

New Spiders From Mexico and Panama

BY

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New Spiders From Mexico and Panama

By RALPH V. CHAMBERLIN AND WILTON IVIE

In the present paper are described eighty new species of spiders, among which are representatives of five new genera, found in two collections from Mexico and Panama respectively.

The collection from Mexico was made in the state of Guerrero by Prof. Dr. Schultze Fena, of the University of Marburg, at whose request the material was transmitted by Prof. Dr. E. Hesse, of the Zoological Museum of the University of Berlin. The adults and specifically identifiable specimens in this Mexican collection represent the following species:

AVICULARIIDAE

Evagrus guatemalensis Cambr.

OONOPIDAE

Oonops chilapensis, new species

SEGESTRIIDAE

Ariadna bicolor (Hentz)

ZODARIIDAE

Storea hessei, new species

GNAPHOSIDAE

Tivodrassus ethophor, new genus and species

CLUBIONIDAE

Trachelas transversus Cambridge

Gosiphrrurus schultze-fenai, new species

SALTICIDAE

Paraphidippus chrysis (Walckenaer)

Phidippus georgii Peckham

THERIDIIDAE

Theridion aztecum, new species

MICRYPHANTIDAE

Eperigone dopainum, new species

LINYPHIIDAE

Nerienne limbata Cambridge

Microneta sima, new species

Microneta watona, new species

THOMISIDAE

Xysticus pellax Cambridge

Misumemoides annulipes (Cambridge)

LYCOSIDAE

Arctosa trifida F. Cambridge

ARGIOPIDAE

Glenognatha spherella, new species

Araneus guerrerensis, new species

Neoscona arizabensis F. Cambridge

Neoscona oaxacensis (Keyserling)

Metepeira chilapae, new species

Arigiope trifasciata (Forsk.)

In addition immature specimens are present representing species of the following genera not included in the preceding list: *Auximus*, *Clubiona*, *Meriola*, *Anyphacna*, *Aysa*, *Lyssomanes*, *Olios*, *Synema*, *Misumenops*, *Lycosa*, *Oxyopes*, *Tetragnatha*, *Leucauge*, *Mangora*, and *Agelena*. Additional families represented in this group of genera are Dictynidae, Anyphaenidae, Clubionidae, Lyssomanidae, Sparassidae, Selenopidae, and Oxyopidae.

The collection from Panama was made by Prof. A. M. Chickering during August, 1928, on Barro Colorado Island. The sixty-nine species in the collection herein described as new are as given in the following list. The previously known forms are not given as they are being listed in another place by Prof. Chickering.

AVICULARIIDAE

Eurypelma embrithes, new species
parvior, new species

SCYTODIDAE

Scytodes nannipes, new species

ULOBORIDAE

Uloborus tingens, new species
mundior, new species

Miagrammopes simus, new species

CTENIDAE

Cupiennius medius, new species

AGELENIDAE

Barrisca nannella, new genus and species

PISAURIDAE

Thaumasia heterogyna, new species
argyrotypa, new species

LYCOSIDAE

- Lycosa tivior*, new species
- chickeringi*, new species

OXYOPIDAE

- Oxyopes barroanus*, new species

SAITICIDAE

- Dendryphantes perplexans*, new species
- Corythalia conformans*, new species
 - clara*, new species
 - diffusa*, new species
 - endigma*, new species
 - sitticus*, new species
- Sidusa tulineba*, new species
- Freya serrapophysis*, new species
 - demarcata*, new species
 - nannispina*, new species
 - uncinella*, new species
 - saggitifer*, new species
- Cobanus erythrocras*, new species
- Phiale lineola*, new species
- Psecas enoplus*, new species
- Scopocira panamena*, new species
- Thiodina pseustes*, new species
- Menemerus delus*, new species

LYSSOMANIDAE

- Lyssomonea saphes*, new genus and species

THERIDIIDAE

- Chrosiothes conservativus*, new species
- Theridilella zygops*, new genus and species
- Theridion metabolum*, new species
- Chrysso lyparus*, new species
 - diplostichus*, new species
 - indicifer*, new species
- Argyrodes parvor*, new species
 - dracus*, new species
 - indignus*, new species
 - atopus*, new species
 - vexus*, new species
 - pachysomus*, new species
- Rhomphaea anomala*, new species

