SPIDERS OF THE SUB-FAMILY LYSSOMANÆ.

BY

G. W. AND E. G. PECKHAM AND WM. H. WHEELER.
INTRODUCTION.*

Up to the present time there have been formed in the sub-family Lyssomanæ, six genera, in the following order of time:

1844. Lyssomanes Hentz.
1869. Asamonea Cambridge.
1877. Evenus † Simon, Athamas Cambridge.
1885. Simonella Peckham.

Some time ago M. Eugén Simon, with great generosity, placed a number of his unpublished species at our disposal; we have also an undescribed species of Lyssomanes from a collection of Attidaæ belonging to the Berlin Museum, which was loaned to us through the courtesy of Dr. Ferd. Karsch; these additions to our own collections have enabled us to add seventeen new species to the thirteen already known in this sub-family.

We wish to express our gratitude to Dr. L. Taczanowski for specimens of all of his species of Jelskia, and to the Rev. O. F. Cambridge for a specimen of Athamas whitmeri.

We have endeavored to separate the species into natural groups and to define the groups as closely as possible. The genus Jelskia we have included as a sub-genus under Lyssomanes, giving the new sub-generic name Maroussa to the other species of the genus. The sub-divisions of Maroussa and Jelskia are merely for practical convenience.

It seems probable that many of the spiders of the Lyssomanii group are adorned, in life, with delicate and brilliant colors which disappear in alcoholic specimens. This we know to be the case with Lyssomanes viridis which is in reality of a tender grass-green color but which appears in collections to be of the light yellowish tint which is common to many related species as known to us. The only way to define spiders of this group satisfactorily is by their anatomical proportions and by their epigynes and palpi, which should always be referred to in determining species.

Our measurements have been made in accordance with the following rules:

To determine the length of the cephalothorax, measure from the anterior edge of the eyes of the second row to the posterior edge of the thorax.

To determine the length of the cephalic part (or of the quadrangle of

---

* The plates for this article were contributed by the authors.
† Afterwards changed to Epeus Peckham.
eyes), measure from the anterior edge of the eyes of the second row to the posterior edge of the eyes of the fourth row.

Where the expression "width of the quadrangle of the eyes" is used, the greatest width is always meant.

The position of the eyes of the third row is determined by measuring from the posterior edge of the eyes of the second, and the anterior edge of the eyes of the fourth row.

**DISTRIBUTION OF THE LYSSOMANII.**

The distribution of the species of Lyssomanii presents some interesting facts. The genus *Asamonea* falls very naturally into two divisions. The two species constituting the first division, *A. gracilis* and *A. fluva*, are confined to South America; the four species forming the second division are restricted to Southern Asia and South Africa. At first sight it would seem well to have formed two genera, allotting to each the *Asamonea* of a hemisphere. Careful study of the species, however, has convinced us that such a proceeding would have been unadvisable, as the morphological characteristics of either group could not be raised to generic importance.

All ten species of Lyssomanes belonging to the sub-genus *Jelskia* are confined to Central and South America. The sub-genus *Maroussa* resembles *Asamonea* in that its species are divided between two hemispheres. One species only, *M. modestus*, is reported from the old world, occurring in Madagascar; of the remaining seven new world forms, five occur in South America, one in the island of San Domingo and one in the southern states of the Union.

Regarded as an isolated fact, this distribution of the members of a genus over the tropics of two hemispheres seems anomalous. But analogous cases in the distribution of other organisms are by no means rare. Among plants especially such cases are common. Among animals we may cite the case mentioned by Wallace of the four species of *Megacephala* (a genus of the Cicindelidæ, or tiger beetle family) two of which occur in Africa and two in South America. In like manner four species of another genus, *Perídexia*, of the same family, are equally divided between South America and Madagascar. Then again when we consider the great antiquity of the existing genera of spiders, we can see nothing difficult of explanation in the wide and discontinuous distribution of the *Asamonea* and *Maroussa*. We have only another instance confirmatory of the truth of Wallace's remarks that "Insects exhibit in a very marked degree in their actual distribution the influence both of very ancient and very modern conditions of the earth's surface. The effects of the ancient geographical features of the earth are to be traced in the large number of cases of discontinuous and widely scattered groups which we meet with in almost every family, and which, to some extent, obscure the broader features of distribution due to the period during which the barriers which divide the primary regions have continued to exist."*  

---

The absence of Lyssomanii in Europe and northern Africa would seem to indicate that the ancestors of this group of spiders during the miocene tertiary ranged through northern Asia and what is now British America. The connection existing between Alaska and northeastern Asia, as shown by the flora of that epoch, would present no obstacle to a group of spiders originating on one of the continents passing over into the other. The advent of the Glacial Epoch, we may suppose, drove the Lyssomanii, which even then had separated into two genera corresponding to our Asamosa and Lyssomanes, members of both of which occurred on either continent, southward, on the one hand through Asia and on the other hand through North America. The distance which the species are driven is considerable, as none seem to have remained on what is now the Asiatic Continent, but all passed over to Ceylon and the neighboring Madagascar, whence some probably wandered to South Africa. Similarly in North America the species were forced southward to Central America, whence some migrated to South America. Here the conditions were most favorable to the development of species as the majority of existing forms is reported from this continent. It is still doubtful whether or not the single species in the island of San Domingo and the single species in the southern United States are to be regarded as forms which were left behind in the wholesale migration of the group or whether they are species which have migrated northward from South America since the close of the Glacial Epoch. We incline to the latter supposition, since it is more probable that a limited number of species would undertake a northward migration than that such a limited number would be spared under conditions which were fatal to the existence of a whole group in the eastern hemisphere. It is, of course, also possible that the Central American species have migrated northward since the close of the Glacial Epoch.

It is interesting to note a somewhat similar distribution in another family of spiders, the Araneidae. This family includes four genera; one of these is extinct, and is represented by fossils in the Baltic amber of the Tertiary period; of the three genera that are represented by living species; one is found in Madagascar, one in western Africa, and one in the southern part of South America.*

FAMILY ATTIDÆ.

SUB-FAMILY LYSSOMANÆ.

Eyes in four transverse rows.

Group I. Lyssomanii. Cephalothorax low or moderately high, rather elongated, longer than wide.

Group II. Athamii. Cephalothorax high, short, quadrate.

Group III. Simonelli. Cephalothorax nodose; spiders ant-like in form.

Spiders of the Sub-Family Lyssomanæ.

GROUP I. LYSSOMANIL.

Quadrangle of eyes never more than one-third wider than long .......... *Lyssomanes.*

Quadrangle of eyes at least twice as wide as long ........................................... *Asamonea.*

GENUS LYSSOMANES HENTZ.

Cephalothorax moderately high, sloping downward behind and on the sides from the caput; about one-third longer than wide. General form oval. Caput occupying one-half or nearly one-half of cephalothorax.

Eyes arranged in four transverse rows of two each. Eyes of first row close together, from two to three times as large as those of second row, occupying the entire face. Second row just behind first and about as wide (sometimes a little wider or narrower). Third row composed of two very small eyes, plainly nearer the second than the fourth row; narrower than second and wider than fourth row. Eyes of fourth row about as large as those of the second and nearer together; quadrangle formed by second and fourth rows as wide as long or from one-fourth to one-third wider.

Sternum somewhat heart shaped; length and width about equal.

Coxae separated by the width of the labium and part or all of the maxillæ. Maxillæ slightly enlarged at extremities.

Labium about as wide as long or a little longer than wide.

Abdomen long, slender, tapering, spinnerets short.

Legs usually long and slender. Relative length variable. Long and slender femoral, tibial, metatarsal and usually patellary spines on the four pairs.

Sub-genus *Maroussa.* Second row of eyes always wider than first. Eyes of second row frequently only about one-third as large as those of first.

Sub-genus *Jelskia.* Second row of eyes not wider than first (equally wide or a little narrower). Eyes of second row relatively larger than in *Maroussa* and often placed directly above those of first row, looking forward.

SUB-GENUS MAROUSSA.†

A. Quadrangle of eyes not more than one-fourth wider than long.

Femur of the first as long as femur and patella of the second; metatarsus of the first bent ......................................................... *antillanus,* (San Domingo).

Femur of the first scarcely longer than femur of the second; metatarsus of the first not bent ......................................................... *unicolor,* (Cera).

*Russian proper name.

† All the species of the sub-genus *Maroussa* have the leg formula 1 2 3 4, excepting mo. destus, Madagascar (4 1 3 2), and *antillanus,* San Domingo (1 4 3 2); while in the sub-genus *Jelskia* the formula 1 2 3 4 occurs in only three species, *amazonicus,* *nigropictus* and *landus.*
LYSSOMANES ANTILLANUS N. SP.

Plate XI, figure 1.

