the present at least, included in the genus *Cyrtarachne*, Thor., though two of them, one from the river Coanza, and the other from Rockhampton, are very abnormal species, and may perhaps eventually form the types of one, if not of two new genera.

In the next family (Cryptothelides) the Spider described is from Ceylon,—*Cryptothele ceylonica*; it is remarkable, not only from its own special and very peculiar characters, but because it is as yet



only the second species known, either of the genus or family, which were lately founded by Dr. Ludwig Koch upon an Australian Spider. The present species is thus another instance of a Spider peculiar (so far as our present knowledge goes) to Ceylon and Australia. Previous instances have been furnished in the genera *Amycle* and *Miagrammopes*.

Of the third family (Eripides) little is known. Two species only besides the present, have been described; and all of them are from Brazil, the present being the first recorded example of the male sex. The close affinity between the Eripides and Stephanopides has not yet received sufficient attention. The latter family is (as at present known) exclusively from Australia and New Zealand, while the former is South-American.

The family Podophthalmides, which is the next contained in this paper, is one of which one (West-African) species only has before been named. Dr. Ludwig Koch, indeed, describes a second species from the river Anseba, E. Africa; but, being doubtful as to its distinctness, he has given it no name. The genus *Podophthalma* (Cappello) is an instance of the difficulty, in some cases, of assigning a systematic place to a Spider. Dr. L. Koch, 'Ægyptische und Abyssinische Arachniden,' p. 36, would place this genus in the family Agelenides; M. Simon thinks that it belongs, "without any doubt whatever," to the family Oxyopides, while to myself it appears necessary to constitute the type species (with those here described) and the genus *Ocyale* (Sav.) a distinct family next to the Lycosides. That there is some affinity with the Agelenides, I have myself observed (see *infra*, p. 566, the remarks there made having been written before those of Dr. L. Koch had come under my notice).

Of the five species of *Podophthalma* described below, one is from East-Central India, another from the river Coanza, two from Madagascar, and one from Brazil. Two of these, *P. incerta* and *P. diversa*, undoubtedly show characters which give some support to Dr. L. Koch's view of their systematic position; and these may perhaps have to be separated under another generic appellation, and be removed to the Agelenides; but how far the typical species of *Podophthalma* would necessarily follow them, should they be so removed, is not so clear to me at present.

The fifth family, Dinopides, including the genus *Avella* described below, contains now three genera and is an exceedingly remarkable group; and I confess that its systematic position is, as yet, a puzzle to me. Walckenaer, as well as Macleay, who founded it, placed *Dinopis* in the family Lycosides, between which and the Salticids I have at present left it, though that place will probably not long retain it. I cannot, however, agree with Dr. L. Koch, who places *Dinopis* in the family Eresides (*vide infra*, p. 573); I would rather suggest that its place is nearer to the Agelenides, though in the absence of any knowledge of its habits it is impossible to speak with certainty upon this point.

The new Salticid genus *Athamas*, the last Spider here described,



adds another to the numerous generic, or subgeneric, forms of the genus *Salticus*, Latreille. It has a close affinity to *Lyssomanes*, Hentz; but its differences from that, as well as from another allied genus, *Jelskia*, Tacz., appear to me to warrant its being made the type of a separate group.

Fam. GASTERACANTHIDES.

Gen. CYRTARACHNE, Thor.

CYRTARACHNE LONGIPES, sp. n. (Plate LVI. fig. 1.)

Adult female, length nearly 7 lines.

It is with great hesitation that I include the present West-African Spider in the genus *Cyrtarachne*, differing, as it does, from the typical species in the greater length and slenderness of the first and second pairs of legs, as well as in the higher eye-eminences. The form, however, of the maxillæ and labium is similar; and as the three long and remarkable spines on the cephalothorax are represented in some (if not in all) of the typical Australian species of *Cyrtarachne*, I have thought it best to place it provisionally with them until perhaps other species from West Africa may prove it to belong to a group specially characterized by the peculiarities noted, and so to require a separate genus for their reception.

The *cephalothorax* of this Spider is broad and rounded behind, much narrower in front, and strongly constricted laterally at the caput. The occipital region is gibbous and has three long, strong, pointed, tapering, nearly erect spines in a line along the middle. These spines are almost straight, but rather divergent; the central one is the longest, and the anterior the shortest. Its colour is yellow strongly tinged with brownish orange on the caput, and covered with a fine, silky, whitish pubescence. The three spines are also similarly clothed; and their basal portion is similar to the caput in colour, their upper part being of a deep blackish red-brown.

The *eyes* are very small, and of an amber-colour; they are seated on three strong, somewhat tuberculiform eminences placed in a transverse line at the fore part of the caput. The central eminence (which is much the largest and highest) has four eyes near its summit, in the form of a quadrangle, whose transverse is rather longer than its longitudinal diameter; the two posterior eyes of these four are the largest of the eight. The eyes of each lateral pair are placed contiguous to each other near the upper extremity, on the outer sides of the lateral eminences.

The *legs* are rather slender, and differ considerably in length; those of the first pair are much the longest; next to them are those of the second pair; and the third pair are a good deal the shortest. They are of a dull yellow colour, the femora tinged with orange, and (excepting these joints) unequally annulated with dull reddish brown; they are also furnished with numerous long, prominent, fine, silky, whitish hairs, but no spines; and each tarsus terminates with three rather sharply bent claws, the two superior ones pectinated at their base. The tibiæ are gradually enlarged at their anterior extremities.



The *palpi* are short, and similar to the legs in colour and clothing.

The *falces* are tolerably long and strong, subconical, straight, perpendicular, and of a yellow-brown colour.

The *maxillæ* are moderate in size and strength, broad and rather rounded at their extremities, much bent downwards and backwards, and inclined towards the labium. They are of a rather orange yellow-brown colour, the extremities being pale yellow.

The *labium* is small, short, and of a semicircular form; its colour is yellow-brown, and the apex pale yellow.

The *sternum* is heart-shaped, hollowed at its fore extremity, and of a pale orange yellow-brown colour.

The *abdomen* is large, very convex above, of a short broad heart-shape when seen from above, and hollowed at the middle of its fore extremity on the upperside. Its cuticle is of a semicorneous nature; and besides numerous blunt, conical, various-sized, but smaller tubercles (principally on the sides and hinder part), there is a large, circular, shining, glossy one on each of the fore corners (or rather shoulders) of the abdomen. These large round tubercles are of a yellow-brown colour, rather brighter in hue than the rest of the abdomen, the underside of the latter being the palest.