LINYPHIIDAE

- Neriere octopunctata*, new species

ARGIOPIDAE

- Araneus mutatus**, new species
- moatus**, new species
- setospinosus**, new species
- sinuoscapus**, new species
- tuonabo**, new species
- designatus**, new species
- Parawixia nesophila**, new species
- Zigana wixoides**, new genus and species
- Acacesia alticeps**, new species
- Micrathena planata**, new species
- coleophora**, new species
- retracta**, new species
- nigrior**, new species
- Mangora pia**, new species
- dentembolus**, new species
- belligerens**, new species
- Leucauge saphes**, new species
- synthetica**, new species
- gemminipunctata**, new species
- Tetragnatha siduo**, new species
- apheles**, new species
- ethodon**, new species
- amplidens**, new species

Types of the new species are deposited in the collection of the University of Utah.

AVICULARIIDAE

Eurypelma embrithes Chamberlin and Ivie, new species.

COLOR: *Female*—Integument of carapace rich brown; covered with rich brown velvety pubescence above, and with lighter and more grayish hairs along margins. Chelicerae, labium, sternum, palpi, and legs rich brown,—the legs and palpi with two light stripes above on femur, patella, and tibia, and the beginning of a single median stripe on base of metatarsus; scopulae lighter brown. A few long rusty brown hairs on legs; a short thick velvet-like pubescence beneath these. Coxae of pedipalpus lighter brown. Long hairs on entites and on each side of fang on chelicerae light rusty brown. Abdomen very dark brown, with long light rusty brown hairs.

STRUCTURE: Carapace decidedly longer than wide. Median depression transverse; deep. Legs stout; with scopulae on tarsi and metatarsi of legs I, II, and III, and on tarsus of leg IV,—barely a trace of scopula on metatarsus IV.

Measurements:

FEMALE

Length:

Without chelicerae.....	58 mm.
With chelicerae	65

Carapace:

Length	28
Width	24

Tibia-patella:

I	26
IV	26

Metatarsus:

I	14
IV	22

TYPE LOCALITY: Barro Colorado Island, Panama. Female holotype.

Eurypelma parvior Chamberlin and Ivie, new species.

Female.—

A small species of the usual structure. Color entirely brown.

FEMALE

Length:	17.0 mm. (Without chelicerae).
Carapace:	
Length	8.5
Width	7.5
Tibia-patella:	
I	7.4
IV	7.4

TYPE LOCALITY: Barro Colorado Island, Panama. Female holotype, accompanied by an egg-sac containing newly hatched young.

This species is to be recognized in the female mainly by its small size; the male is not known.

OONOPIDAE

Oonops chilapensis Chamberlin and Ivie, new species.

Pl. I, ff. 1-2.

COLOR: *Male*.—Cephalothorax and appendages bright clear yellow. Area between the eyes black. Abdomen grayish white.

STRUCTURE in general typical. Legs I and II without spines; legs III and IV with a moderate number. Palpus as figured.

Measurements:

MALE

Length	2.00 mm.
Carapace:	
Length .....	.87
Width .....	.70
Tibia-patella:	
I .....	.86
IV	1.00

TYPE LOCALITY: Chilapa, Guerrero, Mexico. Male holotype.

SCYTODIDAE

Scytodes nannipes Chamberlin and Ivie, new species.

Pl. I, f. 3.

Female.—

Very similar to *Scytodes fusca* in regards to size, color, and general structure; the legs are also short as in that species. The chief difference is in the elevation of the cephalothorax, it being much higher in this species than in *fusca*. This difference is shown by the figures.

TYPE LOCALITY: Barro Colorado Island, Panama. Female holotype.

ZODARIIDAE

Storena hessei Chamberlin and Ivie, new species.

Pl. I, ff. 5-7.

COLOR:—Male. Carapace dark brown; chelicerae similar, but a little lighter. Sternum and labium orange brown. Endites, legs, and palpi light yellow,—tibia, cymbium, and palpal organs of palpus dark brown. Abdomen black with white markings above. Venter whitish with two rows of black spots along the center. Epigastric area, the spinnerets, and a chitinous area in front of the spinnerets light orange brown.