3. Length of cephalothorax 2.4 mm; of abdomen, 4 mm.
Legs 12, 5, 9, 8, 11, 7, 4.

Cephalic and thoracic parts equally long. Quadrangle of eyes one-fourth wider than long. Eyes of first row nearly three times as large as those of the second. Clypeus one-fifth as high as anterior eyes. Falces rounded, horizontal, diverging, four or five times as long as face; fang as long as falx. Maxillae rounded and a little enlarged at their extremities. Labium a little longer than wide, a little narrower, and blunt at the tip, one-half as long as maxillae. Legs 1, 2, 3, 4; femur of the first as long as femur with patella of the second; metatarsus of the first elongated and curved.

Coloration (dry): Upper surface of cephalothorax light-yellowish brown, with some bright red hairs on the eye region, and a dark brown central band from the fourth row of eyes to the posterior margin. Clypeus bright red with a whitish line above the insertion of the falces. Abdomen above dark brown with a white band around base and sides. Falces dark brown, fang black. Legs, palpi, mouthparts and coxae light brown. Sternum and venter drab, with short white hairs.

Habitat: San Domingo.

From the collection of M. Simon.

LYSSOMANES UNICOLOR TACZ. 1874.

Plate XI, figure 2; plate XII, figure 21.


3. Length of cephalothorax 2.7 mm; of abdomen 4.2 mm.
Legs 12, 10.9, 10.8, 10.7.

2. Length of cephalothorax 3 mm; of abdomen 5.2 mm.
Legs 12, 11, 10.5, 10.5.

Cephalic and thoracic parts equally long. Quadrangle of eyes scarcely one-fourth wider than long. Eyes of first row but little more than twice as large as those of second. Second row wider in 3 than in 2, a little wider than the first row in both sexes. Clypeus about one-third as high as anterior eyes. Falces weak, vertical, parallel, about as long as face; fang weak. Maxillae rounded and a little enlarged at their extremities. Labium about as wide as long, blunt,
Spiders of the Sub-Family Lyssomanæ.

(3) one-half, (2) a little more than one-half as long as maxillæ. Coxæ of the first not so widely separated as usual, i. e., by scarcely more than the width of the labium. Legs 1, 2, 3, 4; femur of the first but little longer than femur of the second; metatarsus of the first not curved.

Coloration (dry): (3) Upper surface of cephalothorax pale yellow; eye-region nearly covered with bright red hairs; white hairs on the clypeus, in circles around the anterior eyes, and in patches outside the second and third rows of eyes. Upper surface of abdomen pale yellow with two divergent brown bands from base to apex, which are enlarged at three points to form as many pairs of opposed dots, one pair at each end, and one in the middle. Legs pale yellow with black spines and tips and dark brown bands at the joints. Palpus pale; bulb brown with pale tarsus projecting beyond. Falaces and under surface pale yellow.

The same description answers for the female, excepting that the bands and dots on the abdomen are indistinct, and that there are no brown bands on the legs.

Habitat: French Guiana, Peru.

By the relatively larger eyes of the second row, and the relatively greater length of the quadrangle of the eyes this species approaches the sub-genus Jelskia.

B. Quadrangle of eyes one-third wider than long.

**MALES.**

1. Femur of the first as long as femur and patella of the second.  
   - Femur of the first not so long as femur and patella of the second  
   - Tarsus of palpus less than twice as long as tibia  
   - Tarsus of palpus more than twice as long as tibia  
   - No fringe of hairs on tibia of the first  
   - Tibia of the first with fringe of hairs  
   - Tibia of the first with fringe of hairs on proximal half of upper side and on distal half of under side; tibia of the second with fringe of hairs throughout its length on under side;  
   - Tibia of the first with fringe of hairs on under side nearly throughout its length; no fringe on tibia of the second  

   (South United States).
   - bi-tentaculatus  
   - placidus  
   - miniacus  
   - modestus  

**FEMALES.**

1. Legs 4 1 3 2.  
   - Legs 1 2 3 4  
   - Eyes of first row three times as large as those of second; falaces twice as long as face, moderately stout  
   - Eyes of first row only twice as large as those of second; falaces as long as face, weak  

   (South United States).
   - viridis  
   - modestus  
   - tridens.
LYSSOMANES VIRIDIS WALCK. 1837.

Plate XI, figure 3. Plate XII, figures 6, 6a, 6b.


§. Length of cephalothorax 2.5 mm; of abdomen 4.5 mm.
Legs 12, 9.5, 8.5, 8.2. Falces 2.3 mm.

♀. Length of cephalothorax 3 mm; of abdomen 5.3 mm.
Legs 10, 9, 8, 7.8. Falces 1 mm.

Cephalic part not quite so long as thoracic. Quadrangle of eyes one-third wider than long. Eyes of first row three times as large as those of second row. Clypeus one-fourth as high as anterior eyes. Falces (§) horizontal, diverging, rounded, four times as long as face; on the distal end of each falx, on the inner edge, are two stout projections; fang as long as falx, curved. Falces (♀) rather stout, nearly vertical, twice as long as face; fang one-half as long as falx. Maxille rounded and a little enlarged at their extremities. Labium a little longer than wide, more than one-half as long as maxillae, blunt; in § narrow at the base. Legs 1, 2, 3, 4. Femur of the first (§) quite, (♀) nearly equal to femur with patella of the second. Metatarsus of the first (§) bent, with fine fringe of hairs at distal end. Spines rather long.

Coloration (under alcohol): Upper surface of cephalothorax and falces light yellow (§) with tinge of red; a short dark median longitudinal line on anterior thoracic part. Sternum, coxae, mouthparts and upper and under surface of abdomen pale yellow. Legs pale with slightly darker spines and black tips, (§) tibia of the first darker toward extremity with some short dark hairs; metatarsus of the first brown at distal end with fringe of short brown hairs.

Habitat: Southern United States.

Hentz describes this species as follows: "Tender grass-green; cephalothorax with some orange-colored hairs near the eyes, and a little black line on the disk; abdomen with six or eight black dots, sometimes wanting." The green color evidently fades to a light yellow in alcohol. Hentz probably never had a mature male, as he makes no reference to the long horizontal falces.
LYSSOMANES BI-TÆNIATUS N. SP.

Plate XI, figure 4.

δ. Length of cephalothorax 2.5 mm; of abdomen 4 mm.
Legs 11, 5, 9, 4, 9, 8, 8. Falces 1.5 mm.

Cephalic and thoracic parts equally long. Quadrangle of eyes nearly one-third wider than long. Eyes of first row about three times as large as those of second row. Clypeus one-fifth as high as anterior eyes. Falces horizontal, diverging, three times as long as face; fang bent, as long as falx. On the front face of each falx, just above the insertion of the fang, are seven or eight stout hairs which form a triangle with the apex up. Maxillae rounded and a little enlarged at their extremities. Labium as wide as long, one-half as long as maxillae, truncated. Legs 1, 2, 3, 4. Femur of the first nearly as long as femur with patella of the second. Metatarsus of the first elongated, bent, with a fringe of hairs occupying distal third. Palpus with femur elongated, and patella plainly shorter than tibia. Tibia with a row of stout hairs on upper and outer side of distal half.

Coloration (under alcohol): Upper surface of cephalothorax pale yellow with a dark line around lower margin, and a central longitudinal dark line on thoracic part. Upper surface of abdomen pale yellow with two parallel longitudinal brown bands throughout its length, on which are three pairs of spots, formed by enlargements of the bands. Falces pale yellow, with an oblique band of darker reddish yellow arising at the proximal end, above, and passing downward and inward to the inner side of the insertion of the fang. Legs pale yellow with dark bands at joints, brown spines, and black tips. Palpus and entire under surface, light yellow.

Habitat: Venezuela. (Caracas).

From the collection of M. Simon.

LYSSOMANES PLACIDUS N. SP.

Plate XI, figure 5.

δ. Length of cephalothorax 2.8 mm; of abdomen 4 mm.
Legs 12, 9, 3, 9, 8, 8.

Cephalic and thoracic parts equally long. Quadrangle of eyes one-third wider than long. Eyes of first row more than twice as large as those of second. Clypeus nearly one-half as high as anterior eyes. Falces weak, vertical, parallel, as long as face; fang weak. Maxillae truncated and a little enlarged at their extremities, cut obliquely on their inner edges. Labium longer than wide, rounded, slightly more than one-half as long as maxillae. Legs 1, 2, 3, 4; femur of the first
shorter than femur with patella of the second; metatarsus of the first long, slightly bent; tarsus of the first with fringe of hairs. The tibial and metatarsal spines are long and slender, and are arranged in inferior rows.

**Coloration** (dry): Upper surface of cephalothorax light brown with a dark line around the lower margin; eye-region and clypeus pale, covered with white and red hairs. Upper surface of abdomen blackish, with a white central longitudinal band extending through two-thirds of its length; this band suddenly contracts a little behind its middle point, its posterior end being thus made narrower than its anterior portion. The posterior end of the venter is blackish, the color being continuous with that of the upper surface, and extending forward in a gradually narrowing band, to about the middle; on either side of this band, and at the anterior end, the venter is white. Legs and palpi pale with dark bands and black tips, the first and second pairs of legs being darker than the third and fourth; tarsus of the first black with a fringe of black hair. Other parts all pale.

