Peckham, G. W. and E. G. Peckham. 1885. On some new genera and species of the family Attidae, from Madagascar and Central America. Proceedings of the Natural History Society of Wisconsin *for 1885*: 23-42, plate I.

This digital version has been corrected according to the following *erratum*, published as an insert to the original text.

### ERRATUM.

For "Jotus semi-ater sp. nov.," pages 37 and 42, and also plate, read "Eris praedatoria Keys."

In the original document, scientific names were not italicized, as they are in this version. Unnecessary dashed lines have been removed from the plate, and the text of the plate has also been replaced for clarity. Any small changes from the original to correct omitted characters or to otherwise annotate this version are highlighted in red.

# ON SOME NEW GENERA AND SPECIES OF THE FAMILY ATTIDAE, FROM MADAGASCAR AND CENTRAL AMERICA.

BY G. W. AND E. G. PECKHAM.

(For several of the Madagascar Species described in this paper, we are indebted to Mr. Thomas Workman, of Belfast, Ireland.)

## FAMILY ATTIDAE.

Sub-family Lyssomanae.

Gen. nov. Simonella.1

Body long, slender, nodose.

*Cephalothorax* more than twice as long as wide; convex above; constricted near the middle. Thoracic part twice as long as cephalic.

*Eyes* very unequal in size, placed in four transverse rows of two each, those of the anterior row almost touching. The quadrangle formed by the second and fourth rows is wider behind than in front, and wider behind than long. Eyes of the third row very small, and nearer to the second than to the fourth

<sup>&</sup>lt;sup>1</sup>We have named this genus for the distinguished French arachnologist, M. Eugène Simon.

row. Eyes of the fourth row on the upper margin of the cephalothorax.

*Clypeus,* in width, a little less than the radius of the anterior eyes; in direction, retreating.

*Sternum* long; narrower behind. Anterior coxae separated by the width of the labium.

*Maxillae* twice as long as labium, widest in the middle, tapering toward apex.

*Labium* as wide as long, truncated at tip.

Falces stout and long; vertical; slightly diverging.

Legs slender, differing but little in thickness; the third and fourth pairs devoid of spines. Relative length 4, 3, 1, 2. Patella with tibia of the third shorter than patella with tibia of fourth. Metatarsus with tarsus of the fourth shorter than patella with tibia.

*Abdomen* long, slender; much narrower in the middle.

Simonella makes the fifth genus of the sub-family Lyssomanae, which includes those Attidae which have the eyes in four transverse rows. Janus myrmeciaeformis Tacz. is nearest to Simonella, and Dr. Taczanowski, in describing the species, suggests that it ought to constitute a new genus. It differs, however, from Simonella, in that the first row of eyes occupies the whole of the face, and in the quadrangle of the eyes being longer than wide. Simonella is easily distinguished by its nodose form from the other genera of this sub-family. In general appearance it most resembles Synemosyna Hentz.

# Simonella americana sp. nov.

♂. Total length, 8.5 mm. Width of abdomen, 1.1 mm. Length of cephalothorax, 3.5 mm. Width of cephalothorax, 1.4 mm. Height of cephalothorax, 1.2 mm.

Legs.	Fem.	Pat.	Tib.	Metat.	Tar.	Total.
1.	1.2	<b>0</b> .5	<mark>0</mark> .9	<b>0.8</b>	0.4	3.8
2.	1. <mark>0</mark>	0.4	<mark>0</mark> .9	<b>0.8</b>	<b>0</b> .5	3.6
3.	1.4	<b>0</b> .5	1.1	1.0	_	4. <mark>0</mark> +
4.	1.9	8.0	1.8	1.0	_	5.3+

The cephalothorax is nearly as high as wide; the cephalic and anterior thoracic parts are higher and more convex than the

remaining portion of the thoracic, from which they are separated by a well-marked constriction; the part of the thorax posterior to this constriction is highest in the middle, and slants off to form the narrow pedicle by which it is united to the abdomen. The cephalic and anterior thoracic parts are jet black and glabrous; the posterior thoracic part is pale yellow.

The quadrangle of the *eyes* is wider behind than long. The eyes of the first row are very large and almost touching; the second row is just behind the first. A straight line passing backward from the outer edge of the first would cut the second through the middle, pass through the small eye of the third row, and then pass inside the dorsal, or fourth eye.

The width of the *clypeus* is a little less than the radius of the anterior eyes. It is black, retreating, and is ridged above.

The *palpus* is black, long and slender, having on the outer side of the tibia a stout apophysis.

The *falces* are robust, narrowing toward the tip; the fang is as long as the palpus, slender, and yellowish black in color.

The *maxillae* are also yellowish black, half as long as the palpus, more than twice as long as the labium, and widest at the extremity.