Female. Similar to male, except abdomen which is dark grayish black, with only the faintest suggestion of the light markings above; becoming a little lighter on the venter anteriorly. Epigynum black.

STRUCTURE:—Male. Outline of carapace egg-shaped, being wide behind and narrow in front; the ends rounded, and with only a very shallow indentation at the cervical junction. Carapace high, smoothly and evenly rounded from sides and behind, but abrupt and slightly protruding over margin of clypeus in front; highest point just in front of middle. Median furrow short and line-like. Cervical grooves not apparent. Posterior eyes about equal, larger than the anterior eyes; anterior median eyes slightly smaller than the anterior laterals. Posterior eye row straight; median eyes about two-thirds of a diameter apart, and about twice that distance from the lateral eyes. Anterior eye row procurved; the median eyes less than a radius apart, and a little farther from the side eyes than from each other. Posterior median eyes about a diameter from the anterior median eyes; lateral eyes on each side about the same distance apart. Median ocular area longer than wide, and wider behind than in front. Anterior median eyes black, the others pearly gray. Width of clypeus more than five times the diameter of an anterior lateral eye.

Chelicerae vertical; front outline somewhat retreating; stout at base, but more slender apically; condyle prominent; fang groove without teeth on either margin. Endites stout at the base, narrowing apically, convergent around labium. Labium sub-triangular, slightly wider than long, three fourths length of endites. Sternum broadly shield-shaped, wider than long; pointed behind, but does not separate hind coxae; with small sharp intercoxal points.

Legs moderately stout; with many spines; metatarsus III and IV somewhat scopulate below at distal end. Abdomen rounded, about one and one-half times as long as wide; wider behind than in front. Spinnerets small; front pair normal, hind pair very short.

Female. In general similar to male. Carapace narrower than in male; head more arched above; and cervical indentations on the sides slightly deeper. Spinnerets six, all small, tho the front pair are larger than the posterior pair. Epigynum as figured.

Measurements:

	MALE	FEMALE
Length	4.4 mm.	5.1 mm.
Carapace:		
Length	2.40	2.30
Width	1.85	1.57
Tibia-patella:		
I	1.87	1.63
IV	1.93	1.80

TYPE LOCALITY: Chilapa, Guerrero, Mexico. Male holotype, female allotype.

Named for Dr. E. Herre of the Zoological Museum of the University of Berlin.

ULOBORIDAE

Uloborus tingens Chamberlin and Ivie, new species.

Pl. II, f. 10.

COLOR:—*Female*. Carapace black with a white mark along middle at base, this mark widening and becoming trifurcate, or trifoliate, anteriorly. Chelicerae light yellowish, each with two short longitudinal black streaks on base in front. Sternum blackish. Labium and endites dusky with lighter tips. Leg I: femur dusky or black, with a white ring about two-thirds distance from base, and with more or less of a partial ring in middle, and a narrower one at base; metatarsus and tarsus light dusky, the tarsus white at extreme proximal end, and light at distal end. Other legs: femur dusky with two white rings; patella dusky; tibia dusky with two rings as in leg I, but the rings not so sharp, and the space between them lighter in color; metatarsus dusky with basal and median rings, the basal one white, the other light gray; tarsus as in leg I, but markings more distinct.

Abdomen variable, typically blackish or dark gray, with white spots above, or with the whole median area back of the humps whitish; venter dark along the middle, lighter at the sides,—the dark areas often broken up with irregular lighter markings, or the lighter markings may be more or less absent. The darkness of the entire color varies with different specimens.

STRUCTURE: Similar in size and general shape to *U. americanus*, with abdomen somewhat fuller; the two humps on the abdomen prominent; fringe on tibia of leg I apparently lacking. The epigynum is of a different type, as shown by the figure.

Measurements:

FEMALE

Length 3.5 mm.

Carapace:

Length 1.3

Width9

Tibia-patella:

I 2.0

IV 1.4

TYPE LOCALITY: Barro Colorado Island, Panama. Female holotype, female paratypes.

Uloborus mundior Chamberlin and Ivie, new species.

Pl. I, ff. 8-9.

This species is related to *U. geniculatus* (Olivier) and *U. oweni* Chamberlin.