**Habitat**: Mexico.

**LYSSOMANES MINIACEUS** N. Sp.

Plate XI, figure 8.

5. Length of cephalothorax 3 mm; of abdomen 4 mm.

Legs 10.8, 8.8, 8, 7.8.

**Cephalic and thoracic parts equally long.** Quadrangle of eyes one-third wider than long. Eyes of the first row twice as large as those of second. Clypeus nearly one-half as high as anterior eyes. Falces weak, nearly vertical, about as long as face; fang short. Maxillae rounded and a very little enlarged at their extremities, excavated on their inner sides for the labium. Labium a very little longer than wide, more than one-half as long as maxilla, widest in the middle, blunt at tip. Legs stouter than is usual in this genus, 1, 2, 3, 4. Femur of the first but little longer than femur of the second. Fringes of hair on upper and under sides of tibia of the first, on under side of tibia of the second, and on outer distal half of femur of palpus.

**Coloration** (dry): Upper surface of cephalothorax pale brown with a dark rim around the lower margin. Eye region covered with bright yellowish red hairs, which surround the anterior eyes. Clypeus light brown, with lower margin black. Upper surface of abdomen dark drab, with a wide, pale central band extending through half of its length; under surface dark brown with a curved, white, longitudinal band on each side. Falces light reddish. Sternum and coxae light red, coxae of the first, deeper in color than the others. Mouthparts brown, tipped with pale. Legs of first pair red; of second, third and fourth pairs red mingled with white, the fourth pair being almost en-
Spiders of the Sub-Family Lyssomanæ.

tirely white. Palpus red, excepting proximal half of femur which is pale. Tips of legs, spines and fringes of hair on legs and palpi, black.

Habitat: South America (near Rio Janiero).

From the collection of M. Simon.

LYSSOMANES AUSTERUS N. Sp.

Plate XI, figure 7. Plate XII, figure 17.

♂. Length of cephalothorax 2.7 mm., of abdomen 4.5 mm.

Legs 11.5, 9.5, 9.3, 9.3.

♀. Length of cephalothorax 2.8 mm; of abdomen 4 mm.

Legs 9, 7.8, 7.3, 6.9.

Cephalic part not quite so long as thoracic. Quadrangle of eyes one-third wider than long. Eyes of first row three times as large as those of second. Clypeus one-third as high as anterior eyes, (♂) projecting forward over the falces. Falces nearly vertical, parallel, as long as face, (♂) moderately stout, (♀) weak. Maxillæ rounded and a little enlarged at their extremities. Labium longer than wide, rounded, narrowing slightly toward its base, and a little more than one-half as long as the maxillæ. Coxa of the first separated (♀) by a little more than width of labium, (♂) more widely. Legs 1, 2, 3, 4; femur of the first nearly as long as femur with patella of the second; tibia of the first with a fringe of stout hairs.

Coloration (dry): ♂. Upper surface of cephalothorax light brown, pale on the anterior side; eye-region with bright red hairs. Abdomen blackish with a pale central longitudinal band above, and two white longitudinal lines on the venter. Falces brown. Sternum and coxae pale. Mouthparts dark tipped with white. First and second pairs of legs with first three joints dark brown and the others pale; third and fourth pairs dark brown with pale rings; tarsi tipped with black. Palpus brown with proximal end of femur pale. (♀) light yellow; eye region covered with bright red hairs. Spines and tips of legs black.

Habitat: South America (near Rio Janeiro.)

From the collection of M. Simon.

LYSSOMANES MODESTUS N. Sp.

Plate XII, figure 19.

♀. Length of cephalothorax 2 mm; of abdomen 3.3 mm.

Legs 7, 6.5, 6.8, 8.

Cephalic and thoracic parts equally long. Quadrangle of eyes one-third wider than long. Eyes of first row a little more than twice as large as those of second. Clypeus one-half as high as anterior eyes. Falces-
weak, vertical; parallel, scarcely as long as face; fang weak. Maxillae
rounded and a little enlarged at their extremities. Labium as wide
as long, rounded, almost one-half as long as maxillae. Coxae of the
first separated by but little more than the width of the labium. Legs
4, 1, 3, 2; femur of the first scarcely longer than femur of the second.
Coloration (dry): Upper surface of cephalothorax, light yellow; eye-
region surrounded above by a band of bright-red hairs covered in
the middle with white hairs. Clypeus with thick white hairs. Abdomen
above light brown or yellow, with silvery white hairs; two parallel
longitudinal bands of red hairs extend throughout its length, and
these are connected by transverse bands of red hairs in three places,
at the anterior and posterior ends, and in the middle. Legs light
yellow with brown spines and black tips. Other parts all light
yellow.

Most of our specimens have all the hair rubbed off from the abdomen,
which then presents a plain light colored surface with a few dark dots.

Habitat: Madagascar.

LYSSOMANES TRISTIS N. Sp.

Plate XII, figure 12.

2. Length of cephalothorax 2.5 mm; of abdomen 5 mm.
Legs 8, 5, 7.4, 7, 5.
Cephalic part not quite so long as thoracic. Quadrangle of eyes one-third
wider than long. Eyes of first row twice as large as those of second.
Clypeus a little less than one-half as high as anterior eyes. Falces
weak, vertical, about as long as face; fang short. Maxillae rounded,
and a little enlarged at their extremities, excavated on their inner
sides for the labium. Labium about as wide as long, blunt, and nar-
rowing a little at the tip, and a little more than one-half as long as
maxillae. Legs 1, 2, 3, 4; femur of the first shorter than femur with
patella of the second.
Coloration (dry): Upper surface of cephalothorax yellowish-brown; eye-
region and clypeus covered with snowy white hairs. Abdomen,
above and beneath, very light brown, probably covered with white
hairs, which in the specimens which we have examined are almost
entirely rubbed off. Legs pale, darkening somewhat toward the
proximal ends, with brown tips, and light colored spines. Other
parts all pale.

Habitat: Brazil.

From the Berlin collection, through the courtesy of Dr. Ferd. Karsch.
Spiders of the Sub Family Lyssomanæ.

SUB-GENUS JELSKIA.

A. Quadrangle of eyes as long as wide, or barely wider than long.

MALES.

1. Tarsus of palpus five times as long as tibia ................. tenuis.
   (Brazil), 2.
2. Tarsus of palpus only twice as long as tibia ................. jemineus.
   (South America).
   nigropudus.
   (Amazon).

FEMALES.

3. Metatarsus of the first elongated and bent .................. jemineus.
   (South America).
   parallela.
   (South America).

LYSSOMANES TENUIS N. Sp.

Plate XI, figure 3.

8. Length of cephalothorax 3 mm; of abdomen 2.9.
   Legs 13, 9, 8, 10.

Cephalic part as long as thoracic. Quadrangle of eyes as long as wide.
Eyes of first row twice as large as those of second. Second row narrower than first. Clypeus one-fifth as high as anterior eyes. Falces nearly horizontal, diverging, a little longer than face; fang as long as falx. Maxillae rounded and slightly enlarged at their extremities, excavated for the labium. Labium as wide as long, one-half as long as maxilla, narrowing at base, blunt at extremity. Legs 1, 4, 5, 6; femur of the first longer than femur with patella of the second; femur, tibia and metatarsus of the first, much elongated. Legs all slender. Spines growing gradually weaker from first to fourth, being scarcely more than hairs on tibia and metatarsus of the fourth. Palpus with patella and tibia more than two-thirds as long as tarsus. Spines on palpus as follows: femur, two spines at distal end, one just behind these, and a fourth in the middle; patella, one long spine at distal end; tibia, one in the middle and one at distal end; tarsus, two spines, or long hairs, on dorsum of enlarged part, one placed behind the other.

Coloration (dry): Upper surface of cephalothorax, clypeus and abdomen black with thin, white hairs, the abdomen having a faintly indicated transverse band of a lighter shade behind the middle. Falces and palpi dark brown. Sternum, coxae and mouthparts, light brown. Legs light reddish brown, with brown spines and black tips.

Habitat: South America (near Rio Janiero.)
From the collection of M. Simon.
See remarks under Jelskia velox.
LYSSOMANES JEMINEUS N. Sp.

Plate XI, figure 9. Plate XII, figure 14.

♂. Length of cephalothorax 2.5 mm; of abdomen 5 mm.
Legs 16.8, 12, 11.4, 11.8. Falces 3 mm.
♀. Length of cephalothorax 3 mm; of abdomen 5 mm. (Legs too badly broken to be measured.)