The *sternum* is yellowish, long, truncated in front, narrowing to a point behind.

The relative length of the *legs* is 4, 3, 1, 2. The patella, tibia, and metatarsus of the first pair are black on the inner side; otherwise all the legs are yellowish, with a darker coloring toward the distal end of the fourth pair. There are weak tibial and metatarsal spines on the first pair; the second, third, and fourth pairs are unarmed.

The *abdomen* consists of three portions, the anterior part being joined to the posterior by a narrow neck. The anterior is twice as long as the middle, and half as long as posterior part.

Habitat. Guatemala.

OBSERVATIONS: This species was found running on the ground among a number of leaf-cutting ants.

## FAMILY ATTIDAE.

Sub-family Attinae.

## Gen. nov. Ganesa.1

Cephalothorax very low and flat; slightly contracted in front and behind, twice as long as wide, and a little wider than the third row of eyes, with a depression limiting the cephalic part. Thoracic part twice as long as cephalic, truncated behind.

Eyes forming a quadrangle, a little more than  $^{1}/_{4}$  wider than long, and equally wide in front and behind. Anterior eyes all separated, forming a line slightly curved downward  $^{2}$ ; the middle are nearly three times as large as the lateral eyes. Eyes of the second row half way between the dorsal and the lateral eyes. Dorsal eyes further from each other than from the lateral borders.

Clypeus extremely low.

*Sternum* wide and oval; narrower behind than in front. Anterior coxae separated by the width of the labium.

*Maxillae* less than twice as long as labium, wider at the extremity, parallel.

*Labium* a little longer than wide, rounded at tip.

*Falces* nearly vertical, not diverging, robust, short, about as wide as long, narrower at the insertion of the fang.

Legs: 1, 4, 2, 3, in both sexes. First legs much the stoutest, with femur and tibia greatly enlarged, and patella slightly enlarged in both sexes. The patella with tibia of the third shorter than patella with tibia of the fourth; metatarsus with tarsus of fourth shorter than patella with tibia. The third and fourth pairs have no spines.

Abdomen long and slender, flattened above.

<sup>&</sup>lt;sup>1</sup> Proper name: God of Wisdom—Sanscrit.

<sup>&</sup>lt;sup>2</sup> We consider the anterior row of eyes *straight* when a straight line from the top of the middle eyes touches also the top of the lateral eyes; *curved*, when a straight line from the top of the middle eyes cuts the lateral eyes; *curved downward*, when a straight line from the top of the middle eyes passes above the lateral eyes.

# Ganesa workmanii sp. nov.

♂. Total length, 5 mm. Width of abdomen, 1.1 mm. Length of cephalothorax, 2 mm. Width of cephalothorax, 1.1 mm. Height of cephalothorax, 0.7 mm.

Legs.	Fem.	Pat.	Tib.	Metat.	Tar.	Total.
1.	1.5	8.0	1.6	<b>0</b> .9	<b>0</b> .5	5.3
2.	1. <mark>0</mark>	0.4	<mark>0</mark> .6	0.4	0.2	2.6
3.	1. <mark>0</mark>	0.4	<mark>0</mark> .6	0.4	0.2	2.6
4.	1.2	<b>0</b> .7	1. <mark>0</mark>	<mark>0</mark> .6	0.4	3.9

The *cephalothorax* is very low and flat, the thoracic part being much longer than the cephalic. The upper surface is glabrous black, with a median longitudinal line of white hairs throughout its length.

The quadrangle of the *eyes* is wider than long, and equally wide in front and behind. The dorsal eye is as large as the lateral. A straight line from the outer edge of the lateral would pass outside the small median eye and cut the inner edge of the dorsal eye. The small median eye is half way between the lateral and the dorsal eye. The anterior row of eyes is slightly curved downward. The middle are nearly three times as large as the lateral eyes, and all four are separated. The lateral are placed a little further back than the middle eyes.

The *clypeus* is very low.

The *palpus* has a weak spine on the femur.

The *falces* are stout, a little inclined forward; yellowish brown in color.

The *maxillae* are less than twice as long as the labium; wider at the extremity; parallel.

The *labium* is a little longer than wide. rounded at the tip.

The *sternum* is very wide, and is rounded. Its color is dark brown.

The relative length of the legs is 1, 4,  $\overline{2}$ ,  $\overline{3}$ . The first leg is much the stoutest, and is peculiar in form; the coxa and femur are very stout, the femur having one spine on the under border; the patella is enlarged at its distal end, where it joins the tibia;

the tibia is greatly dilated, and has on its under border three pairs of stout spines; the metatarsus is curved, and has two stout spines on the under border near the extremity. The color of this leg is dark brown, excepting the tarsus and the distal end of the metatarsus, which are light yellow. The other leas are weak, and in color pale yellow, with darker rings at each joint. The tibia of the second leg has two spines.