COLOR:—*Female*. Essentially the same as that given for *U. tingens* new species. The color varies from nearly white to nearly black; dark specimens have the black (or dark) areas more extensive, light specimens have the dark areas less extensive and usually faded.

Male. Color much faded and more uniform, being mainly light yellowish brown, with indistinct dusky shadings.

STRUCTURE in general similar to that of *Uloborus geniculatus*, differing in details of the palpus and epigynum, which are figured.

Measurements:

MALE

FEMALE

Length 4.3 mm.

7.0 mm.

Carapace:

Length 1.9

2.10

Width 1.5

1.67

Tibia-patella:

I 2.90

3.80

IV 1.95

2.90

TYPE LOCALITY: Barro Colorado Island, Panama. Male holotype, female allotype; male, female, and immature paratypes.

Miagrammopes simus Chamberlin and Ivie, new species.

Pl. II, ff. 11-12.

COLOR:—*Female*. Carapace varying shades of grayish brown. Chelicerae light yellowish. Sternum, endites, and labium brown. Legs varying shades of dusky brown,—tarsus I light yellowish. Abdomen brownish gray, with lighter and darker markings above, as shown in the figure.

STRUCTURE: Eyes four, in one row; the outer eyes somewhat larger than the medians, and a little more than a diameter from them; median eyes far apart. A sunken pit inside and a little back of each eye group. Sternum small, narrow, and crumpled. Hind coxae contiguous. Front legs stout, with a fringe of hairs on under side of metatarsus and distal part of tibia. Abdomen slender, nearly three times as long as wide. Epigynum as figured.

FEMALE

Length 7.3 mm.

Carapace:

Length 1.9

Width 1.6

Tibia-patella:

I 4.8

IV 3.0

TYPE LOCALITY: Barro Colorado Island, Panama. Female holotype, immature paratypes.

GNAPHOSIDAE**Genus TIVODRASSUS** Chamberlin and Ivie, new

Carapace a little longer than wide; wide behind, narrow in front. Margin concave in middle behind, corners rounded, sides rounded; head narrow, cervical indentations shallow, sides of head convergent anteriorly; clypeus straight across front. Carapace low; width of clypeus only a little more than the diameter of an anterior median eye; from the anterior eye row, the dorsal outline gradually ascends to the highest point at the median furrow, which is more than two-thirds the length from the front; from there it descends steeply in a concave line to the base. No distinct cervical grooves are present. Median furrow small and short, line-like. The posterior part of the carapace, where the abdomen overlaps is concave.

Posterior eye row longer than the anterior, moderately recurved. Posterior median eyes slightly more than a diameter apart and about a diameter from the side eyes. Anterior row straight; anterior median

eyes less than a diameter apart, and scarcely a radius from the side eyes. The lateral eyes on each side about a diameter of a posterior median eye apart; the median eyes of the two rows a little farther apart. Median ocular area barely wider than long, much wider behind than in front. Eyes in order of size: Anterior lateral, posterior lateral, posterior median, anterior median. Anterior median eyes black, others pearly white.

Chelicerae verical; short and stout; rounded; with a lateral condyle. Fang stout; furrow with a tooth at the mesal end in front, and no teeth behind, tho there is a small keel near the base of the fang. Labium slightly wider than long. Endites stout; somewhat diamond-shaped; widely separated; scopulate along antero-mesal edge.

Sternum large, shield-shaped; separating hind coxae by nearly one of their diameters. Legs moderately stout; 4 1 2 3. Spines moderate in number; leg I with spines 2-2-2 on underside of tibia, and 2-2 on underside of metatarsus; leg II with spines 1-1-1 on underside of tibia, and 2-2 on underside of metatarsus.

Abdomen flattened,—of the usual Drassid form. Front spinnerets largest and longest; widely separated.

Genotype *Tivodrassus ethophor* Chamberlin and Ivie, new species.

***Tivodrassus ethophor* Chamberlin and Ivie, new species.**

Pl. III, ff. 17-21.

COLOR: Carapace brown with dusky markings, as shown in the figure. Mouthparts and sternum light yellowish brown, with faint dusky markings. Legs dark straw yellow. Abdomen gray above, lighter gray beneath; spinnerets surrounded with darker gray and whitish patches.

Structure as given under generic characters.