Cephalic part not quite so long as thoracic. Quadrangle of eyes about one-fifth wider than long. Eyes of first row three times as large as those of second. Second row slightly narrower than first. Clypeus nearly one-third as high as anterior eyes. Falces (♂) stout, horizontal, three times as long as face, diverging; fang as long as falx, with a double curve; (♀) stout, nearly vertical, about twice as long as face, bulging in front, nearly parallel; fang short. Maxillae blunt, and a little enlarged at their extremities. Labium longer than wide, a little more than one-half as long as maxillae, widest in the middle. Legs 1, 2, 4, 3; (♂) femur, tibia and metatarsus of the first all much elongated, metatarsus curved; a wide fringe of hairs on each side of tibia and metatarsus of the first, less marked on tibia of the second, and much less on metatarsus of the second; (♀) metatarsus of the first long, curved, without hairs, but with longer and stouter spines than ♂. (♂) Palpus with femur as long as falx; patella but little shorter than tibia; patella and tibia two-thirds as long as tarsus; a bunch of hairs on outer side of distal half of tibia; two spines at distal end of femur and one at extremity of patella.

Coloration (under alcohol): Cephalothorax, reddish yellow; cephalic part with a band of yellowish white hairs on each side below the eyes; a large bright red spot behind the eyes of the fourth row which extends forward between them; and a red spot on the outer side of each anterior eye; eyes of third row surrounded by reddish hairs. Thoracic part with a dark brown central longitudinal band extending from just behind fourth row of eyes to posterior margin. Falces reddish yellow. Mouth parts, sternum and coxae pale yellow; abdomen above, mottled brown; sides pale yellow; venter with dark brown, median, longitudinal band. Legs pale yellow or light brown; (♂) black fringes of hair on tibiae and metatarsi of the first and second. (♂) Palpus pale yellow excepting tibia and tarsus which are brown.

Habitat: South America.

From the collection of M. Simon.

The male of this species is easily distinguished by its elongated falces, and by the double fringes of hair on the first and second pairs of legs.
LYSSOMANES NIGROPIG'TUS N. SP.

Plate XI, figure 19.

♂. Length of cephalothorax 2.8 mm; of abdomen 4 mm.
Legs 12.5, 11.5, 11.3, 10.8.

Cephalic part as long as thoracic. Quadrangle of eyes scarcely wider than long. Eyes of first row twice as large as those of second row. First and second rows equally wide. Clypeus nearly one-half as high as anterior eyes. Falces weak, parallel, vertical, as long as face; fang weak. Maxillae rounded and slightly enlarged at their extremities, excavated on their inner sides for labium. Labium longer than wide, about one-half as long as maxillae, blunt at tip, widest in the middle, and narrowing toward both ends. Coxae separated by but little more than width of labium. Legs 1, 2, 3, 4. Femur of the first scarcely longer than femur of the second. Palpus with patella and tibia three-fourths as long as tarsus. Spines on palpus as follows: femur, two on dorsum at distal end; patella, one long spine at extremity; tibia, one behind middle on inner side, and one at distal end; tarsus, two long spines on dorsum of enlarged part, placed side by side.

Coloration (under alcohol): Upper surface of cephalothorax with eye-region white, and the remainder very light brown; there is a black line around the lower margin and a central dark brown band from the fourth row of eyes to the posterior edge. Upper surface of abdomen white with four pairs of brown spots; the first pair is on the anterior face of the abdomen and is not plainly visible from above; the third pair is just behind the middle point of the dorsum; the fourth pair is just in front of the white spinnerets, and the two spots are connected by a brown band. Legs white with brown rings and spines and black tips. Palpus white with a dark line on each side of the femur, and having the bulb light brown, and some dark hairs at the extremity of the tarsus. Other parts all white.

Habitat: South America (Amazon).

From the collection of M. Simon:
The tarsus of the palpus of this species has an arrangement of the spines which is only duplicated in Jelskia velox, the palpus differing from that of this species in having no fringes of hair on the patella and tibia. It has, moreover, the first two pairs of legs more nearly equal in length than any species excepting Jelskia robusta, from which it is quickly distinguished by its much lighter color.
LYSSOMANES PARALLELUS. N. SP.

Plate XII, figure 18.

♀. Length of cephalothorax 1.9; of abdomen 3 mm. Legs 9, 7, 7, —. (Fourth leg missing.)

Cephalic part as long as thoracic. Quadrangle of eyes scarcely wider than long. Eyes of first row a little more than twice as large as those of second. Second row narrower than first. Clypeus scarcely one-fifth as high as anterior eyes. Falces moderately stout, somewhat inclined forward, diverging, as long as face. Maxilla excavated on inner sides for labium; extremities rounded, near together, but little enlarged. Labium but little longer than wide, truncated, a little more than one-half as long as labium. Legs 1, 2, 3, —; femur of the first as long as femur with patella of the second.

Coloration (dry): Eye region covered with mixed red and white hairs; upper surface of thoracic part brown, glabrous, with a pale transverse band just behind the fourth row of eyes; sides pale excepting lower margin, which is brown. Clypeus covered with white hairs. Abdomen pale with two longitudinal brown bands originating separately at the base and meeting at the apex. Falx yellowish brown with a fringe of red hairs at extremity. Mouthparts light brown. Sternum, coxae, and venter pale yellowish. Legs pale; first leg and femur of second with a dark line on each side; spines brown, tips black. Palpus pale excepting tarsus, which is light brown.

Habitat: South America.

From the collection of M. Simon.

B. Quadrangle of eyes from one-fifth to one-third wider than long.

MALES.

1. Tarsus of palpus five times as long as tibia. ........................................... velezer. (Brazil). 2
   Tarsus of palpus only twice as long as tibia. ...........................................

2. Femur of the first as long as femur and patella and one-half tibia of the second .................................................. longipes. (French Guiana). 3
   Femur of the first scarcely longer than femur of the second ...........................................


FEMALES.

1. Eyes of first row three times as large as those of second; eyes of fourth row a little smaller than those of second. .................................................. amazonicus. (Amazon).
   Eyes of first row only twice as large as those of second; eyes of fourth row as large as those of second. .................................................. blandus. (Guatemala).
LYSSOMANES VELOX  N. Sp.

Plate XI, figure 11.

3. Length of cephalothorax 2.7 mm.; of abdomen 4 mm.
Legs 14, 13.2, 15, 15.5.

Cephalic part plainly shorter than thoracic. Quadrangle of eyes a little more than one-third wider than long. Eyes of first row three times as large as those of second. First and second rows equally wide. Clypeus one-fourth as high as anterior eyes. Falces weak, nearly vertical, parallel, a little longer than the face; fang weak. Maxillae slightly enlarged beyond the middle, rather pointed, very little excavated on their inner edges. Labium a little longer than wide, one-half as long as maxillae, a little narrower, and blunt at tip. Legs long and slender, 4, 3, 1, 2; femur of the first about as long as femur of the second. Palpus with patella and tibia one-half as long as tarsus; patella and tibia with fringe of hairs on outer edge; those on tibia pointing downward and outward, those on patella on a higher plane, and pointing forward. Spines on palpus as follows: femur, one spine at distal end, another just behind this one, and a third about in the middle of the joint; patella, one spine at distal end, in the middle; tibia, one at distal end and one in the middle on the outer edge; tarsus two long spines on the dorsum of the enlarged part, placed side by side.

Coloration (under falc hol): Inter-ocular region pale, almost white; thoracic part and sides brown, growing much darker toward lower margin. Clypeus brown with a black line above falces. Abdomen, above, with sides white, and a large white spot at anterior end which contracts behind to form a long point; dorsum occupied by a wide brown band which bifurcates in front to surround the white spot. Falces brown with white extremities. Mouthparts dark brown. Coxæ of the first brown; other coxæ, and sternum, white. Veouter pale, excepting at posterior end where it is brown. Legs with upper faces of femora and tarsi pale; otherwise brown. Palpus dark brown.

Habitat: Brazil.

From the collection of M. Simon.

This species and Jelskia tenuis are easily distinguished from other members of this genus by their dark color and elongated legs; while velox is distinguished from tenuis by the hairs on the patella and tibia of the palpus, and by the position of the spines on the tarsus of the palpus, these being placed side by side in velox and one behind the other in tenuis.
LYSSOMANES LONGIPES Tacz. 1874.

Plate XI, figure 12.


5. Length of cephalothorax 2 mm; of abdomen 3.3 mm. Legs 12.4, 8.3, 7.7, 8.

Cephalic part as long as thoracic. Quadrangle of eyes one-fifth wider than long. Eyes of first row a little more than twice as large as those of second. Second row narrower than first. Clypeus about one fifth as high as anterior eyes. Falcate very weak, vertical, parallel, as long as face; fang short. Maxillae rounded, and a very little enlarged at their extremities, excavated on inner sides for labium. Labium as wide as long, one-half as long as maxillae, blunt. Legs 1, 2, 4, 3; femur of the first very long, equaling femur with patella and half tibia of the second. Palpus with patella and tibia about equal in length; patella and tibia three-fourths as long as tarsus, spines on palpus as follows: Femur, two at distal end, and one in the middle of the dorsum, all short; patella, one at extremity; tibia, one long hair in the middle, and one at extremity; tarsus, one long hair on dorsum of enlarged part.