The *abdomen* is flat, long, and slender, tapering toward the posterior end. In color it is black, with a few white hairs at the base, and a median longitudinal line of white hairs continuing that on the cephalothorax. The spinnerets are long.

The *venter* is black.

 — Total length, 4.3 mm. Width of abdomen, 0.9 mm.
 Length of cephalothorax, 1.9 mm.
 Width of cephalothorax, 0.9 mm.
 Height of cephalothorax, 0.5 mm.

Legs.	Fem.	Pat.	Tib.	Metat.	Tar.	Total.
1.	1.0	0.4	<b>0.8</b>	<b>0</b> .5	0.3	3.0
2.	<b>0.8</b>	0.2	0.4	<b>0</b> .1	0.1	1.6
3.	<b>0.8</b>	<b>0</b> .2	0.4	<b>0</b> .1	<b>0</b> .1	1.6
4.	0.8	0.3	0.6	0.5	0.3	2.5

The *maxillae, labium, sternum, venter* and the ends of the *palpi* are pale yellow. The abdomen is more slender, and the spinnerets are longer than in the  $\sigma$ .

Habitat. Madagascar.

From the collection of Mr. Thomas Workman, of Belfast.

In figures 2c and 2d the clypeus is drawn too high, and the quadrangle of the eyes relatively too long.

# Homalattus insularis sp. nov.

♂. Total length, 3.3 mm. Width of abdomen, 1.8 mm. Length of cephalothorax, 1.9 mm. Width of cephalothorax, 1.8 mm. Height of cephalothorax, 1.2 mm.

Legs.	Fem.	Pat.	Tib.	Metat.	Tar.	Total.
1.	1.1	<b>0</b> .9	1.0	<b>0</b> .5	0.4	3.9
2.	<b>0</b> .7	<b>0</b> .5	<mark>0</mark> .6	0.4	0.4	2.6
3.	<b>0</b> .6	0.4	<b>0</b> .5	0.4	0.3	2.2
4.	8.0	<mark>0</mark> .6	8.0	<b>0</b> .6	<b>0</b> .5	3.3

The *cephalothorax* is very slightly convex above, and is a little contracted in front and behind. It is nearly as wide as long. The cephalic part, which occupies more than  $^3/_5$  of its length, has its sides gently rounded and its upper surface a little inclined. The thoracic part is abruptly truncated behind. There is no depression between the cephalic and thoracic parts. The entire cephalothorax is of a soft brown color, sprinkled over with fine short white hairs.

The quadrangle of the *eyes* is  $^1/_3$  wider than long, and is wider behind than in front. The first row of eyes is straight; the lateral are a little behind the middle eyes and are  $^1/_2$  as large; the middle eyes are touching; the lateral separated from them by a space equaling  $^1/_2$  their diameter. The eyes of the second row are small and are separated from the anterior lateral eyes only by a space equaling their own diameter. The dorsal eyes are as large as the lateral, are placed on the margin of the cephalothorax, and are further from each other then from the lateral borders. The frons is  $^1/_5$  as wide as the middle anterior eyes.

The *clypeus* is 1/2 as wide as the anterior middle eyes, retreating.

The *falces* are robust, short, and vertical; the fang is small,  $^{1}/_{2}$  as long as the falx.

The *maxillae* are wider and truncated at the extremity, parallel; dark brown in color.

The *labium* is about  $^2/_3$  as long as the maxillae, raised and rounded at base, wider and rounded at the extremity; brown in color.

The *sternum* is rounded behind and on the sides, pointed in front, and is about as wide as long; its color is brown. The anterior coxae are separated by the width of the labium.

The relative length of the *legs* is 1, 4,  $\overline{2}$ ,  $\overline{3}$ . The first is the stoutest, and has the femur and tibia much enlarged. The first and second pairs are brown, the third and fourth have alternate brown and white rings. There are spines on the femoral joints of the first and second legs, besides others, which are very stiff and strong, on the tibial and metatarsal joints of the first. The third and fourth legs are unarmed.

The *abdomen* is of the same soft brownish color as the cephalothorax, and has, in its anterior portion, six rather indistinct black dots, arranged in two longitudinal rows of three each.

The *venter* is brownish.

The  $\stackrel{\frown}{}$  is like the  $\stackrel{\frown}{}$ , excepting that the relative length of the legs is 4, 1,  $\overline{3}$ ,  $\overline{2}$ .

Habitat. Madagascar.

In the  $\nearrow$  the tube in the palpus is sometimes coiled closely and sometimes drawn out, when it appears to be longer. The bulb is often more triangular than is shown in the drawing, and appears swollen.