Measurements:

FEMALE

Length 2.85 mm.

Carapace:

Length 1.20

Width 1.00

Tibia-patella:

I 1.25

IV 1.30

TYPE LOCALITY: Chilapa, Guerrero, Mexico. Female holotype.

CTENIDAE

Cupiennius medius Chamberlin and Ivie, new species.

Pl. II, ff. 13-14.

Male. Color faded due to specimen having been dried.

Anterior median eyes a little more than a radius apart, more than a diameter from the side eyes. Posterior median eyes less than a radius apart, nearly a diameter from the side eyes. Width of clypeus two-thirds of a diameter of an anterior median eye. Palpus as shown in the figures.

Measurements:

MALE

Carapace:

Length	6.5 mm.
Width	5.3

Tibia-patella:

I	11.0
IV	10.0

TYPE LOCALITY: Barro Colorado Island, Panama. Male holotype.

CLUBIONIDAE

Gosiphrrurus schulzefenai Chamberlin and Ivie, new species.

Pl. II, ff. 15-16.

COLOR:—*Female.* Cephalothorax and appendages orange, the legs slightly shaded with diffuse dusky. Abdomen pale grey, with the basal sclerite orange.

STRUCTURE: In general similar to that of the male of the known species (see Chamberlin and Ivie, *Bull. Univ. Utah*, 1935, Biol. ser. 2(8) :38). The abdominal sclerite above small, covering only a part of the basal end. Leg I with six pairs of large spines on underside of tibia; metatarsus with spines 2-2-2-1. Eyes and epigynum as figured.

Measurements:

FEMALE

Length	2.23 mm.
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Carapace:

Length93
Width85

Tibia-patella:

I	1.10
IV	1.00

TYPE LOCALITY: Chilapa, Guerrero, Mexico. Female holotype.

The species is dedicated to Dr. L. Schulze-Fena of the University of Marburg.

AGELENIDAE

Genus *BARRISCA* Chamberlin and Ivie, new.

Pl. IV, ff. 28-32.

A new genus apparently close to *Tegenaria*. The general shape similar to that of *Tegenaria*.

Carapace with thoracic part in general circular; sides rounded, base slightly concave; the head narrow and protruding. Elevation of carapace moderate; dorsal outline about level for most of length.

Anterior eye row nearly straight, posterior row recurved. Anterior median eyes smaller than the others, which are about equal. Width of clypeus scarcely more than the diameter of an anterior lateral eye. Anterior median eyes less than a radius apart, somewhat farther from the side eyes. Chelicerae vertical; furrow with three teeth on upper margin and four on lower.

Sternum as wide as long; separates hind coxae by less than the diameter of one of them. Endites widely separated at tips. Labium only slightly wider than long. Legs rather long and slender, especially on distal segments; with many slender spines. Hind spinnerets with apical segment short; the hind spinnerets not longer than the front.

Genotype: *Barrisca nannella* Chamberlin and Ivie, new species.

Barrisca nannella Chamberlin and Ivie, new species.

COLOR: Carapace brown on the sides, with a broad median stripe of lighter color, and narrow lighter submarginal bands on the thoracic part; radial streaks darker. Chelicerae light brownish yellow, each with a large dusky spot in front. Sternum dusky brown. Labium and endites dusky at base, light yellowish distally. Legs yellowish, specked and spotted with brownish. Dorsum with a dusky brown pattern on a light grayish yellow background, as shown in the figure. Venter light, with brownish spots and markings along midline.

Structure as given under the generic characters above. Palpus as shown in the figures.

Length of male 4.5 mm.

TYPE LOCALITY: Barro Colorado Island, Panama. Male holotype, immature paratypes.

PISAUROIDAE

Thaumasia heterogyna Chamberlin and Ivie, new species.

Pl. IV, f. 26.

COLOR: Carapace light orange brown, with dark reticulations, and an indistinct light median line from median furrow to posterior median eyes. Chelicerae same color as carapace. Sternum, labium, and endites light yellowish. Legs light brownish, with dusky markings; these

markings being irregular and numerous on the femur, then forming wide blackish annuli over the joints between the patella and tibia, and the tibia and metatarsus. Abdomen greenish above with a light irregular stripe along each side (somewhat as shown in fig. 24); venter light grayish yellow.