Coloration (under alcohol): Upper surface of cephalothorax deep reddish yellow, with a narrow black line around lower edge and another on the central thoracic region; eyes, as usual, on black spots. Abdomen above, with a blackish region at the extremity in front of which is a white band; the remainder of the dorsum is blackish excepting three white spots, one elongated, large, one on the anterior central part, and two smaller, which come off obliquely from the posterior corners of the first one. Spinnerets white. Ventral surface white excepting at the extremity where it is blackish. Sternum, mouthparts, and falcate yellow. Legs light yellow with brownish spines and tips. Palpus pale with the bulb reddish brown.

When dry, the eye-region is seen to be covered with white hairs. The abdomen is also thinly covered with short white hairs.

Habitat: French Guiana.

From the collection of Dr. Taczanowski.

This species is distinguished by the great relative length of the first pair of legs, and especially by the elongation of the femora of that pair.
LYSSOMANES ROBUSTUS TACZ. 1879.

Plate XI, figure 13. Plate XII, figure 7.


Species. Length of cephalothorax 2.3 mm; of abdomen 3 mm.

Legs 9.3, 8.6, 8.8, 8.7.

Cephalic part a little shorter than thoracic. Quadrangle of eyes nearly one-fourth wider than long. Eyes of first row twice as large as those of second. Eyes of second row placed directly above those of first, forming a row equally wide, looking forward. Clypeus only a line. Falces very weak, vertical, parallel, as long as face; fang very short. Maxillae and labium unusually short. Maxillae rounded and a little enlarged at their extremities, which are quite close together, excavated on their inner sides for the labium. Labium a little longer than wide, rounded at tip, one-half as long as maxillae. Legs 1, 3, 4, 2; femur of the first not quite so long as femur of the second. Palpus with patella and tibia equally long; patella and tibia two-thirds as long as tarsus. Tibia with a stout fringe of hairs on the outer edge. Tarsus with one spine on dorsum of enlarged part behind middle.

Coloration: Upper surface of cephalothorax jet black, with two indistinct brownish spots on thoracic part, and a few long white hairs on eye-region. Clypeus black. Abdomen above, black, thinly covered with whitish hairs, and having two indistinct brownish spots behind the middle. Falces black with extremities and fangs pale yellow. Mouthparts black; sternum black with a large pale yellow spot in center. Venter pale yellowish, excepting the anterior and posterior ends, which are pale. Legs light yellow, excepting tarsus of the first, and tips of other legs which are black. Palpus black, except that part of the tarsus which projects beyond the bulb which is pale yellow.

Habitat: Peru.

From the collection of Dr. Taczanowski.

The jet black body and pale legs of this species quickly distinguish it from all members of this group.
LYSSOMANES AMAZONICUS  N. Sp.

Plate XII, figures 1, 16.

♂. Length of cephalothorax 2.5 mm; of abdomen 4.4 mm.
Legs 12, 5, 11, 10, 8, 10, 8.

♀. Length of cephalothorax 2.5 mm; of abdomen 5 mm.
Legs 11, 3, 10, 9, 4, 9, 2.

Cephalic part (♀) as long (♂) not quite so long as thoracic. Quadrangle of eyes one-fifth wider than long. Eyes of first row three times as large as those of second. Second and first rows equally wide. Clypeus one-third as high as anterior eyes. Falces rather stout, diverging, not quite vertical, one-third longer than face; on the front of each falx just above insertion of fang, is a line of three stout hairs. Maxillae rounded and a little enlarged at their extremities. Labium longer than wide, blunt and slightly narrower at extremity, and a little more than one-half as long as maxillae. Legs 1, 2, 3, 4; femur of the first not so long as femur with patella of the second. (♂) Palpus with tibia plainly longer than patella; patella and tibia plainly less than one-half as long as tarsus. Femur with two spines at distal end and one in the middle; patella with one long hair at extremity; tibia with one stout hair at distal end on inner side.

Coloration (under alcohol): ♂. Light yellow. Eye-region covered with white hairs; there is an abbreviated central longitudinal black line on the thoracic region, and a black line around the lower margin. The abdomen has two longitudinal brown bands throughout its length which are enlarged at the middle point and again at the posterior end to form two pairs of spots. The spinnerets are brown. The legs grow darker toward their extremities and are tipped with black.

♀. Yellowish white. Cephalothorax like ♂ excepting that there is no dark marginal line. Abdomen with two pairs of brown spots, and with the spinnerets pale. The color is paler and the marks less distinct than in the ♂.

Habitat: South America (Amazon).

From the collection of M. Simon.

The male of this species differs from all others in the greater relative length of the tarsus of the palpus, the tarsus being more than twice as long as the patella and tibia together.
LYSSOMANES BLANDUS N. SP.

Plate XII, figure 13.

♂. Length of cephalothorax 2.8 mm.; of abdomen 4.6 mm.

Legs 12.3, 10, 9.6, 9.6.

Cephalic part as long as thoracic. Quadrangle of eyes one-fourth wider than long. Eyes of first row twice as large as those of second. First and second rows equally wide. Clypeus one-half as high as anterior eyes. Falces robust, nearly horizontal, one and one-half times as long as face. Maxillae a little enlarged and rounded at their extremities, slightly excavated on their inner sides. Labium longer than wide, a little more than one-half as long as maxillae, widest in the middle, blunt at extremity. Legs 1, 2, 3, 4; femur of the first shorter than femur with patella of the second.

Coloration (under alcohol): Cephalothorax light yellow; eye-region surrounded with red and white hairs; anterior thoracic part with a dark central longitudinal line. Abdomen white with scattered light brown hairs; on the posterior part of the dorsum are two abbreviated, longitudinal, light brown bands, and there are some irregular, light brown spots on the anterior part. Falces, legs, palpi, mouthparts and sternum all pale yellow.

Habitat: Guatemala.

GENUS ASAMONEA (CAMBRIDGE) SIMON.

Cephalothorax low; cephalic plate usually but little higher than thorax, occupying a little more than one-third of the cephalothorax.

Eyes in four transverse rows of two each. Eyes of first row close together, from two and one-half to three times as large as those of second row (relatively larger than in Lyssomanes), occupying the entire face. Second row of eyes wider than first. Eyes of third row much nearer the second than the fourth and much nearer together than those of second row; third row narrower than second, and sometimes wider, sometimes narrower than fourth. Eyes of fourth row about as large as those of second and nearer together. Quadrangle formed by second and fourth rows, at least twice as wide as long.

Sternum little, if any, longer than wide, truncated in front.

Coxae separated by the width of the labium and part or all of that of the maxillae.

Labium at least as wide as long.

Abdomen long, slender, tapering.

Legs slender; (♂) 1432 or 1423; (♀) fourth leg longest, others nearly equal.

Femoral, tibial, metatarsal and sometimes patellar spines on the four pairs.

P
A. Eyes of third row but little smaller than those of the fourth.

**MALES.**

General color light; integument covered with silvery hairs. \( \textit{puella}. \) (South Africa).

General color dark. \( \textit{tenuides}. \) (Ceylon.)

**FEMALES.**

1. First and third legs equal. \( \textit{tenuides}. \) (Ceylon). 3
   1. First and third legs not equal. \( \textit{puella}. \) (South Africa). 3
   2. Legs 4 1 2 3. \( \textit{puella}. \) (South Africa). 3
   3. Legs 4 3 2 1. \( \textit{punctata}. \) (Madagascar). \( \textit{ornatissima}. \) (Madagascar).

**ASAMONEA PUELLA SIMON. 1885.**


Having no mature specimen of this species we translate the following description from Simon:

3. **Length 6 mm.** Cephalothorax yellowish testaceus narrowly bordered with brownish, with the cephalic part covered with yellow hair, and having on each side a large black three-lobed spot which surrounds the eyes; the thoracic part, above, with two lines covered with thin red hairs which come together posteriorly. Clypeus very high, smooth behind the falcis, above the eyes densely pubescent, in the middle silvery, on each side reddish. Abdomen steeply elongate, covered with hairs which are whitish testaceus and silvery white, adorned above with two lines, prettily interrupted with red. Spinnerets testaceus, upper ones brownish. Falcis yellow testaceus, cut transversely by a black band in front. Sternum testaceus. Legs testaceus, femora with brownish lines below; tibia of fourth from base to apex, minutely dotted with brown; abundantly armed with long and delicate spines. Palpi testaceus with the stout femur armed below, back of the middle, with an obtuse tubercle; patella short; tibia not longer than patella, slightly thicker on the outside and enlarged into a keel-shaped laminate apophysis which is a little thickened and obtuse in the middle and very sharply prolonged above; the large tarsus longer than the femur and much thicker, convex and attenuated longitudinally with a large convex bulb.