# *Icius cornutus* sp. nov.

♂. Total length, 5.3 mm. Width of abdomen, 1.5 mm. Length of cephalothorax, 2.5 mm. Width of cephalothorax, 1.8 mm. Height of cephalothorax, 1.2 mm. Horns, 1.5 mm.

Legs.	Fem.	Pat.	Tib.	Metat.	Tar.	Total.
1.	1.9	1.2	1.8	1.0	<b>0</b> .5	6.4
2.	1.3	8.0	1.0	<b>0</b> .7	0.4	4.2
3.	1.3	<b>0</b> .9	1.0	<b>0</b> .7	0.5	4.4
4.	1.4	<b>0.8</b>	1.2	<mark>0</mark> .9	<b>0</b> .5	4.8

The *cephalothorax* is low and flat, dilated behind the middle. The sides of the cephalic part are vertical; those of the thoracic are rounded, as is also the posterior slope. The cephalic and

thoracic parts are on the same plane. The cephalic part occupies  $^{1}/_{3}$  of the cephalothorax and has no limiting depression. In color the ocular region is yellowish, glabrous, with two dark spots in the middle. Behind this region is a median band covered with light-yellowish hairs. On each side of the cephalothorax are two blackish bands, extending from the anterior lateral eyes to the posterior margin. The sides of the cephalothorax are brown, lighter above than below. There are some rufus hairs just below the dorsal and small median eyes, and also above the anterior eyes.

The quadrangle of the *eyes* is wider than long and very slightly wider behind than in front. The anterior row of eyes is straight, the middle being more than twice as large as the lateral eyes. All four are almost touching. The small median eyes are nearer to the lateral than to the dorsal eyes. The lateral and dorsal eyes are equally large. A straight line from the inner edge of the lateral eye would pass just within the small median eye, and within the dorsal eye, distant from it by a space equal to its diameter. The dorsal eyes are situated on the sides of the cephalothorax.

The *clypeus* is only a line.

The *falces* are vertical, very short and weak, almost square; the fang is very small and weak. On the anterior upper edge of each falx is a stout horn, which is very slightly curved downward, and is more than twice as long as the falx.

The *maxillae* are narrow at base, wider at extremity, slightly rounded, brownish.

The *labium* is a little more than half as long as the maxillae, and about as wide as long, rounded, brownish.

The *sternum* is about as wide as long; yellow. The anterior coxae are separated by the width of the labium.

The relative length of the *legs* is 1, 4, 3, 2, the first pair being very much the stoutest, the other pairs weak. The first leg is brown excepting the tarsus, which is yellow. The other legs are yellow. The first leg has one spine on the femur, three on the tibia and two pairs on the metatarsus; the second has two spines on the tibia and two pairs on the metatarsus; the third

and fourth legs are devoid of spines, but have stout hairs on the femoral joints.

The *abdomen* has a central longitudinal band formed of yellowish hairs, with a darker band on each side. The sides are yellowish.

The *venter* is yellowish, slightly darker than the sides.

The dorsal aspect of the spider presents a median yellowish band throughout the whole length, with a dark band on each side.

Habitat. Madagascar.

*Plexippus ensifer* Thorell, (Studi sui Ragni Malesi e Papuani, I, p. 267), has two spines on the clypeus. This species ought, perhaps, to form a new genus, as it differs in several respects front *Icius* E. S.; but we think it best to form new genera but slowly until we have made a more careful comparison of species.

## Astia ornata sp. nov.

♂. Total length, 5.7 mm. Width of abdomen, 1.2 mm. Length of cephalothorax, 3.1 mm. Coxa I, 1.1 mm. Width of cephalothorax, 2.0 mm. Height of cephalothorax, 1.3 mm.

Legs.	Fem.	Pat.	Tib.	Metat.	Tar.	Total.
1.	1.8	1.2	1.8	1.4	8.0	7. <mark>0</mark>
2.	1.7	8.0	1.2	<b>0</b> .9	<b>0</b> .6	5.2
3.	1.4	8.0	<b>0</b> .9	1.0	<b>0</b> .5	4.6
4.	1. <mark>0</mark>	8. <mark>0</mark>	1.3	1.1	<mark>0</mark> .6	4.8

The *cephalothorax* is moderately high, a little wider at the dorsal eyes, and about twice as long as wide. The cephalic part occupies about  $^2/_5$  of the cephalothorax; it is plane, and not inclined, with vertical sides. The thoracic part is a little convex, and is rounded behind and on the sides, slanting downward from a little distance behind the dorsal eyes. The color is dark brown, with some white hairs about the anterior eyes and on the thoracic part, which probably form distinct patterns, or cover the cephalothorax, but in our specimens are almost entirely rubbed off.