STRUCTURE: Anterior eye row procurved, the median eyes larger than the lateral; eyes about equidistant, less than a diameter apart. Posterior eye row strongly recurved; posterior median eyes a little more than a diameter apart, and somewhat farther from the side eyes. Chelicerae with three teeth on each margin. Epigynum as shown in fig.

26. *Measurements:*

FEMALE	
Length	10.2 mm.
Carapace:	
Length	5.0
Width	4.7
Tibia-patella:	
I	10.7
IV	9.7

TYPE LOCALITY: Barro Colorado Island, Panama. (Female holotype, immature paratypes).

Thaumasia argyrotypa Chamberlin and Ivie, new species.

PL. IV, ff. 24-25.

Closely related to *T. heterogyna* n. sp., being somewhat smaller in size, differing in color, and showing differences in the epigynum.

Carapace lighter, with a brownish reticulated margin along sides of thoracic part, a light submarginal stripe, and a light greenish brown median area. The remainder of the color is essentially as in *heterogyna*, with the markings on the legs indistinct, and the markings on the abdomen more distinct.

Measurements:

FEMALE	
Length	9.0 mm.
Carapace:	
Length	4.3
Width	4.2
Tibia-patella:	
I	(missing)
IV	8.8

TYPE LOCALITY: Barro Colorado Island, Panama. (Female holotype).

LYCOSIDAE

Lycosa tivior Chamberlin and Ivie, new species.

Pl. III, f. 22.

COLOR: Carapace dusky brown, with a light yellowish broken submarginal stripe along each side of the thoracic part; and with a broad median band of the same color, which is slightly wider than the space between the posterior eyes along the middle, but narrows posteriorly, and also narrows rather abruptly to half its greatest width anteriorly in the region of the posterior eyes, from where it extends about two-thirds the distance to the middle eyes. Chelicerae dark mottled brown. Labium and endites light yellowish brown. Sternum light brownish yellow with a dark longitudinal median streak. Legs light brownish yellow with heavy broken annuli dusky. Abdomen brownish gray with a lighter median lanceolate mark on base above, and with other darker and lighter mottlings. Venter light with a few black specks, especially on the sides.

STRUCTURE: Anterior eye row slightly procurved, shorter than the middle row; the median eyes larger than the lateral. Middle eyes larger than the posterior; about a diameter from the posterior, and about three-fifths diameter apart. Posterior eyes nearly two diameters apart. Chelicerae with three teeth on lower margin. The epigynum as figured (fig. 22). Other structures typical.

Measurements:

FEMALE	
Length	5.7 mm.
Carapace:	
Length	2.80
Width	2.15
Tibia-patella:	
I	2.50
IV	3.10

TYPE LOCALITY: Barro Colorado Island, Panama. (Female holotype).

Lycosa chickeringi Chamberlin and Ivie, new species.

Pl. III, f. 23.

A species closely related to *L. tivior* n. sp., from which it differs mainly in the following details:

Size larger; color darker. Posterior eyes over two diameters apart. Epigynum as shown in fig. 23. Median stripe on carapace slightly constricted in front of the median furrow, from which it is distinctly nar-

rower behind. Sternum with a broader median streak of dusky, the width being about two-fifths the width of the sternum. Abdomen darker; the lanceolate mark on the base dusky, bordered with lighter gray; venter with a broad dusky streak along the middle.

Measurements:

FEMALE	
Length	7.5 mm.
Carapace:	
Length	4.3
Width	2.9
Tibia-patella:	
I	3.7
IV	4.7

TYPE LOCALITY: Barro Colorado Island, Panama. (Female holotype).

OXYOPIDAE

Oxyopes barroanus Chamberlin and Ivie, new species.

Pl. IV, f. 27.

COLOR:—*Female*. Carapace dusky brown, lighter at base, darker in the interocular area. Chelicerae dark chestnut, with light tips. Endites and labium light brown, with pale tips. Sternum pale yellowish. Legs light brownish yellow, with faint dusky annuli. Abdomen gray, darker on sides, and with a dark lanceolate mark on base. Venter pale at sides, darker along center.

Epigynum as shown in the figure.

Length 6.5 mm.

TYPE LOCALITY: Barro Colorado Island, Panama. Female holotype.