The tubercles on the sides and hinder part are symmetrically placed; and four form a curved transverse line with the two large circular ones. On the middle of the upperside are six, not very large, round, sigilliform spots or markings, in two longitudinal lines of three each. The sides and underside have numerous, small, somewhat similar, impressed spots, connected with each other by pale brown venose streaks. The whole of the abdomen, excepting the two circular tubercles, is dotted with fine silky hairs; those at the extremities of the conical tubercles form a tuft, apparently connected for a little distance from their bases and then spreading out in all directions, giving the abdomen a very peculiar and characteristic appearance. The spinners are short, tolerably strong, and two-jointed, those of the inferior pair being much the strongest. The genital aperture is very small and inconspicuous.

A single example of this very remarkable Spider was received from the banks of the river Coanza, in West Africa, where it was found in 1873 by Mr. Henry Rogers, of Freshwater, Isle of Wight.

CYRTARACHNE FURCATA, sp. n. (Plate LVI. fig. 2.)

Adult female, length 6 lines.

Length of the example described (an immature female) nearly  $4\frac{1}{2}$  lines.

The *cephalothorax* of this Spider resembles that of *C. longipes* in the elevated prominences on which the central and two lateral pairs of eyes are traced, but differs in the much more prominent clypeus. There is also on the occiput a strong, furcate, somewhat spiniform eminence, the height of which is a little greater than that of the central ocular eminence; the prongs of this occipital eminence are blunt-pointed, and range in a line with the central ocular one; also in a line between the occipital one and each of those bearing



the lateral pairs of eyes is another, shorter, erect, rather slender, blunt-pointed, somewhat nipple-like eminence. The lower fore corners of the clypeus are prominent. The colour of the cephalothorax is pale whitish straw-colour, marked and clouded in a somewhat radiated form, on the sides, with brownish yellow; it is clothed with longish, pale, slender hairs; and from the middle of the summit of the central ocular eminence issue two longish, black, curved and almost contiguous black bristles.

The *eyes* are small; those of the central group (four in number) form a square on the front of the upper extremity of the middle eminence; those of each lateral pair are contiguous to each other on the outer side of the summit of the lateral eminences, and are widely removed from the middle group.

The *legs* are neither very long nor strong; those of the first and second pairs differ but little in length, though perhaps the second pair are slightly the longest, and the third pair are the shortest. They are of a straw-yellow colour, semiannulated with brown, and clothed with longish fine hairs.

The *palpi* are similar in colour to the legs, and have a single curved pectinated claw at their extremity.

The *falces* are moderately long and strong, perpendicular, and similar in colour to the palpi.

The *maxillæ* and *labium* are like those of *A. trispinosa* in form, and are similar to the legs in colour.

The *sternum* is of a somewhat triangular shape; it is of a yellowish colour, clouded with brownish in the middle, and marked with a black spot opposite to the basal joints of the second, third, and fourth pairs of legs.

The *abdomen* is large, very short, subtriangular, or somewhat heart-shaped, extremely convex above, and projects considerably over the base of the cephalothorax. On the upperside are some not very large, bluntish, conical protuberances; two of them are in a straight transverse line, wide apart towards the fore margins; the rest, eight in number, are arranged in a somewhat circular group at the posterior extremity. The upperside is of a dull sooty hue, mapped out into rather roundish-angled patches of various forms and sizes, which are divided from each other by clear and intersecting straw-yellow stripes; most of these patches have a central blackish spot on the fore part; and from each of the three immediately in front of each of the two foremost conical protuberances rises a long, erect, somewhat lanceolate black bristle, there being also several others of the same kind on the sides and hinder part; the patches above described are almost obsolete on the middle and hinder part of the upperside, which are then of a plain straw-yellow colour. The underside is suffused with yellow-brown; the hinder slope (*i. e.* the part between the protuberances at the hinder extremity and the spinners) and sides are streaked vertically with pale yellow-brown lines.

An adult female of this Spider was received from Paramatta (Australia), where it was found by Mr. Barlow, and sent to me by my kind friend Mr. Frederick Bond several years ago. I have also very



lately received an immature female from Rockhampton, N. S. W., through Mr. E. Janson.

*CYRTARACHNE HOBSONI*, sp. n. (Plate LVI. fig. 3.)

Adult female, length  $5\frac{1}{4}$  lines.

The *cephalothorax* of this Spider is of the same general form as that of *C. longipes*; but the prominence on which the four central eyes are placed is much less projecting, and the spines are much shorter; besides the three in the central longitudinal line (of which the middle one is much the longest and strongest, the other two being very short), there are two or three other short ones on each side in an oblique line, between the long central spine and the lateral eyes. The colour of the cephalothorax is dark yellowish brown, thinly clothed with hairs, and rather paler on the fore part of the caput.

The *eyes* of the central group form a square, those of the posterior pair being rather larger than the anterior ones; those of each lateral pair are close together on a prominence, and very small, but widely removed from the central group.

The *legs* are short and rather slender; there is very little, if any, difference in length between those of the first and second pairs, those of the third pair being the shortest; they are of a brownish yellow colour, annulated, but not very distinctly, with darker yellow-brown; the femora are palest, but most distinctly annulated; the legs are destitute of spines, being furnished with hairs only.

The *palpi* are short, slender, and similar to the legs in colours and armature.

The *falces* are moderately long and strong, and perpendicular, and of a dark yellow-brown colour.

The *maxillæ* and *labium* exactly resemble those of *A. trispinosa* in form, and are of the same colour as the falces.

The *sternum* is of a triangular form, its fore side hollowed, and its colour yellow-brown.

The *abdomen* is of great size, of a corneous nature, and appears to overwhelm the cephalothorax; it is of a short heart-shape, its shoulder-portions, as well as the posterior extremity, being large, prominent and rounded, and, together with the sides, studded with round, raised, dark red-brown bosses or protuberances of various sizes; the two largest of these are placed one on each of the summits of the shoulder-portions; the three next in size form a triangle on the hinder portion; the sides are deeply rugulose; the ground-colour of the upperside is a lightish yellow-brown; in the hollow centre of the fore side is a large, yellow, somewhat irregularly formed patch, with an irregular black marking on each shoulder-part, and two other longer ones, one on each side, near the hinder portion. The underside is darker than the upper, its lateral portions marked strongly but irregularly with connected brown streaks.

The example from which the above description has been made was received from Bombay, where it was found, and kindly sent to me, by Major Julian Hobson. Three other examples, similar to the one



described, excepting in being much smaller, have more recently been sent to me from Ceylon by Mr. G. H. K. Thwaites.

Fam. CRYPTOTHELIDES.

Gen. CRYPTOTHELE, L. Koch.

CRYPTOTHELE CEYLONICA, sp. n. (Plate LVI. fig. 4.)

Adult female, length  $1\frac{3}{4}$  line.

*Cephalothorax* oval behind, but constricted laterally at the caput; it is generally flattened, and its sides much depressed; its upper surface is roughened and clothed with coarse bent bristles and hairs; these are mainly disposed in two curved lines along the middle, enclosing the thoracic junction in an elongated oval figure. The colour of the cephalothorax is a uniform yellowish brown; and the height of the clypeus (which retreats considerably) is just equal to the length of the falces.