The quadrangle of the *eyes* is about  $^{1}/_{4}$  wider in front than it is long, and is wider in front than behind. The anterior eyes are visible from above, are all touching, and are in a straight line; the lateral are placed a little further back than the middle eyes, and are less than half as large. The eyes of the second row are much nearer the lateral than the dorsal eyes. The dorsal eyes are about as large as the lateral, and are placed about double their own diameter inside the margin of the cephalothorax. They are nearer to each other than to the lateral borders. There is no frons.

The *clypeus* is retreating, and is scarcely 1/5 as wide as the large middle eyes.

The *falces* are very robust, short, a little inclined forward, and parallel. The fang is about  $^2/_3$  as long as the falx, and is weak. Color, dark reddish-brown.

The *maxillae* are wider and rounded at the extremity, parallel, as long as the anterior coxae. Color, like falces.

The *labium* is a little more than half as long as the maxillae, nearly as wide as long, oval, rounded at extremity. Color, like maxillae and falces.

The *sternum* is heart-shaped, truncated in front, about  $^{1}/_{4}$  longer than wide. Its color is light yellowish-brown. The anterior coxae are separated by the width of the labium and maxillae at the base.

The relative length of the *legs* is I, 2, 4, 3; the first is the stoutest, the second next; the coxa and trochanter of the first are visible from above. There are femoral, tibial and metatarsal spines on the four pairs; those on the tibiae of the first and second are in a single row; on the tibiae of the third and fourth they are irregular; on the metatarsi of the third and fourth they are found only in circles at the extremities of the articulations. The color of the first and second pairs is dark brown; of the third and fourth light brown; all are tipped with black.

The *abdomen* is slender and pointed; its color is light brown; on each side is a wavy white band, extending from the base to back of the middle; on the dorsal surface are four white spots, two, longitudinally elongated, just behind the middle, and two

others external to these, transversely elongated, and nearer the spinnerets; from the base, two slender black lines extend backward to about the middle of the dorsum, where they unite and merge into a series of small black chevrons, which extend nearly to the spinnerets.

The *venter* is light brown.

Total length, 6.8 mm. Width of abdomen, 2.2 mm. Length of cephalothorax, 3.0 mm. Width of cephalothorax, 2.0 mm. Height of cephalothorax, 1.5 mm.

In general appearance the  $\circlearrowleft$  resembles the  $\circlearrowleft$ , but the color is decidedly lighter, particularly that of the cephalothorax and the anterior pairs of legs. The labium is relatively a little longer, and the relative length of the legs is 4, 1, 2, 3. Femoral spines are found on the four pairs, and very weak spines in circles at the extremities of the metatarsi of the third and fourth.

Habitat. Madagascar.

# Ergane madagascarienis sp. nov.

♂. Total length, 6.5 mm. Width of abdomen, 1.8 mm. Length of cephalothorax, 3.0 mm. Width of cephalothorax, 2.0 mm. Height of cephalothorax, 1.9 mm.

Legs.	Fem.	Pat.	Tib.	Metat.	Tar.	Total.
1.	2.2	1.3	1.9	1.0	8.0	7.2
2.	1.7	8.0	1.0	1.0	0.7	5.2
3.	1.9	8.0	1.1	1.2	0.9	5.9
4.	1.7	<mark>0</mark> .6	<mark>0</mark> .9	1.0	<b>0</b> .7	4.9

The *cephalothorax* is high,  $^{1}/_{3}$  longer than wide, with nearly parallel sides. The cephalic part occupies more than  $^{1}/_{3}$  of the cephalothorax, is plane, slightly inclined, and has nearly vertical sides. The thoracic part is a little convex with slightly rounded sides, and falls abruptly behind. There is a slight depression between the cephalic and thoracic parts. The color is black, or very dark brown.

The quadrangle of the *eyes* is nearly  $^1/_3$  wider than long, and equally wide in front and behind. The anterior row is visible from above and is straight. The lateral are placed slightly further back than the middle eyes, are a little more than half as large, and are slightly separated from them, while the middle eyes are touching. Both lateral and middle eyes are large. The eyes of the second row are half way between the lateral and dorsal eyes. The dorsal eyes are as large as the lateral, are placed below the margin of the cephalothorax, and are further from each other than from the lateral borders. There is no frons.

The *clypeus* is vertical, and a little more than  $^{1}/_{3}$  as wide as the large middle eyes.

The *falces* are robust, wider at the extremity, long, inclined forward, parallel; dark reddish-brown in color. The fang is  $^2/_3$  as long as the falx.

The *maxillae* are narrow at base, wider at extremity, rounded, with a projection at the outer edge, parallel or slightly converging. Color, dark brown.

The *labium* is a little more than  $^{1}/_{2}$  as long as the maxillae, slightly narrower and rounded at the extremity. Color, like maxillae.