SALTICIDAE

Dendryphantes perplexans Chamberlin and Ivie, new species.

Pl. VIII, f. 65.

COLOR:—*Female*. Carapace reddish brown, darker around eyes; top of head covered with shiny green scales. Chelicerae reddish brown. Sternum, labium, and endites dark dusky reddish brown, tips of labium and endites whitish. Legs and dpalpi for the most part dusky reddish brown, more or less mottled; tarsi II and III yellowish; legs III and IV light yellowish on basal part, including half of femur III and two-thirds of femur IV.

Abdomen with seven stripes above, extending the full length; these stripes not sharply distinguishable. The median stripe is light brownish red, next on each side is a dark reddish brown stripe, then a medium reddish brown stripe, and on each far side of the dorsum is a narrower stripe of white scales, the two white stripes joining together across base. The median and the medium reddish brown stripes clothed with bright green scales. There are also two pairs of small spots of white hairs on the sides of the median stripe. Venter and side purplish gray.

Structural in general typical. Epigynum as figured.

FEMALE

Length 7.0 m.m.

Carapace:

Length 2.9

Width 2.3

Tibia-patella:

I 2.9

IV 2.3

TYPE LOCALITY: Barro Colorado Island, Panama. Female holotype.

Corythalia conformans Chamberlin and Ivie, new species.

Pl. V, f. 33; Pl. VI, ff. 36A-38.

COLOR: Carapace black, with a large patch of whitish hairs at margin on each side near base. Mouthparts, sternum, and coxae and trochanters of legs brown. Palpus brown, with patella light yellowish. Legs blackish brown, with basal part of femur IV yellowish, and metatarsi and tarsi dusky orange. Abdomen black with three pairs of white spots above. Venter light grayish, more or less marked with darker gray.

STRUCTURE: Anterior eye row decidedly longer than the posterior. Eye area occupying less than half the length of the head. Palpus and epigynum as figured.

MALE

FEMALE

Length 3.2 mm.

3.8 mm.

Carapace:

Length 1.6

1.8

Width 1.3

1.4

Tibia-patella:

I (Missing)

1.2

II95

1.0

III 1.05

1.2

IV 1.00

1.2

TYPE LOCALITY: Barro Colorado Island, Panama. Female holotype, male allotype; female paratype.

Corythalia clara Chamberlin and Ivie, new species.

Pl. V, f. 34; Pl. VI, f. 41.

COLOR:—Female. Carapace brown on sides, more yellowish on top; eyes surrounded by blackish. Whole carapace thinly covered with grayish white hairs. Chelicerae light brownish red. Endites light reddish brown. Labium and sternum dusky-brown, the sternum lighter in center. Legs light brownish yellow, with light dusky annuli. Abdomen mottled dark and light gray above, the design is shown by the figure. Venter dark gray along middle, light gray at sides.

STRUCTURE: Carapace high and flat on top. Eye area occupying the full width, and over half the length. Posterior slope very steep. Legs 4 3 1 2; heavily spined. Epigynum as figured.

FEMALE

Length 4.6 mm.

Carapace:

Length 2.0

Width 1.5

Tibia-patella:

I 1.3

II 1.2

III 1.35

IV 1.5

TYPE LOCALITY: Barro Colorado Island, Panama. Female holotype.

Corythalia diffusa Chamberlin and Ivie, new species.

Pl. VI, f. 45.

COLOR:—Female. Carapace blackish brown, partially covered with white scales. Chelicerae dark brown, with some white scales in front. Endites reddish with white tips. Sternum and labium medium dusky yellowish brown. Palpi and legs reddish brown, with yellowish and orange markings; coxae yellowish, undersides of femora II, III, and IV yellowish on basal two-thirds; distal two-thirds of femur, patella, and distal end of tibia of the palpus light yellowish; other diffuse orange markings on legs. The palpi and legs have scattered white scales beneath the longer black hairs. Abdomen marked with dark and pale grayish above and on sides; venter mostly pale grayish, with the large median region lightly shaded.

STRUCTURE: Eye area not occupying the full width of the cephalothorax. Anterior eye row not longer than posterior. Median eyes about half way between the other rows.

FEMALE

Length 6.8 mm.