The *eyes* are seated on black spots in three transverse rows—2, 2, 4, at the slightly produced upper extremity of the caput. Those of the foremost row are of tolerable size and the largest of the eight; these are separated by an interval of an eye's diameter; those of the middle row are next in size, and are contiguous to each other; this row is separated from the first by about the diameter of one of the eyes of the foremost row. The hinder row is curved, the convexity of the curve directed backwards; its eyes (four in number) are of about equal size, but much smaller than the rest; those of the central pair of this row are separated by an interval of an eye's diameter, and form a line scarcely differing in length from that of the middle row; the hind laterals are each separated from the hind central next to it by an interval of about double the length of that which divides the central pair from each other, and equal to that which separates these last from those of the middle row.

The *legs* are short, strong, and differ but little in length; those of the fourth pair are slightly the longest; and the difference between those of the second and third pairs is very little, the third pair being perhaps the shortest. They are similar to the cephalothorax in colour; and the several joints (at least the tibiæ, genua, and femora) are of a gouty or somewhat nodose form, and furnished with coarse tuberculose spines, curved spine-like bristles of uniform thickness throughout their length, and hairs; each tarsus ends with three claws. Some portions of the legs appeared to be darker than the rest; but this was caused, I think, by extraneous matter clogged up among the bristles.

The *palpi* are short, similar to the legs in colour, and furnished with short, coarse bristles and hairs.

The *falces* are short, not very strong, subconical, considerably directed backwards, and a little paler in colour than the cephalothorax.

The *maxillæ* are short, and rather weak, slightly curved, and much inclined towards the labium, over which they fit closely, with their extremities almost meeting; their colour is like that of the falces.



The *labium* is similar in colour to the maxillæ; and is of a somewhat subtriangular form, rounded at the apex; it is large in comparison with the size of the maxillæ, its apex reaching very nearly to their extremities.

The *sternum* is large, heart-shaped, truncated at its anterior extremity, of a yellowish colour, and clothed thinly with coarse hairs.

The *abdomen* is short, broadest and rounded at its hinder extremity. This part is prolonged into a kind of flap which bends downwards and underneath, so as totally to conceal the spinners, whose number and form consequently could not be discerned. According to Dr. L. Koch (*Die Arachn. Austr.*) the spinners of this genus are two in number. The colour of the abdomen is of a darker hue than the cephalothorax; its whole surface is rugulose and clothed with coarse, bent, spiny bristles and hairs. The example described was much disfigured by extraneous substances, dirt and dust, accumulated and retained by its peculiar curved bristly armature.

A single example of this remarkable Spider was received some time since from Ceylon, where it was found, and kindly forwarded to me among many other Spiders, by Mr. G. H. K. Thwaites.

The type of this genus is Australian; and its close affinity to *Stephanopsis* (Cambr.) is very evident. The discovery of a second species, so nearly allied to the Australian one, gives another proof of a similarity between the Ceylon and Australian Arachnids. Two other forms common to these two regions are the remarkable genera *Amycle*, Cambr., and *Miagrammopes*, id. Although nearly allied to *Cryptothele verrucosa*, L. Koch, the present Spider may be easily distinguished by a great difference in the relative size and position of the eyes.

#### Fam. ERIPIDES.

#### Gen. ERIPUS, Walck.

#### ERIPUS QUINQUEGIBBOSUS, sp. n. (Plate LVI. fig. 5.)

The *cephalothorax* is broad and round behind, and much constricted laterally at the caput; this latter part is elevated at its fore part into two considerable conical divergent eminences, and has a third eminence of a rather stronger and blunter form at the occiput. The surface of the cephalothorax is granulose; the caput is of a reddish orange-yellow brown, suffused more or less on the sides with dark red-brown, in which colour it joins with the line of the thoracic region; the summit of the occipital eminence, as well as a stripe running from it forwards, is bright yellow; and the facies has three dark-brown perpendicular streaks; the outer ones are somewhat sinuous, the middle one straight; the three eminences are furnished with short bristly hairs.

The *eyes* are in three transverse rows, 2, 2, 4; the lower or foremost row is the shortest; and the hinder one is curved, the convexity of the curve being directed backwards. Those of the first row are amber-coloured, and divided by rather over two diameters' interval; those of the next row are larger, and are placed in front of the base of the two conical eminences on the caput, being separated by an



interval of double the extent of that between the eyes of the first row, and their colour is black, with a narrow orange margin; the laterals of the hinder row are placed rather behind, and near the summit of the eminence, and are divided from those of the second row by an interval equal to that between the second and first rows; the two centrals of the hinder row are seated behind the bases of the eminences, and are considerably further apart than each is from the lateral, of the same row, on its side.

The lateral eyes of the three rows form on each side a very nearly straight line; and its length is rather greater than the height of the clypeus.

The *legs* are strong; those of the first and second pairs are much the longest, the difference in their length being very slight; the first are perhaps a little the longest, and the third pair shortest. They are of a yellow colour, clouded with orange and brown in parts, and the two basal joints are bright red-brown. The femora, tibiæ, and metatarsi of the first two pairs are furnished with spines; those on the femora are in front; those on the other two joints are underneath. Each tarsus terminates with two curved claws, furnished beneath the basal portion with, apparently, no more than 1-3 denticulations.

The *palpi* are short and rather strong; the radial joint is shorter than the cubital, but less stout, and has its fore extremity on the outer side produced into a furcate projection; the upper prong forms a short, curved, pointed, claw-like apophysis; the under one adheres close to the outer side of the digital joint, and is of a flattened form, pointed at the end, and much longer and larger than the upper prong; the digital joint is large, of a broad oval form, of a brownish yellow colour, the rest of the palpus being yellow; the palpal organs are simple in structure, and apparently inscribed by a filiform spine.

The *falces* are short, strong, subconical, perpendicular, and of a deep yellowish-red colour.

The *maxillæ* are moderate in length and strength, straight, but rather inclined towards the labium, and a little the broadest at their extremities, their colour being reddish yellow-brown, palest at the extremities.

The *labium* is of the same colour as the maxillæ; its breadth and height are about equal; but its base is broader than its apex, which is rounded.

The *sternum* is heart-shaped, of an orange-yellow colour, margined with dark red-brown.

The *abdomen* is broadest and most convex at the hinder extremity; the hinder part, sides, and underside are rugulose; and the whole surface is covered with small, red-brown, shining tubercles; on the upperside are two long, slightly tapering, strongly divergent prominences; and at the middle of the upper part of the hinder extremity is another, shorter and more sharply pointed; a little lower down on each side of the hinder extremity is another still shorter, or simply conical eminence: the upperside of the abdomen, including the eminences, is of an orange-yellow colour; the two anterior eminences have each two longitudinal red-brown stripes, the foremost of which



reaches to the fore margin of the abdomen; each of the other eminences has a single, less distinct, stripe of a similar colour; and on the fore half of the upperside of the abdomen is a central longitudinally brown marking which is produced at its hinder end until it meets the stripe on the third eminence; four red-brown impressed spots form a square (whose fore side is the shortest) about the middle of the upperside. The sides and underparts are yellow-brown; the spinners are short, compact, and encircled at their base by a yellow-brown corneous-looking fillet or rim. A large round area at the fore part of the underside, including the spiracular plates and the junctional pedicle, are of a coriaceous texture and bright red-brown colour.