The *sternum* is nearly round, truncated in front. Color, black. The anterior coxae are separated by more than the width of the labium.

The relative length of the *legs* is 1, 3, 2, 4; the first pair is much the stoutest. There are femoral, tibial and metatarsal spines on the four pairs, which are strong on the first, and grow weaker on the second, third and fourth successively; those on the metatarsi of the fourth extend to the base. The first leg is black, or dark brown; the others are pale yellowish-brown.

The *abdomen* is slender and pointed, and is covered with metallic scales which give it a purplish. iridescent appearance.

The *venter* is black.

Habitat. Madagascar.

# Philaeus vinsonii sp. nov.

♂. Total length, 7.8 mm. Width of abdomen, 2.5 mm. Length of cephalothorax, 3.8 mm. Width of cephalothorax, 3.0 mm. Height of cephalothorax, 1.9 mm.

Legs.	Fem.	Pat.	Tib.	Metat.	Tar.	Total.
1.	2.2	1.5	2.0	1.1	1. <mark>0</mark>	7.8
2.	2.0	1.1	1.5	1.0	<b>0</b> .9	6.5
3.	2.2	8.0	1.5	1.2	0.9	6.6
4.	2.0	<b>0</b> .9	1.5	1.4	0.9	6.7

The *cephalothorax* is high and convex, and dilated behind the middle. It is about  $^1/_4$  longer than wide. The cephalic part occupies a little more than  $^2/_5$  of its length, is inclined forward, and is separated by a slight depression from the thoracic part. The thoracic part has its sides widely rounded, and slants steeply to the posterior margin. The color of the cephalothorax is brown, darker in the thoracic part, with a narrow black line around the lower border, and a light yellowish central spot behind the dorsal eyes.

The quadrangle of the eyes is about  $^1/_4$  wider than long, and is slightly wider behind than in front. The anterior row is slightly curved; the lateral are placed a little further back than the middle eyes, and are half as large. The middle eyes are barely separated, and the lateral are distant from the middle eyes by a space equaling less than half their own diameter. The eyes of the second row are half way between the lateral and dorsal eyes. The dorsal eyes are a little smaller than the lateral, and are placed on the margin of the cephalothorax. They are further from each other than from the lateral borders. The frons is  $^1/_6$  as wide as the anterior middle eyes.

The *clypeus* is  $^{1}/_{3}$  as wide as the middle eyes, and is a little inclined backward; it has a few hairs.

The *falces* are stout, long, diverging, inclined forward; dark reddish-brown in color; the fang is as long as the falx.

The *maxillae* are narrow at the base, wider and truncated at the extremity, nearly parallel; brown in color.

The *labium* is more than half as long as maxillae; wide at the base; pointed at the extremity; brown.

The *sternum* is oval, truncated in front; more than half as wide as long; light yellowish-brown in color. The anterior coxae are separated by the width of the labium.

The relative length of the *legs* is 1, 4, 3, 2; the first and second pairs are the stoutest. There are numerous strong spines on the femoral, patellary, tibial and metatarsal joints of the four pairs. In color the legs are all brown, growing lighter toward the tips.

The *abdomen* is brown, the posterior third being much lighter in tint than the anterior portion. A wide central longitudinal band of the lighter color passes forward to the anterior margin.

The *venter* is light brown.

Habitat. Madagascar.

## *Eris praedatoria* Keys. (was *Jotus semi-ater* sp. nov., corrected by ERRATUM)

♂. Total length, 7.1 mm. Width of abdomen, 2.0 mm. Length of cephalothorax, 3.0 mm. Width of cephalothorax, 2.8 mm. Height of cephalothorax, 2.0 mm.

Legs.	Fem.	Pat.	Tib.	Metat.	Tar.	Total.
1.	2.3	1.5	2.0	1.1	<b>0</b> .9	7.8
2.	2.0	1.2	1.2	1.1	<b>0</b> .9	6.4
3.	2.3	1. <mark>0</mark>	1.2	1.3	<mark>0</mark> .9	6.7
4.	2.3	1.1	1.5	1.3	0.9	7.1

The cephalothorax is high and the dorsum is hollowed in the middle behind the dorsal eyes. It is nearly as wide as long, and the cephalic and thoracic parts are separated by a depression. The cephalic part occupies  $^1/_3$  of the cephalothorax, and has its sides a little rounded; it is plane, not inclined. The thoracic part is a little convex; its sides round out widely to the lower border; its posterior slope is rounded. The color of the cephalothorax is jet black, with a large central spot of white hairs behind the dorsal eyes.