9. **Length 7 mm.** Cephalothorax with no lines on thoracic part. Clypeus, behind falcis smooth, above eyes covered all over with silvery hair. Falcis and legs uniform yellow testaceus without lines or spots. Region of epigynum, anteriorly, with a transverse pit obtusely triangular and much broader than long; posteriorly, a shining reddish transverse spot.
Spiders of the Sub-Family Lyssomanes.

ASAMONEA TENUIPES CAMB. 1869.

Plate XII, figures 5, 19, 19a, 19b.


♂. Length of cephalothorax 1.5 mm; of abdomen 2 mm.
Legs 6, 5, 5, 5.3.

♀. Length of cephalothorax 1.7 mm; of abdomen 3 mm.
Legs 5.5, —, 5.5, —. (Second and fourth wanting.)

Cephalic part scarcely more than one-half as long as thoracic, in ♀ with
front and sides projecting like carapace of turtle. Quadrangle of
eyes twice as wide as long. Eyes of first row two and one-half times
as large as those of second row. Clypeus about one-half as high
as anterior eyes. Falces very weak, ♀ inclined backward, ♀
vertical, ♀ scarcely as long as face, almost quadrate, ♀ as long as
face; fang very weak. Maxillae short, truncated, ♀ a little narrower,
♀ a little wider at their extremities. Labium wider than long, wider
in ♀ than in ♀, ♀ one-third, ♀ a little less than one-half as long as
maxillae, blunt at extremity. Legs, ♀ 1, 4, 3, 2; ♀ first and third
equal. Coxae of the first separated by the width of maxillae and
labium. Femur of the first plainly shorter than femur with patella
of the second. Superior spinnerets elongated, in ♀, curved upward.

Coloration (dry): ♀. Cephalothorax dark brown, covered with whitish
iridescent scales; a pale central band extends from the anterior eyes
to the posterior border, and from this, curved white bands extend
around the outer sides of the eye-region; the anterior part of the eye-
region is covered with long white hairs. Clypeus covered with
highly iridescent scales. Palpi, dark brown. Sternum and coxae,
pale. Abdomen, above and below, dark brown, shading to blackish
on the sides, with a wide irregular pale ring near the posterior end:
apex and curved spinnerets jet black; the whole abdomen is thinly
covered with iridescent scales like those on the cephalothorax. Legs
pale yellow; those of the first and second pairs have three black spots
on the posterior side, one at the distal end of the femur, one at the
proximal and one at the distal end of the patella; the tips of all the
legs are black. Spines yellow.

♀. Light yellow with thick snowy white hairs on eye region and clypeus.
Legs tipped with black.

Habitat: Ceylon.
ASAMONEA PUNCTATA N. Sp.

Plate 12, figure 20.

♀. Length of cephalothorax 2.8 mm; of abdomen 5 mm.
Legs 8.7, 9, 9.5, 10.5.

We have also an immature ♀ of this species.

Cephalic part a little more than one-half as long as thoracic. Quadrangle of eyes more than twice as wide as long. Eyes of first row three times as large as those of second row. Clypeus fully one-half as high as anterior eyes. Falces weak, vertical, parallel, as long as face; fang weak. Maxillae rounded, a little enlarged at their extremities. Labium rounded, ♀ wider than long, ♂ as wide as long; less than one-half as long as maxillae. Legs 4, 3, 2, 1; femur of the first shorter than femur of the second. Spines unusually long and stout.

Coloration (under alcohol): ♀. Pale yellow, with an indistinct dark median line on the thoracic part of the cephalothorax, and three equi-distant pairs of dark brown dots on the abdomen arranged in two lines of three dots each, the posterior pair of dots being only a little behind the middle of the abdomen. The tips of the legs are black, but the spines are light colored. When the spider is dried a small tuft of black hairs becomes visible at the anterior end of the abdomen. ♂. Upper surface of cephalothorax light brown, excepting on eye-region and anterior thoracic part, where it is pale yellow; on each side of the posterior thoracic part are two dark brown dots. Abdomen with four pairs of dark brown dots at equal distances between the two ends, the first three pairs converging toward the posterior end, the two dots of the fourth pair being placed further apart than any of the others. Probably a fourth pair of dots has been effaced from the abdomen of our female specimen.

Habitat: Madagascar.

ASAMONEA ORNATISSIMA N. Sp.

Plate XII, figure 22.

♀. Length of cephalothorax 2 mm; of abdomen 3 mm.
Legs 6.2, 6.6, 6.4, 7.

Cephalic part a little more than one-half as long as thoracic. Quadrangle of eyes twice as wide as long. Eyes of first row about two and one-half times as large as those of second row. Clypeus nearly one-third as high as anterior eyes. Falces weak, parallel, vertical, as long as the face, fang weak. Maxillae rounded and very little enlarged at their extremities. Labium rounded, wider than long, less than one-half as long as maxillae. Legs 4, 3, 2, 1; femur of the first about as long as femur of the second. Spines growing more slender from the first leg to the fourth.
Coloration (dry): Eye region covered with hairs of a rich brownish red color, with a wide central band of silver hairs extending between the eyes of the third row; thoracic part pale, without hairs. Clypeus with a band of silver hairs. Falces, and entire under side, pale yellow. Upper surface of abdomen covered with hairs of a rich brownish red, encircled by a band of silvery hairs, and having three spots of silvery hairs on the dorsum, the anterior one being the smallest, and the second and third broader. Legs pale, with light brown spines and black tips. 

Habitat: Madagascar.

B. Eyes of third row much smaller than those of fourth (not more than one-third as large.)
Under this head we have only two individuals of different sexes. The male is gracilis, French Guiana, and the female flava, Central America.

ASAMONEA GRACILIS Tacz. 1875.

Plate XII, figure 2.

♂. Length of cephalothorax 1.8 mm.; of abdomen 4 mm.
Legs 11, 9, 10.8, 10.4.

Cephalic part not quite so long as thoracic. Quadrangle of eyes more than twice as wide as long. Eyes of the first row three times as large as those of second row, projecting. Clypeus nearly one-half as high as anterior eyes. Falces very weak, vertical, as long as face; fang weak. Maxillae rounded and a little enlarged at their extremities, slightly inclined toward labium. Labium as wide as long, about one-half as long as maxillae. Maxillae and labium unusually short. Legs 1, 4, 3, 2, very long and fine. Coxae of the first more widely separated than usual — by fully the width of maxillae and labium. Femur of the first about as long as femur with patella of the second.

Coloration: Cephalothorax and abdomen, both above and beneath, polished black, with bluish iridescent reflections. Legs very pale yellow with pale spines and hairs; on the upper surface of the first leg a black line begins on the trochanter and extends throughout half the length of the femur; there is a similar line on the upper surface of the second leg, but here it is much shorter and finer. Falces pale yellow with a black spot on the anterior face of each. Mouthparts pale yellow. Palpus black excepting the tarsus, which is light reddish yellow.

Habitat: French Guiana.

From the collection of Dr. Taczanowski.
ASAMONEA FLAVA N. SP.

Plate XII, figure 18.

♀. Length of cephalothorax 1.8 mm; of abdomen 3.8 mm.
Legs 11.8, 10.8, 11.6, 13.

Cephalic part a little more than one-half as long as thoracic. Quadrangle of eyes twice as wide as long. Eyes of first row two and one-half times as large as those of second row. Clypeus one-third as high as anterior eyes. Falces weak, shorter than face, slightly inclined backward. Maxillae truncated, and a little enlarged at their extremities. Labium a little wider than long, less than one-half as long as maxillae, rounded. Legs 4, 1, 8, 2. Femur of the first scarcely longer than femur of the second. Spines very few in number, and extremely weak, scarcely more than hairs. The abdomen, which is somewhat injured, seems to have been cylindrical in shape and truncated behind. Superior spinnerets not so much elongated as is usual in this genus.

Coloration (under alcohol): Light yellow; on all the legs the tibial joints have two dark brown spots at each end; the metatarsi have two brown spots at the proximal end and the metatarsus of the first has one brown spot at the distal end; the tarsi of all the legs have the distal fifth dark brown. Spines matching the legs in color.

Habitat: Central America.

LYSSOMANES PALLENS BLACKWALL. 1887.