A single example of this distinct and remarkable Spider was contained in a collection made for me in Minas Geraes in 1871, by Mr. Henry Rogers. So far as I know, this is the first male of the genus yet described. The genus, indeed, which is closely allied to *Stephanopis* (Cambr.), consists at present of but three species, *E. heterogaster*, Latr., *E. spinipes*, Bl., and *E. quinquegibbosa*, all being found in Brazil. The present species cannot be confounded with either of the other two, not only differing in the number of the abdominal prominences, but in their form and colour also: these prominences are three in *E. spinipes*, five in *E. quinquegibbosa*, and seven in *E. heterogaster*, the last being also of a large size, while the other two are quite small.

#### Fam. PODOPHTHALMIDES.

##### Gen. PODOPHTHALMA, Capello.

The examination of the examples described below long ago convinced me that the genus *Podophthalma* is closely allied to *Ocyale*. This is contrary to the conclusion lately arrived at by M. Simon (Bull. Soc. Zool. de France, 1876, séance du 7 Juillet), who considers *Podophthalma* to belong to the family Oxyopides. The form of the cephalothorax and maxillæ, as well as the position of the eyes, are totally different from those of *Oxyopes*; there is, however, perhaps some affinity between them; at any rate there is a certain resemblance in the general form of *Podophthalma* and *Oxyopes*; but even in this respect the resemblance between the former and *Ocyale* is still more close, while in the form of the cephalothorax there is a very striking similarity; and if in *Ocyale* the lateral eyes of the anterior row were separated a little more from each other, and seated at the prominent fore corners of the clypeus, this would make the eye-position exceedingly like that of *Podophthalma*. The species of *Ocyale* used to be placed in the genus *Dolomedes*. All arachnologists, I believe, now separate them from the latter genus, while still retaining them, next to it, in the family Lycosides. I have myself long since felt the necessity for constituting a family Podophthalmides for *Podophthalma* and one or two other (as I then conceived) allied genera, forming a passage from the Thomisides to the Lycosides through *Ocyale*. I have recently found reason to doubt the family affinity between



*Podophthalma* and those others which I had imagined formerly to be allied genera, viz. *Labdacus*, Cambr., and *Triclaria*, C. Koch. I would now suggest that *Ocyale* should be joined with *Podophthalma* to form a family, Podophthalmides, which might be placed between the Lycosides and Sphasides, and followed by the family Salticides; or perhaps a yet more natural arrangement would be, still to place the Podophthalmides, as I have hitherto done, between the Thomisides and Lycosides. In this case *Triclaria* and *Labdacus* would form a transition from the Thomisides to the Podophthalmides, and the latter, although followed immediately by the Oxyopides, would lead unmistakably to the Lycosides through *Ocyale*. The Oxyopides would, indeed, thus intervene between *Ocyale* and *Dolomedes*; but of course this kind of discrepancy cannot be always avoided in a linear arrangement.

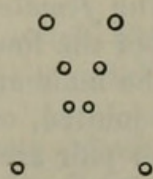
In any case *Triclaria* and *Labdacus*, both of which have three terminal tarsal claws, must be separated from the Thomisides, and should form a family (Triclarides) between them and the Podophthalmides. The arrangement would thus be THOMISIDES, TRICLARIDES, PODOPHTHALMIDES, OXYOPIDES, LYCOSIDES, SALTICIDES.

*PODOPHTHALMA ELLIOTI*, sp. n. (Plate LVII. fig. 6.)

Adult male, length very nearly 9 lines,

The *cephalothorax* of this fine species is oval, much flattened above, and the fore part of the caput, especially the clypeal portion, considerably produced; at each corner of this part there is a strong, somewhat cylindrical, rather elongated, tubercular prominence, beneath the fore extremity of which is one of the fore lateral eyes. The colour of the cephalothorax is yellow-brown, with a broadish paler margin and central band; and it is pretty densely clothed with coarse greyish-white pubescence, almost entirely concealing the real colour of the surface. The longitudinal thoracic indentation is strong, and the ordinary converging furrows well marked.

The eyes are in four transverse rows, 2, 2, 2, 2; or they may be perhaps more correctly described as forming a large quadrangular figure of four eyes, and about the middle of it is another small quadrangle of the remaining four. The anterior side of the larger quadrangle is longer than the posterior one, while the posterior side of the inner quadrangle is longer than the anterior; in both figures the length is greater than the breadth. The eyes of the foremost row are the largest of the eight; and this row is the same distance from the next one as the latter is from the posterior (or fourth) row, the third row being equidistant between the second and fourth. The eyes of the third row (which are rather smaller than those of the fourth) are separated by an eye's diameter; and those of the second row, which is the shortest of the four, are also much the smallest, and are divided from each other by an eye's diameter. The eyes may also be described as forming a St. Andrew's Cross, whose base is rather longer than the width of the upper part.





The *legs* are long and moderately strong, furnished with hairs, bristles, and strongish spines; their relative length is 1, 4, 2, 3, or 4, 1, 2, 3, the difference between 1 and 2 being slight (in the only male examined the fourth pair were wanting); the shorter hairs are white, and give a grey hue to the legs, whose real colour is yellow-brown with here and there a paler annulus. Each tarsus ends with three claws, of which the superior pair are distinctly pectinated.

The *palpi* are moderate in length and strength, and their colour and clothing of grey hairs are like those of the legs; the radial joint is a little longer and stronger than the cubital, being enlarged gradually towards its fore extremity, where, on the outer side, is a short, deep red-brown, curved, blunt-pointed, corneous apophysis; there is also a long, tapering, spine-like, prominent bristle at the inner side of its posterior extremity; the digital joint is large and hairy, and its length exceeds that of the radial and cubital joints together, being almost, if not quite, equal to that of the humeral joint; in its general form and appearance the digital joint is like that of *Tegenaria* and *Ocyale*, the fore extremity being much produced into a long, narrow, tapering point. The palpal organs are placed beneath the posterior half of the digital joint, and comprise several strong, bulbous-looking, corneous processes, each terminating in a sharp point.

The *falces* are strong, tolerably long, and straight, but directed rather backwards towards the sternum; they are similar to the cephalothorax in colour, and are also clothed with grey hairs and a few prominent dark bristles.