The quadrangle of the eyes is  $^{1}/_{4}$  wider than long, and is equally wide in front and behind. The anterior row of eyes is

visible from above, and is a little curved. The lateral are placed further back than the middle eyes, and are less than half as large; the middle eyes are subtouching and the lateral are separated from them by a space equal to  $^1/_2$  their own diameter. The eyes of the second row are nearer the lateral than the dorsal eyes. The eyes of the third row are as large as the lateral eyes, and are placed on the margin of the cephalothorax; they are equally distant from each other and from the lateral borders. There is no frons. There are a few long stiff black hairs in the eye region.

The *clypeus* is vertical, less than half as wide as the large middle eyes.

The *falces* are stout and moderately long, inclined forward, and diverging; their color is glossy black. The fang is nearly as long as the falx, and has a tooth near the tip.

The *maxillae* are a little wider and rounded at the tip, and are nearly parallel. They are black, with the inner edges white.

The *labium* is more than half as long as the maxillae; it is rounded at base, narrower at extremity. It is black, except the tip, which is white.

The *sternum* is wide and rounded behind, a little narrower and truncated in front; it is but little longer than wide. Its color is black. The anterior coxae are separated by the width of the labium.

The relative length of the *legs* is 1, 4, 3, 2; the first and second pairs are the stoutest. There are numerous strong spines on the femoral, tibial and metatarsal joints of the four pairs, those on the metatarsi of the fourth extending to the base; and the patellae of the third and fourth pairs have each one spine. The color of the legs is black, excepting the tarsi, which are white.

The *abdomen* is black; there is a large spot of white hairs at the base, and there are two short white transverse bands on each side, one in front of and one behind the middle.

The venter is black.

Habitat. Madagascar.

From the collection of Graf E. von Keyserling.

# Bavia albo-lineata sp. nov.

♂. Total length, 7.4 mm. Width of abdomen, 2.0 mm. Length of cephalothorax, 3.2 mm. Width of cephalothorax, 2.7 mm. Height of cephalothorax, 2.1 mm.

Legs.	Fem.	Pat.	Tib.	Metat.	Tar.	Total.
1.	1.8	1.5	2.0	<b>0</b> .9	<b>0.8</b>	7. <mark>0</mark>
2.	1.8	1.3	1.5	1.0	<mark>0</mark> .6	6.2
3.	2.2	1.3	1.2	1.0	<b>0</b> .9	6.6
4.	1.9	<b>0</b> .9	1.4	1.2	<b>0</b> .9	6.3

The *cephalothorax* is high; the cephalic part is  $^1/_6$  shorter than the thoracic; it is plane and much inclined, with vertical sides, and is not limited by a depression. The thoracic part is convex, and slopes backward from the dorsal eyes; its sides are rounded. The cephalic part is brown, glabrous, with a central spot of white hairs; the eyes are situated on black spots. The thoracic part is darker brown, pubescent, also with a central white spot. A band of white hairs, on each side, passes from the anterior lateral eye to the posterior margin; below these bands the sides are dark brown.

The quadrangle of the *eyes* is wider than long, and equally wide in front and behind. The anterior row is straight; the lateral are placed a little further back than the middle eyes, and are  $^{1}/_{2}$  as large; they are very slightly separated from the middle eyes, which are touching. This row is visible when looked at from above. The eyes of the second row are half way between the dorsal and lateral eyes. The dorsal eyes are as large as the lateral, are placed on the margin of the cephalothorax, and are equally distant from each other and from the lateral borders. There is no frons.

The height of the *clypeus* is equal to  $^{1}/_{5}$  the diameter of the large middle eyes; in direction, it is vertical.

The *falces* are stout, long, inclined forward, diverging; the fang, which has a slight bend in the middle, is nearly as long as the falx.

The *maxillae* are narrow at base, wider and rounded at the extremity, nearly parallel. Color, light brown.

The *labium* is nearly  $^{1}/_{2}$  as long as maxillae, as wide as long, gently rounded at extremity. Color, brown.

The *sternum* is wide, oval, truncated in front, nearly as wide as long. Its color is light brown. The anterior coxae are separated by the width of the labium.

The relative length of the *legs* is I, 3,  $\overline{4}$ ,  $\overline{2}$ ; the first pair is the most robust. In color, the legs are light brown. There are spines on the four pairs, those on the metatarsi of the fourth extending to the base.

The *abdomen* is dark grey, with a few long white hairs and three white bands extending throughout its length, one central, and one on each side, these latter placed just high enough to be visible from above.

The *venter* is dark grey.

Habitat. Madagascar.

We have put this species into the genus *Bavia* with some hesitation, as it differs from it in several points. It might, perhaps, go as well into *Maevia* as *Bavia*.