Having no specimen of this species, we are unable to determine its genus, although, to judge from the drawings, it belongs to the second division of Asamonea. We quote the whole description as given by Blackwall:

"Length of an immature male (not including the spinners), one-fifth of an inch; length of the cephalothorax, one-sixteenth; breadth, one-sixteenth; breadth of the abdomen, one-twentieth; length of a posterior leg, one-fourth; length of an anterior leg, five-twenty-fourths. The color of this spider is white tinged with yellow, particularly on the sides and base of the cephalothorax. The eyes are disposed on the anterior part of the cephalothorax; two, which are situated in front, are much the largest, and are prominent, pellucid, and almost in contact; on each side of the upper part of the cephalic region these eyes are placed in the form of an irregular triangle, on small tubercles seated on confluent black spots, the intermediate eye, constituting the vertex of an obtuse angle, being the smallest of the eight. The cephalothorax is somewhat quadrate, convex, glossy, slightly
rounded on the sides and at the base, and moderately elevated in the cephalic region. The falcæ are small, sub-conical, and inclined toward the sternum, which is broad, convex, and heart-shaped; the maxillæ are short, rounded at the extremity, and inclined toward the lip, which is somewhat quadrate, being broader at the base than at the apex. The legs are slender, and provided with hairs and long spines, two parallel rows of the latter extending along the inferior surface of the tibia and metatarsus of the first and second pairs; each tarsus is terminated by two minute, curved claws, below which there is a small black scopula. The abdomen is long, sub-cylindrical, and has a few short, pale hairs distributed over its surface. The superior spinners are the longest, and their terminal joint, which is pointed, has the spinning-tubes arranged on its inferior surface. The palpi of the specimen from which the description was made were very tumid, but the palpal organs were not developed, indicating that it probably had to undergo its final change of integument before it arrived at maturity; the radial was stronger than the cubital joint, and prominent in front."

GROUP II. ATHAMII.

GENUS ATHAMAS CAMBRIDGE.

Cephalothorax high, short, quadrate, very convex above, sloping steeply behind and on the sides. Caput occupying at least one-half of cephalothorax. Eyes arranged in four transverse rows of two each. Eyes of first row large and close together. Eyes of second row two-thirds as large as those of first, forming a wider row. Eyes of third row half way between second and fourth rows, and about one-third as large as those of fourth row. Eyes of fourth row smaller than those of second and nearer together. Quadrangle formed by second and fourth rows as long as wide. Labium about as wide as long.

ATHAMAS WHITMEEI CAMBRIDGE. 1887.

Plate XII, figures 3, 11.


5. Length of cephalothorax 1.6 mm; of abdomen 1.4 mm.

7. Length of cephalothorax 1.25 mm; of abdomen, 1.75 mm. *

Legs 3.5, 2.5, 2.5, 3.

5. Cephalic part a little longer than thoracic. Clypeus one-half as high as anterior eyes. Falces vertical, short. Maxillæ rounded and enlarged at extremities. Labium as wide as long, one-third as long as maxillæ. Sternum heart-shaped. Legs rather long and slender, those of the first pair stoutest and furnished with strong spines; relative length

* These are the measurements given by Koch. We have no female of this species.
1, 4, 3, 2. Abdomen small and short, slanting from the anterior part to the spinnerets.

**Coloration:** As our specimen is considerably rubbed we quote the color description given by Cambridge. "The cephalothorax of this very pretty and distinct spider, is of a yellow brown color, 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 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 color as the rest, and the femora of only ordinary comparative strength, and the legs themselves shorter and weaker. The palpi are pale yellow. The falkes are of a brownish yellow color with a broad rather oblique dark yellow-brown longitudinal stripe on the fore side. The maxillae are yellow-brown, paler at their extremities. The labium is also yellow-brown, palest at the apex. The sternum is of a pale yellow color. The abdomen is of a palish yellow hue; on the fore half of the upper side 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 extends forward 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 hair. In front, below the fore margin, are some coarse, bristly, black, upturned hairs. The spinners are of a blackish hue, tipped with pale yellowish. There is evidently some variety in the abdominal markings of this species, since in the other example before noted the upper side 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."
As we have no female of this species we translate the description given by L. Koch, Arachniden Australiens, p. 1076, T. xciv.

2. The cephalothorax is brownish with a narrow, black marginal band which is broadened in some places and a brownish, interrupted longitudinal stripe on the lateral declivity; the space between the eyes black with faint, blue iridescence. A median longitudinal stripe composed of brilliant yellow hairs begins on the posterior declivity and extends to the front row of eyes; the remaining hair of the cephalothorax is white mixed with pale yellow. The hair-rings around the eyes of the first and second rows orange-yellow and white, those of the first row above and below orange-yellow, without and within white. Falces dark brown; maxillae, labium and sternum dirty brownish-yellow. Palpi and legs pale yellow; femur of the palpus with a black longitudinal stripe before and behind. Femur of the first with a black longitudinal stripe in front, and two black spots behind; femur of the second with two black spots in front and behind; femora of the third and fourth with a black ring on the basal half, and a small black spot on the terminal half before and behind. Patellae with a black spot before and behind. The tibiae and metatarsi have a black ring at the base and the tarsi are suffused with black at the base. Abdomen black above, with white and pale yellow hairs; from the base to a point in front of the middle runs a longitudinal band covered with deep yellow hairs, back of this, and again just in front of the spinnerets, a long spot covered with similar hair; specimens in alcohol show also the following markings which almost disappear completely in the dry animal; from the end of the longitudinal band above mentioned two undulating pale bands run first to the sides and thence in an arc back to the base, enclosing a space which is covered with pale reticulating veinlets; the posterior half of the upper surface is marked with small blue spots and streaks; the spinnerets brownish-yellow suffused with black.

Cephalothorax about one-sixth longer than broad, considerably longer than patella and tibia of the fourth, high, abrupt on the posterior edge, falling almost perpendicularly, faintly convex on the lateral perpendicular declivity, above, only slightly arched as far as the third row of eyes, but from these strongly convex, dull, covered with short hairs; the median, longitudinal stripe with hair-shaped scales; lateral margin with long black bristles which project outward; one very long anteriorly directed bristle between the eyes to the first row; clypeus as high as the radius of an eye of the first row. Eyes in four rows; quadrangle of the eyes longer than broad, narrowed behind; eyes of the fourth row as far again from the lateral borders as from each other, overhung by the lateral walls of the cephalothorax.* Eyes of the first row very large, close together and abutting on those of the second row; eyes of the second row placed above and slightly

* "... von der Seitenwand des Cephalothorax überragt."

projecting over those of the first, with their outer peripheries distant from one another by the diameter of one of the eyes of the first row. Eyes of the third row nearer to those of the second than to those of the fourth; those of the fourth smaller than those of the second row. Falces only a little longer than the breadth at the base, very glistening, smooth, slightly convex anteriorly, diverging on the inner side from the base. Maxillae with outer and anterior margins straight, and inner margins also straight as far as the labium; the inner corners, consequently rather rectangular; the maxillae are excavated along the labium; labium very short, broader than long, rounded anteriorly. Sternum cordate, slightly convex, dull, sparsely overgrown with projecting, long, yellowish hairs. Abdomen only slightly longer than broad, truncate in front, strongly convex laterally, acuminate toward the spinnerets, dull, covered with short adpressed and longer projecting hairs in many layers; the deep yellow markings formed by hair like scales. Legs short; femora convex above, underneath overgrown with long projecting hairs, with two spines above, those of the first pair with one spine above at the end. Tibiae and metatarsi underneath beset with long spines. Spines of the patellae, tibiae and metatarsi of the third and fourth short. On tibie and metatarsi of the third and fourth above, long projecting hairs. Patella and tibia of the third as long as patella and tibia of the fourth; metatarsus and tarsus of the fourth longer than patella and tibia of the fourth.

Habitat: Tahiti, Upolu, Samoa.

GENUS EPEUS* Peckham.


Cephalothorax rather elongated; thoracic part scarcely the longer, sensibly dilated and rounded; cephalic part plane, elevated behind, inclined in front, longer than wide; superfliciar projections pronounced. Median anterior eyes very large, almost touching, occupying the entire width of the face; the lateral eyes much smaller, separated, placed further back, forming a second line. Dorsal eyes as large as the laterals, a little nearer together since the sides converge behind. Clypeus almost as wide as the radius of the median anterior eyes. Falces short, vertical, not ridged. Sternum scarcely wider than the intermediate coxae. Labium twice as long as wide, rounded at the tip. Coxæ of the first separated by at least the width

*In 1885, in our work on the Genera of the Attidæ, we substituted the name Epeus for Simon’s name Evenus, this latter being preoccupied. It seems very probable that Epeus and Athamas should form but one genus, but we have no specimen of Epeus, and are unable, from the description given by Simon, to decide the point. The generic and specific descriptions of Epeus are translated from Simon.
of the labium, of the same length as the others. Legs: 3, 1, 2-4, long, the three first pairs equal in thickness, the fourth more slender; patella and tibia of the first longer than the cephalothorax, tibia much longer than patella; patella and tibia of the fourth much longer than patella and tibia of the third, and more slender; metatarsus and tarsus of the fourth at least as long as patella and tibia; on the two first pairs two rows of very long inferior tibial and metatarsal spines; tibiae and metatarsi of the two posterior pairs furnished with slender spines throughout their length. Tarsal claws long, regularly curved; the external one provided with a series of five broad, short, conical teeth; the internal one with ten teeth which are longer, more slender, equal, close together.

EPEUS TENER  Simon. 1876.