The *maxillæ* are strong, tolerably long, broader at their upper extremity than at the middle, and straight, almost exactly resembling those of *Ocyale*, *Dolomedes*, and many *Lycosæ*, their colour and clothing being similar to those of the falces.

The *labium* is of a short oblong form, half the length only of the maxillæ, and truncated at the apex; this is paler than the rest, the general colour being like that of the maxillæ.

The *sternum* is of a short heart-shape, and its colour and clothing are like those of the falces.

The *abdomen* is long, and tapers gradually to its hinder extremity; its general colour is yellowish brown, clothed with hairs, most of which have a greyish hue; the upperside is occupied by a broad, tapering, longitudinal dark-brown band, whose margins at the hinder part are bluntly denticulate; this band is bordered on each side by a pale yellow-brown stripe, clothed densely with white hairs; and another similar longitudinal stripe occupies the middle of its anterior portion; and on each side of this latter stripe is a largish, round, dark-brown, impressed spot.

The *female* resembles the male, but is larger. In the female the legs of the fourth pair appear to be the longest; and probably those of the male are also similarly proportioned. The spinners are short, two-jointed, of equal, or nearly equal, length; and those of the inferior pair are the strongest. The form of the genital aperture is peculiar and characteristic.



Several adult females and one adult male of this species were most kindly given to me, among other Spiders, by Sir Walter Elliot, K.C.S.I., by whom they were found some years ago in East Central India. Having been preserved in spirit for some years, it is probable that their present colours are not quite the same as those of the living Spider.

*PODOPHTHALMA AFFINITATA*, sp. n.

A portion only of this Spider has come before me; this portion consists of the cephalothorax and falces, together with the maxillæ, labium, sternum, and legs, as far as, and including, the femora. It is evidently nearly allied to *P. bayoniana*, Capello; but as it differs in the colour, as well as in the size of the eyes, I am inclined to describe it as distinct, although, of course, no details of the abdomen and other absent parts can be given.

The colour of the cephalothorax, as well as of all the other parts above mentioned, is yellow. The form also of the cephalothorax appears to be more flattened than in Capello's type species; and when looked at sideways there is no difference in the convexity of the caput and thorax.

The eyes are on black tuberculate spots; the length of the posterior and anterior rows is equal; the interval between those of the third row (or that next to the posterior one) is less than an eye's diameter: these two eyes are rather the largest of the eight; those of the first and fourth rows are next in size, and are apparently about equal. The interval also between those of the second row is less than an eye's diameter; and the intervals between the second and third, and the third and fourth rows are equal, being less than that between the second and first. The distance between each eye of the second row and that of the first row, on its side, is considerably less than the distance between it and the eye of the fourth row on its side. The length of the rectangle formed by the eyes of the first and fourth rows is greater than its breadth, but evidently not as much greater as it is represented to be in the figure of *P. bayoniana*, where also the posterior row of eyes is given as longer than the anterior one.

From the relative lengths of the femora I should judge the relative lengths of the legs to be 4, 1, 2, 3.

The length of the cephalothorax is very nearly 3 lines.

The falces are slightly divergent.

The fragment from which the above notes have been made was received in a small collection of Spiders sent to me by Mr. Henry Rogers from the west coast of Africa, on the banks of the river Coanza.

*PODOPHTHALMA HILARIS*, sp. n. (Plate LVII. fig. 7.)

Immature female, length  $7\frac{1}{2}$  lines.

In general form and appearance this Spider is much like *P. elliottii*: its colours, however, are much richer; and its markings, as well as the relative size of the eyes differ.

The *cephalothorax* is of a dark rich yellowish brown colour with a very narrow marginal yellow line, and a longitudinal yellow stripe



along nearly the middle of each side, together with a narrow stripe or line of the same colour along the middle from the second row of eyes, each to the posterior margin; all these yellow lines and stripes are thickly clothed with white hairs.

The *eyes* are in the same position as those of *P. elliottii*, but those of the third row are smaller in proportion than in that species, being scarcely larger than those of the second row; those of the fourth (or posterior) row are also smaller.

The *legs* are long and rather slender; their relative length is 4, 1, 2, 3; and they are of a brownish-yellow colour, the femora considerably clouded with brown. They are thinly clothed with white pubescence, as well as other hairs, bristles, and rather slender spines.

The *palpi* are moderately long, of a yellowish hue, and furnished with hairs, long bristles, and slender spines.

The *falces* are rather long and strong, prominently rounded in profile, almost perpendicular, of a yellowish colour, striped with brown on their basal half, and clothed with bristly and white hairs.

The *maxillæ* are straight, enlarged and rounded at their extremities, and, together with the labium (which is of an oblong-oval form truncated at its apex), of a yellowish hue.

The *sternum* is heart-shaped, yellow, with two dark-brown, irregular, parallel stripes or markings along the middle, and clothed with white hairs.

*Abdomen* long, narrow-oval, much produced and tapering to the spinners. The upperside is pale yellowish, the middle line occupied by a broad, tapering, dark, rich-brown longitudinal band strongly and distinctly denticulated along the whole of its posterior half; the middle longitudinal line of this band is charged with a series of reddish yellow-brown markings, those on the hinder part being triangular and representing the normal angular bars or chevrons; immediately outside the margin of the central brown band, on each side, is a narrow stripe of white hairs; a broadish dark-brown band runs along each side, and is traversed obliquely by a yellowish stripe. The lower part of the sides is pale yellow thinly spotted with brown; and the underside is more of a yellow-brownish hue. These parts, and, indeed, the whole abdomen, are more or less clothed with short grey and white hairs. The spinners are short, two-jointed, compact, and equal in length, those of the inferior pair being the strongest.

Four immature examples of this fine and handsome species were received, through the kindness of Mr. R. H. Meade, of Bradford, from Madagascar.

*PODOPHTHALMA INCERTA*, sp. n. (Plate LVII. fig. 8.)

Immature female, length not quite  $2\frac{1}{2}$  lines.

This Spider is of very great interest, because by a slight modification in the position of the eyes, the close relationship between *Podophthalma* and *Ocyale* is very distinctly shown.

The *cephalothorax* is of the ordinary shape, oval behind, considerably compressed laterally at the caput, and truncated on lower



margin of clypeus; its colour is yellow, with a few small brown markings round the lateral margin, and a faint brown, broad, longitudinal central band divided longitudinally on the caput by a narrow yellow line, and broken in upon by short radiating yellowish streaks indicating the normal thoracic indentations.

The *eyes* are on conspicuous black tubercular spots, and vary a little from the normal position, those of the first and second rows forming together a curved line of four eyes, the curve directed backwards; this is caused by the group which consists of the second, third, and fourth rows being advanced so much closer towards the fore margin of the clypeus, while still retaining their own relative position. This arrangement brings the general position of the eyes into very nearly that of the genus *Ocyale*; the exterior eyes, however, of the first row still occupy the same position as those of the first row in the typical *Podophthalma* (*i. e.* quite at the lower corners of the clypeus), and are also seated in front of, and rather below, a tubercular eminence, though of less length than in the other (already described) species of *Podophthalma*. Another characteristic of the eyes of this Spider is that they are of considerable size, and vary from each other very slightly in that respect.