# Phyale tamatavi Vinson.

Syn: 1863. Attus tamatavi Vinson, Aranéides des iles de La Reunion, Maurice et Madagascar—p. 62.
1861. Phyale tamatavi Simon, Histoire Naturelle den Araignées—p. 315.

Total length, 8.9 mm. Width of abdomen, 3.0 mm. Length of cephalothorax, 3.2 mm. Width of cephalothorax, 2.5 mm. Height of cephalothorax, 1.5 mm.

Legs.	Fem.	Pat.	Tib.	Metat.	Tar.	Total.
1.	1.7	1.2	1.5	<mark>0</mark> .9	<mark>0</mark> .6	5.9
2.	1.5	<b>0</b> .9	1.0	<b>8.0</b>	<b>0</b> .5	4.7
3.	2.1	1. <mark>0</mark>	1.2	1.2	0.7	6.2
4.	2.0	<mark>0</mark> .9	1.4	1.3	<b>0.8</b>	6.4

The *cephalothorax* is rather high at the dorsal eyes, much lower in front. It is about  $^{1}/_{4}$  longer than wide. It it widest in the

middle, the thoracic part being dilated. The cephalic and thoracic parts are separated by a transverse depression. The cephalic part occupies  $^2/_5$  of the cephalothorax. It is plane and inclined, with rounded sides. The thoracic part is slightly convex; its sides round out widely toward the lower border; it slants rather steeply behind to the posterior margin. In color, the thoracic part and sides are yellowish-brown, with a good deal of short white down. From a spot behind the dorsal eyes several white rays on each side extend forward onto the anterior sides. The ocular region is black, also with white down. In fresh specimens it may be that the down entirely covers the cephalothorax.

The quadrangle of the *eyes* is  $^1/_4$  wider than long, and is a little wider in front than behind. The anterior row is visible from above, and is curved, a straight line across the tops of the middle eyes cutting the lateral eyes above the middle. The lateral are placed further back than the middle eyes, are less than half as large, and are separated from them by more than half their diameter; the middle eyes are sub-touching. The eyes of the second row are nearer the lateral than the dorsal eyes. The dorsal eyes are as large as the lateral, and are on the upper margin of the cephalothorax, although this row of eyes is not so wide as the cephalothorax below; they are equally distant from each other and from the lateral borders. There is no frons.

The *clypeus* is vertical, with white hairs, and is about  $^{1}/_{4}$  as wide as the large middle eyes.

The *falces* are moderately robust, vertical; a little longer than the face, and parallel. Their color is yellowish-brown. The fang is small and weak.

The *maxillae* are wider, truncated at the extremity and parallel. Color, yellowish-brown.

The *labium* is more than half as long as the maxillae, rounded at the base, slightly truncated at the extremity. Color, yellowish-brown.

The *sternum* is rounded behind, narrower and truncated in front; it is about twice as long as wide; color, yellowish-brown. The anterior coxae are separated by the width of the labium.

The relative length of the *legs* is 4, 3, I, 2; the first and second pairs are the stoutest. There are femoral, tibial and metatarsal spines on the four pairs, those on the metatarsi of the fourth extending to the base; the patellae of the third and fourth pairs are also spined. In color the legs are yellowish-brown, tipped with black.

The *abdomen* is covered with fine golden down, and has four transverse white bands, curved forward. These bands have their edges outlined with brown. The first three are long and extend on to the sides; the fourth, near the spinnerets, is short.

The venter is light brown, with two fine, dark, longitudinal lines.

Habitat. Madagascar.

From the collection of Mr. Nicolas Pike, of Brooklyn, New York.

### **EXPLANATION OF PLATE I.**

- <sup>1</sup> Fig. 1. *Simonella americana*, face and falces; 1a, dorsal view of eyes; 1b, palpus; 1c, profile.
  - Fig. 2. *Ganesa workmanii*, profile; 2a, palpus; 2b, epigynum; 2c, face and falces; 2d, dorsal new of male.
  - Fig. 3. *Homalattus insularis*; epigynum; 3a, palpus of male.
  - Fig. 4. *Icius cornutus*, palpus; 4a, maxillae, falces, and horns, from below.
  - Fig. 5. *Astia ornata*, palpus of male; 5a, sternum of male; 5b, epigynum.
  - Fig. 6. *Ergane madagascariensis*, palpus.
  - Fig. 7. *Philaeus vinsonii*, palpus; 7a, falces and maxillae.
  - Fig. 8. *Eris praedatoria*, palpus. (was *Jotus semi-ater*, corrected by ERRATUM)
  - Fig. 9. Bavia albo-lineata, palpus.
  - Fig. 10. Phyale tamatavi, epigynum.

<sup>&</sup>lt;sup>1</sup> We are indebted to Mr. Rudolph Haessler for the drawings of figures 1 and 2. For the other drawings to Mr. Fred Heath.