White testaceous, with the circumference of the eyes black. Clypeus ornamental with thick, very white hairs. Cephalic square ornamented above with scaly pubescence of a brilliant, slightly gilded yellow, and on the sides with red pubescence. Abdomen bright red above, with two fine lateral yellow lines. Legs and palpi glabrous.

Malamoy, Bassilan Island (Philippine Islands).

GROUP III. SIMONELLII.

GENUS SIMONELLA  PECKHAM.

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 nearly touching; quadrangle formed by the second and fourth rows of eyes, equally wide in front and behind or wider behind than in front, and wider than long. Eyes of the third row very small, sometimes halfway between the second and fourth rows, sometimes nearer the second than the fourth.

Legs slender, differing but little in thickness; relative length 4, 3, 1, 2.

Abdomen long and slender, sometimes constricted in the middle.

3. Total length 8.5 mm. Width of of abdomen 1.1 mm.
Length of cephalothorax 3.5 mm; width 1.4 mm; height 1.3 mm.
Legs 3.8, 3.6, 4, 5.3.

Cephalothorax nearly as high as wide; cephalic and anterior thoracic parts higher and more convex than the remaining portion of the thoracic, from which they are separated by a well-marked constriction; that part of the thorax posterior to the 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. Eyes of first row more than twice as large as those of the second; second row wider than the first; third row nearer the second than the fourth; eyes of fourth row about as large as those of second and further apart.

Clypeus less than one-half as high as anterior eyes, retreating; ridged above; color black. Palpus black, long and slender, having on outer side of tibia a stout apophysis. Falces robust, narrowing toward the tip, long, vertical, slightly diverging; fang as long as the palpus, slender, yellowish black in color. Maxillae yellowish black, half as long as palpus, more than twice as long as labium; widest at their extremities. Labium as wide as long, truncated at tip.

Sternum yellowish, long, truncated in front, narrowing to a point behind. Legs with weak tibial and metatarsal spines on the first pair; second, third and fourth pairs unarmed. Patella and tibia of the third, shorter than patella and tibia of the fourth; metatarsus and tarsus of the fourth, shorter than patella and tibia of the fourth. Patella, tibia and metatarsus of the first black on the inner side; otherwise all the legs are yellowish with a darker shading toward the distal ends of of those of the fourth pair. Abdomen made up of three parts, the middle part being a narrow neck which joins the anterior and posterior portions. The anterior is twice as long as the middle, and half as long as the posterior part.

**Habitat:** Guatemala.

This species was found running on the ground among leaf-cutting ants.
SIMONELLA MYRMECÆFORMIS* TACZANOWSKI. 1874.

Plate XII, figure 8.

Janus myrmecæformis Tacz., Les Aranéides de la Guyane française, p. 94.

Eyes in four rows; cephalothorax in two parts, abdomen with a marked constriction in the middle; general color ochre yellow, four black spots on the head, two pale rings on the abdomen. Length 8-7 mm.

§. The cephalothorax is very slender and much elongated, with the head a little longer than wide, distinctly separated by a marked constriction across the back and throughout the height of sides; the thoracic part considerably longer than the head, a little narrower and composed of three distinct portions of which the anterior represents a short slightly contracted neck, which is followed by a convex knob, behind which is a rather long pedicle which is more slender than the neck; the cephalic plate is lightly arched and inclined forward; the lateral contours of the head are arched; behind it is terminated by a facet with a gentle slope. Eyes in four rows, in a quadrangle a little longer than wide;† those of the first row very large, in contact, and occupying the entire height and width of the face; those of the second pair behind on the lateral border of the back at a considerable distance from the preceding ones, and directed upward; eyes of the third pair halfway between those of the second and fourth; external border of the anterior eyes in a straight line and parallel with those of the other pairs. Falces short, thick and vertical. Abdomen longer and more slender than the cephalothorax, strongly constricted in the middle so as to form three distinct parts, of which the anterior is cylindrical, almost horizontal, the second very slender and strongly bent and the posterior elliptical, of the same breadth, but much longer than the anterior, that is to say the whole resembles an S faintly bent and enlarged at the two extremities. The spinnerets are short. The legs are slender and of moderate length, in the order 4, 3, 1, 2. Palpi short, thicker than the legs, with the tibia short and stouter than the femora. The body is entirely bare, only a few hairs being found around the anterior eyes, on the tarsi of the palpi, and some which are almost imperceptible on the legs.

Coloration: The general color is a pale ochre yellow; two large black spots are found on each side of the head at the base of the eyes, the anterior one of which extends between those of the second and third

*The descriptions of this species and of lucasi are translated from Dr. Taczanowski.
†This is true when the quadrangle is understood to include the first row of eyes; when we use the expression "quadrangle of the eyes" in relation to the Lyssomanæ (as in defining this genus) we refer to the quadrangle formed by the second and fourth rows of eyes.
pairs; two wide rings clearer than the general color are found around the abdomen, the first being in the middle of the anterior part, the second on the constriction. In the individual from Saint Laurent de Maroni the posterior part of the abdomen is grayish, much deeper than the rest of the body. The legs are of the color of the body but a little paler. The anterior eyes are amber yellow, the others blackish.

Two males from Cayenne and St. Laurent de Maroni; female unknown.

SIMONELLA LUCASII TACZANOWSKI. 1874.

Plate XII, figure 9.

Janus lucasii Tacz., Les Aranéides de la Guyane française, p. 96.

Eyes in four rows; cephalothorax in two parts, abdomen with a constriction near the base; color of cephalothorax reddish yellow; four black spots on the head; abdomen grayish. Length 3 4 mm.

♀ Cephalothorax slender and elongated, with the head square, distinctly separated from the thoracic part by a strong constriction, terminated behind by an inclined slope. The sides parallel and perpendicular; the thoracic part longer but not so wide as the head, is composed of a much contracted but short neck, followed by a globular knob, which is terminated behind by a short pedicle which is more slender than the anterior constriction. The eyes are in four rows, but are arranged a little differently from those of the preceding species; the ocular quadrangle is a little longer than wide; the anterior eyes are large, in contact, occupying the entire front of the vertical inclination of the face; the second pair is placed on the back behind the eyes of the first pair, but they are a little further from each other than the distance between the external borders of the first ones, and are directed sideways; the posterior eyes are larger, but are separated by the same distance as those of the second row, the eyes of the third pair halfway between the second and fourth. The falces are short, thick and vertical. The abdomen is of the same length as the cephalothorax, thicker, commencing by a short pedicle which appears to constitute a prolongation of that of the thoracic part; behind this it suddenly grows larger up to the middle of its length and then grows smaller again so as to terminate in a point. The legs are slender and not very long, in the order 4, 3, 1, 2. All the body is glabrous, with some sparse hairs, which are rather long on the upper part of the head, and on the posterior part of the back of the abdomen.

*The quadrangle is wider than long if the second row of eyes is taken as its anterior line. See note under preceding species.
Coloration: The color of the cephalothorax is reddish yellow, two black spots on each side of the head of which the anterior one includes the base of the eyes of the second and third pair. The abdomen is grayish yellow. The legs are pale yellow; the femora and the patellae in the two posterior pairs are of a brownish gray, so as to form a wide clear ring at the origin of the leg. The anterior eyes yellow, the others black.

A single female from Uassa.

DESCRIPTION OF PLATES.

PLATE XI.

1. Lyssomanes antillanus, palpus of $\delta$.
2. " unicolor, palpus of $\delta$.
3. " viridis, palpus of $\delta$.
4. " bi-teniatus, palpus of $\delta$.
5. " placidus, palpus of $\delta$.
6. " miniaceus, palpus of $\delta$.
7. " austerus, palpus of $\delta$.
8. " tenuis, palpus of $\delta$.
9. " jemineus, palpus of $\delta$.
10. " nigro-pictus, palpus of $\delta$.
11. " velox, palpus of $\delta$.
12. " longipes, palpus of $\delta$.
13. " robustus, palpus of $\delta$.

PLATE XII.

1. Lyssomanes amazonicus, palpus of $\delta$.
2. Asamonea gracilis, palpus of $\delta$.
3. Athamas whitmeei, palpus of $\delta$ (after Keyserling).
4. Simonella americana, palpus of $\delta$.
5. Asamonea tenuipes, palpus of $\delta$.
6. Lyssomanes viridis, epigynum; 6a, eyes; 6b, falces of $\delta$.
7. Lyssomanes robustus, eyes.
8. Simonella mymeciaeformis, cephalothorax (after Taczanowski).
10. Lyssomanes modestus, epigynum.
11. Athamas whitmeei, epigynum (after Keyserling).
12. Lyssomanes tristis, epigynum.
15. " parallelus, epigynum.
17. " austerus, epigynum.
19. " tenuipes, epigynum; 19a, eyes; 19b, falcis.
20. Asamonea punctata, epigynum.
21. Lyssomanes unicolor, epigynum.
22. Asamonea ornatissima, epigynum.