The *legs* are long, slender, and of a pale yellow colour, faintly annulated with yellow-brown. They were entirely destitute of hairs and spines; but there were evidences of these having been considerably rubbed off. Their relative length appears to be 4, 1, 2, 3.

The *palpi* are similar to the legs in colour, slender, and of moderate length.

The *falces*, *maxillæ*, and *labium* present no difference from the normal form. They are of a pale yellow colour, except the labium, which is pale brown.

The *sternum* is heart-shaped, brown, with a distinct and complete dentated border, and central longitudinal oval patch of yellow.

The *abdomen* is oval, not so attenuated as in the other species, but more convex towards the anterior extremity; it is of a brownish-yellow colour, marked variously both above and below with brown stripes and markings, the sides and a broad transverse band on the underside just behind the middle being closely marked with white cretaceous spots and patches.

A single example only, received in company with those, already described, of *P. hilaris*, from Madagascar.

I have had some doubt whether it would not be proper to place this Spider in a new genus, on account of the difference in the eyes from the typical *Podophthalma*, especially as the next Spider described (*P. diversa*, from Brazil) has a similar general position of the eyes, differing, however, in the two eyes of the second row (or rather the intermediate ones of the first) being much smaller than the rest, and so more nearly resembling those of the typical *Podophthalma*. On the whole, therefore, it is perhaps best at present to await the discovery of other species before forming a new genus for these two. This and the next species show some resemblance to *Lycosides*, Linn. (*Textrix*, Sund.), of the family Agelenides.



*PODOPHTHALMA DIVERSA*, sp. n. (Plate LVII. fig. 9.)

Immature female, length 6 lines.

This Spider is nearly allied to *P. incerta*, Camb.

The *cephalothorax* is broad, round, oval behind, greatly constricted laterally at the caput, which is rather produced and truncated in front. Although closely resembling in its form that of the typical *Podophthalma*, the cephalothorax is perhaps more nearly like that of *Agelena* and *Tetrax*, with which genera there is no doubt an affinity, although in a linear arrangement these genera are removed at a great distance from *Podophthalma* (see introductory remarks, p. 558). The colour of the cephalothorax is yellow-brown, pretty thickly clothed with greyish-yellow pubescence.

The *eyes* are in the same position as those of *P. incerta*. The exterior ones, however, of the foremost row are not so near to the exterior (lower) corners of the clypeus; and the central pair of this row are distinctly (rather considerably, in fact) smaller than the rest. In this Spider, as well as in the last, *P. incerta*, the ocular area, looked at in profile, is less flattened, and thus the eyes of the third row project more forwards.

The *legs* are moderate in length and strength; their relative length is 4, 1, 2, 3. They are of a pale yellow-brown colour, furnished with hairs, bristles, and slender spines; and each tarsus terminates with three curved claws, of which those of the superior pair are strong and pectinated, and the inferior one is small.

The *palpi* are slender, of moderate length, and similar to the legs in colour and armature, terminating with a single, curved, pectinated claw.

The *falces* are straight, perpendicular, moderate in length and strength, similar to the cephalothorax in colour, and furnished in front with numerous bristles.

The *maxillæ* and *labium* are of normal form; the former are dull pale yellow, and the latter is tinged with yellow-brown.

The *sternum* is yellow-brown, darkest along the middle, of an oval heart-shape, and clothed with numerous erect bristly hairs.

The *abdomen* is of an elongate-oval form, pretty densely clothed with grey and other hairs intermixed with some prominent dark bristly ones. It is of a yellowish-brown colour, with a broad central longitudinal band on the upperside, the margins indented, and each indentation marked conspicuously with a patch of white hairs, and joined to the corresponding indentation on the opposite side by a slightly curved line of similar hairs; these transverse curved white lines are most conspicuous on the hinder half. The sides are closely marked with parallel broken lines of dark-brown elongate spots; and the underside is tinged with darker yellow-brown, which, however, is obscured by the clothing of short yellow-grey pubescent hairs.

The spinners of the superior pair are rather longer than those of the inferior, though less strong.

Several examples (all immature females) were collected by Mr. Henry Rogers, in Minas Geraes, Brazil.



## Fam. DINOPIDES.

Until lately one genus alone of this group (*Dinopis*, Macleay) had been characterized. It has always appeared to me impossible to place *Dinopis* in any known or recognized family group; and consequently I have long since constituted it a family of itself, placing it between the Lycosides and Salticides, rather for want of a better place for it than for any really close affinity to either of them. It is more probable that its place will some day be found to be much nearer to the Agelenides than to either the Lycosides or Salticides. Dr. Ludwig Koch, writing in 1867 (Verh. k.-k. zool.-bot. Gesell. in Wien, 1867, p. 230), says that the position of *Dinopis* is without any doubt in the family Eresides, giving as a proof the position of the eyes and possession of calamistra and inframamillary organ. It would seem, however, scarcely possible to place in juxtaposition two Spiders more unlike each other than *Dinopis* and *Eresus*, whether we consider the general form, or any special point of structure from which a family affinity could be deduced. The mere position of the eyes is quite insufficient. *Podophthalma* has an eye-position very closely resembling *Dinopis*; and between other widely separated genera there may also be often found a similar eye-position. Relying upon this only, Walckenaer once placed a Theraphosid (*Idiops*) in the genus *Sphasus*; and as regards calamistra and the mamillary organ, these may certainly be considered of family value in some groups of genera possessing them, as in *Dictyna*, *Amaurobius*, *Titanœca*, and *Lethia*; but when we find them in such widely different Spiders as *Filistata*, *Ecobius*, and *Rhion*, all family value, at least with respect to them, vanishes. So, it appears to me, it is also in regard to *Dinopis*, where the flattened cephalothorax, enormous central pair of eyes, long and excessively slender legs, with a very peculiar form of maxillæ, labium, and sternum, must have far more weight than the calamistra and general position of the eyes taken by themselves. M. Simon has recently (Bull. Soc. Zool. de France, 1876, p. 218) characterized a second genus (*Menneus*) unmistakably allied to *Dinopis*, but, along with some minor characters, differing remarkably in having the tarsi of the first pair of legs subdivided. *Menneus* has also calamistra; and so also has another Spider, allied both to *Dinopis* and *Menneus*, and upon which I propose presently to found a third genus of the family Dinopides. This Spider, for which I propose the generic name *Avella*, has the flattened cephalothorax, the long slender legs, the peculiar maxillæ and labium, as well as the general eye-position of *Dinopis*; but the central pair of eyes are but little larger than the rest. With *Menneus* it agrees in having the tarsi of the first pair of legs subdivided, though it seems to me, with respect to other generic characters, quite distinct. It however possesses calamistra and an inframamillary organ (though the calamistra were of rather a peculiar nature). It is therefore probable that these portions of structure will here also prove a good family character within the limits of the Dinopid group; but this remains to be proved. Of course the family character thus attached



to these curious points of structure would at once fail if an undoubted Dinopid were found without them.

Gen. nov. AVELLA.

*Cephalothorax* longer than broad, oval behind, constricted laterally at the caput, and truncated in front; the lower corners of the clypeus prolonged into eye-bearing tubercular prominences; upper surface much flattened, the thorax and caput being on the same low level. The caput runs in a straight line to the middle pair of eyes, when it drops abruptly, at right angles, to the falces.

*Eyes* small, in three transverse rows, 4, 2, 2, and not differing greatly in size; the foremost row (of four) is strongly curved, the convexity of the curve directed backwards; the laterals of this row are placed at the extremity of cylindrical tubercles springing from the corners of the clypeus. Those of the second row are a little the largest of the eight. Those of the third or posterior row form a line not nearly so long as that formed by those of the first row.

*Legs* long, slender; relative length 1, 2, 4, 3—1 and 2 greatly exceeding 3 and 4 in length; the tarsi of the first pair subdivided. Each tarsus ends with three curved claws, of which the superior pair are pectinated; and there is a calamistrum on the metatarsus of each of the fourth pair.

*Palpi* short, slender, and terminating with a single curved pectinated claw.

*Falces* long, strong, and divergent.

*Maxillæ* long, strong, considerably constricted just above the insertion of the palpi, and thence greatly divergent, or bent outwards, and rounded at their extremities.

*Labium* oblong but broader at the base than at the apex, which is truncated; its length slightly exceeds one half that of the maxillæ.

*Sternum* of a somewhat subtriangular form, but much elongated.

*Abdomen* long, broadest in the middle, where there is a strong prominence on each side, with a supernumerary mamillary organ in front of the ordinary spinners.

AVELLA DESPICIENS, sp. n. (Plate LVII. fig. 10.)

Adult female, length rather over  $4\frac{1}{2}$  lines.

The *cephalothorax* is of a yellow-brown colour, with a broad central longitudinal band of a paler hue; this band runs through to the central pair of eyes; it is rather wider on the caput than on the thorax, and is thickly clothed with a grey pubescence, the rest of the cephalothorax being thinly clothed with similar pubescence. The area comprised by the six foremost eyes is of a rather chocolate red-brown colour.

The *eyes* may be described not only as in three transverse rows, but as also in two quadrangular figures, a large one with a small one in the middle of it; the foremost pair of the central quadrangle are the smallest of the eight, and separated from each other by about three diameters, and from the hinder pair by about two; the hinder pair are considerably larger and form a longer line than the



fore ones, being also separated from each other by two diameters, the distance from each to the eye of the hinder row on its side being somewhat greater than this. The tubercles, at the extremity of which the foremost eyes of the outer quadrangle are placed, are directed strongly outwards and downwards.

The *legs* are brown, slightly tinged with yellow, and furnished with hairs and a few short spines. The calamistra on the metatarsi of the fourth pair begin close to the hinder extremity of the joint, rather on the inner side, and continue along it for about one third of its length; the terminal tarsal joint of the first pair is less than a fourth of the length of the normal joint.

The *palpi* are similar to the legs in colour and annulation.

The *falces* are long, strong, perpendicular, and divergent, and of a dark, slightly yellowish brown colour.

The *maxillæ* and *labium* are of a similar hue, the apex of the latter and the inner sides of the former being of a pale whitish colour. The maxillæ are also rather closely fringed with hairs on their inner sides and at their extremities.

The *sternum* is of a dark brown and dull orange-yellowish hue mixed.

The *abdomen* was much shrunken; but its form is apparently elongate-oval, truncated in front, broad across the middle, where there is a strong somewhat conically pointed prominence on each side. It is clothed with short hairs; and the femoral hue is a mixture of brown-grey and reddish-yellow. The lateral prominences are joined by a somewhat raised transverse curved ridge clothed with grey hairs, the colour of the abdomen in front of the ridge being dark reddish yellow-brown; and extending from it to the spinners is a broad dentated paler yellow-brown band.

A single example of this very interesting and important Spider was received, among numerous examples of other groups, from Rockhampton, Australia, through Mr. E. W. Janson, in the present year (1877). The relation of this Spider to *Dinopis* and *Menneus* is noted above.

#### Fam. SALTICIDES.

#### Gen. nov. ATHAMAS.

This genus is closely allied to *Lyssomanes*, Hentz, as well as to *Jelskia*, Tacz. It differs, however, from both in the shortness of the cephalothorax and also of the abdomen. From *Lyssomanes*, Hentz, it differs in the superior and inferior spinners being of equal length, whereas in that genus those of the superior pair are much longer, slender, and three-jointed.

*Cephalothorax* short, massive, quadrate, very convex above; the sides and hinder slope almost vertical.

*Eyes* very unequal in size, disposed in four transverse lines of two each, and almost of the same length.

*Legs* rather slender, and moderately long; those of the first pair longest, and of the second pair shortest.



*Maxillæ* rather short, slightly divergent, and much the broadest at their extremities, which are rounded.

*Labium* short, small, and of a somewhat curviangular form.

*Abdomen* small, short, oval, and sloping from its most convex part, near the fore margin, to the spinners.

ATHAMAS WHITMEEI, sp. n. (Plate LVI. fig. 11.)

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

The *cephalothorax* of this very pretty and distinct Spider is of a yellow-brown colour, with a large pale patch on each side of the hinder extremity, and the ocular area black, thinly clothed with short white hairs, and shining, in some lights, with a strong metallic dark violet hue; a pale stripe densely clothed with bright white squamose hairs runs through the middle of the hinder half of the ocular area to the beginning of the posterior slope; there is also a spot of similar hairs on each side towards the hinder part, and another on each side near the hinder part of the ocular area, just below the eyes of the third row; the height of the clypeus is rather less than the diameter of one of the first row of eyes.

The *eyes* may be described not only as in four transverse rows or four pairs, but as in two longitudinal, and nearly straight, parallel lines. The foremost pair are of enormous size, contiguous to each other, and placed on the vertical front of the caput; the two next to them are on the upper edge of the caput, and form a line but very slightly longer than the first pair; they are also large, but not nearly so large as the former, and are separated by rather less than two diameters; those of the next row are very minute and not easily distinguished, they form a line shorter than the last-mentioned eyes, but separated by a rather wider interval; these minute eyes are about halfway between those of the second and fourth rows. Those of the fourth row are considerably smaller than those of the second, and are divided by an interval of three diameters. The line, however, that they form is nearly of the same length.

The *legs* are yellow, the femora and the two other basal joints of the first pair being much stronger than the rest, and brownish black on each side. This, however, is apparently not a constant character; or at any rate it does not always exist at the first coming of the Spider to maturity, but probably is acquired later; for in one of the examples before me the first pair are of the same colour as the rest, and the femora of only ordinary comparative strength, and the legs themselves shorter and weaker. They are furnished sparingly with hairs and a few slender spines, except the first pair, in which there are five pairs of long strong spines beneath the tibiæ, and three pairs (rather longer and stronger still) beneath the metatarsus, disposed in two longitudinal parallel rows; these spines are much less strongly developed in the example before mentioned, whose fore legs are less strong than those of the other specimen.

The *palpi* are pale yellow, short and slender; the radial joint is, if any thing, a little shorter than the cubital, and has a very small, slender, pointed apophysis at its fore extremity on the outer side;



this apophysis is very difficult to distinguish clearly; the digital joint is of a narrow form, and tapers a little towards its fore extremity, its length being nearly, if not quite, equal to that of the cubital and radial joints together; all these three joints are clothed with longish coarse white hairs. The *palpal* organs are simple but well developed; they are not conspicuous, being of a similar colour to the rest of the palpus, and much obscured by the white hairs on the digital and radial joints.

The *falces* are short, straight, vertical, and not very strong; they are of a brownish-yellow colour with a broad rather oblique dark yellow-brown longitudinal stripe on the fore side.

The *maxillæ* are yellow-brown, paler at their extremities.

The *labium* is also yellow-brown, palest at the apex.

The *sternum* is heart-shaped and of a pale yellow colour.

The *abdomen* is of a palish yellow hue; on the fore half of the upperside a clearer yellow elongate-oblong central marking is indicated by a dark-brown dentated marginal line, and terminates posteriorly with a short transverse curved dark-brown stripe, behind which, again, are two longitudinal curved dark-brown markings inclosing a circular area covered densely with white squamose hairs which extend forwards also to the transverse stripe above described. The sides are marked with a few dark-brown spots and markings; and on each side of the fore extremity of the oblong central marking is a large patch of white squamose hairs. In front, below the fore margin, are some coarse, bristly, black, upturned hairs.

The spinners are of a blackish hue, tipped with pale yellowish; those of the inferior pair are much the strongest, though of the same length as the superior pair; and those of the central pair are nearly as long as the rest. There is evidently some variety in the abdominal markings of this species, since in the other example before noted the upperside of the abdomen is generally suffused with dark blackish brown, showing faintly the longitudinal oblong central yellowish marking on the fore part; the posterior and two anterior large patches of white squamose hairs, however, are even more conspicuous in this than in the other example.

Two adult male examples were received from the Rev. S. J. Whitmee, by whom they were found in the island of Samoa, and kindly sent to me, together with a few other Spiders.

#### LIST OF SPIDERS.

##### Fam. GASTERACANTHIDES.

- Cyrtarachne longipes*, sp. n., river Coanza, p. 559, Pl. LVI. fig. 1.  
 — *furcata*, sp. n., Rockhampton, p. 560, Pl. LVI. fig. 2.  
 — *hobsoni*, sp. n., Bombay and Ceylon, p. 562, Pl. LVI. fig. 3.

##### Fam. CRYPTOTHELIDES.

- Cryptothele ceylonica*, sp. n., Ceylon, p. 563, Pl. LVI. fig. 4.

##### Fam. ERIPIDES.

- Eripus quinquegibbosus*, sp. n., Minas Geraes, p. 564, Pl. LVI. fig. 5.



## Fam. PODOPHTHALMIDES.

- Podophthalma ellioti*, sp. n., East Central India, p. 567, Pl. LVII. fig. 6.  
 — *affinitata*, sp. n., river Coanza, p. 569.  
 — *hilaris*, sp. n., Madagascar, p. 569, Pl. LVII. fig. 7.  
 — *incerta*, sp. n., Madagascar, p. 570, Pl. LVII. fig. 8.  
 — *diversa*, sp. n., Minas Geraes, p. 572, Pl. LVII. fig. 9.

## Fam. DINOPIDES.

- Avella*, g. n.  
*Avella despiciens*, sp. n., Rockhampton, p. 574, Pl. LVII. fig. 10.

## Fam. SALTICIDES.

- Athamas*, g. n.  
*Athamas whitmeei*, sp. n., island of Samoa, p. 576, Pl. LVI. fig. 11.

## EXPLANATION OF PLATES LVI. AND LVII.

## PLATE LVI.

- Fig. 1. *Cyrtarachne longipes*, sp. n., ♀.  
 a, full figure, upperside, natural size; b, profile, without legs, enlarged; c, maxillæ, labium, and sternum.  
 2. *Cyrtarachne furcata*, sp. n., ♀.  
 a, full figure, upperside, enlarged; b, profile, without legs; c, profile of cephalothorax, more enlarged; d, outline, natural size.  
 3. *Cyrtarachne hobsonii*, sp. n., ♀.  
 a, full figure, upperside, enlarged; b, profile, without legs; c, natural length of Spider.  
 4. *Cryptothele ceylonica*, sp. n., ♀.  
 a, full figure, upperside, enlarged; b, profile, without legs; c, fore part of caput, from behind, showing the eyes; d, maxillæ and labium; e, natural length of Spider.  
 5. *Eripus quinquegibbosus*, sp. n., ♂.  
 a, full figure, upperside, enlarged; b, caput, in front; c, profile; d, abdomen from behind; e, natural length of Spider.  
 11. *Athamas whitmeei*, sp. n. et g. n., ♂.  
 a, full figure, upperside, enlarged; b, profile, without legs; c, fore part of caput, from behind, showing position of the eyes; d, maxillæ and labium; e, natural length of Spider.

## PLATE LVII.

- Fig. 6. *Podophthalma ellioti*, sp. n., ♀.  
 a, full figure, upperside, nearly of natural size; b, fore part of caput, showing position of the eyes; c, d, palpus of male; e, radial, and portion of cubital, joint of palpus, ♂, f, natural length of Spider.  
 7. *Podophthalma hilaris*, sp. n., ♀.  
 a, full figure, upperside, enlarged; b, profile of cephalothorax; c, natural length of Spider.  
 8. *Podophthalma incerta*, sp. n., ♀.  
 a, full figure, upperside, enlarged; b, fore part of caput, from in front, showing position of the eyes; c, natural length of Spider.  
 9. *Podophthalma diversa*, sp. n., ♀.  
 a, full figure, upperside, enlarged; b, fore part of caput, from in front, showing position of the eyes; c, natural length of Spider.  
 10. *Avella despiciens*, sp. n. et g. n., ♀.  
 a, full figure, upperside, enlarged; b, profile of cephalothorax; c, fore part of caput from in front, showing position of the eyes; d, part of metatarsus of one of fourth pair of legs, showing calamistrum; e, natural length of Spider.





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