Carapace:

Length 3.2

Width 2.7

Tibia-patella:

I 2.43

II 2.35

III 2.60

IV (Missing)

TYPE LOCALITY: Barro Colorado Island, Panama. Female holotype.

Corythalia sitticus Chamberlin and Ivie, new species.

Pl. VI, f. 46.

COLOR:—*Female*. Carapace reddish brown, with the whole top of the head blackish, tho somewhat lighter in the middle. Carapace bearing several patches of white scales, but these mostly rubbed off from the type. Chelicerae reddish brown with distal end whitish on mesal side. Endites light brownish yellow with white tips. Labium orange brown. Sternum dusky orange. Legs dusy brown, with basal parts of legs III and IV light yellowish; tibiae darker. Abdomen dark gray above with light gray markings, consisting of: a longitudinal spot on each side near base, and three transverse marks on posterior half, each containing a smaller dark mark—the most anterior of these transverse marks large and extending onto sides, the posterior one small. Venter pale grayish with dark speckling.

Structure essentially typical, differing mainly in the epigynum, which is figured.

FEMALE

Length 5.3 mm.

Carapace:

Length 2.4

Width 1.7

Tibia-patella:

I 1.4

IV 1.8

III 1.7

TYPE LOCALITY: Barro Colorado Island, Panama. Female holotype.

Sidusa tulineba Chamberlin and Ivie, new species.

Pl. V, f. 35; Pl. VI, ff. 39-40.

COLOR:—*Male*. Carapace dark dusky reddish brown, with entire top of head black, and with scattered patches of white scale-like hairs; two lines of white hairs across clypeus near margin. Chelicerae dusky reddish brown. Sternum dusky brown. Labium dusky brownish yellow. Endites light grayish yellow, with blackish patches on edges. Palpus dark dusky brown, with patella and distal end of femur light yellowish above. Legs mainly dark dusky brown; coxae and trochanters of three posterior legs light yellowish in part. Femur IV light yellowish brown on basal half below; leg III with tibia and metatarsus black; tarsi lighter than the rest of the legs, tarsi III being bright yellowish white. Abdomen dull yellowish, marked with black above, as shown in the figure; a large black patch on basal half containing a white spot. Venter blackish. Spinnerets brownish yellow.

STRUCTURE: General shape typical. Legs rather stout. Leg III especially modified on tibia and patella—these segments bearing a dense fringe of black hairs along dorsal and ventral sides—the legs in this region appearing flattened laterally. Legs I and II with a much lesser scopula-like growth on underside.

MALE

Length	5.1 mm,
Carapace:	
Length	3.35
Width	2.00
Tibia-patella:	
I	1.85
III	2.33
IV	2.30

TYPE LOCALITY: Barro Colorado Island, Panama. Male holotype.

Freya serrapophysis Chamberlin and Ivie, new species.

Pl. VII, ff. 49-50.

COLOR:—*Male*. Carapace dark brown on top and margins, lighter and more orange on the sides below eyes, and with an orange spot over the median depression. The whole carapace thinly clothed with whitish hairs. Chelicerae, endites, and labium dark brown with light tips. Sternum blackish at sides, large median area yellowish. Palpi blackish brown, with a stripe of white hairs along side which turns dorsal on distal end of femur. Legs light yellowish on tops and bottoms, blackish on the sides—the black especially heavy on leg I, much reduced on III and IV.

Abdomen dusky gray above, with sides whitish, and an irregular white median stripe on posterior half. Sides and sides of venter white. Venter and epigastric region black.

STRUCTURE: Essentially typical. Palpus as shown in the figures.

MALE

Length 3.5 mm.

Carapace:

Length 1.85

Width 1.32

Tibia-patella:

I 1.15

II 1.05

III 1.20

IV 1.30

TYPE LOCALITY: Barro Colorado Island, Panama. Male holotype.

Freya demarcata Chamberlin and Ivie, new species.

Pl. VII, ff. 47-48.

COLOR:—*Male*. Carapace blackish, with a large whitish patch on top of head and another somewhat smaller spot just back of median depression; a wide sub-marginal band of white hairs along side, extending onto the clypeus in front, and sending a branch up between the posterior and middle eyes; sides of head above partially clothed with bright reddish hairs, especially in front. Chelicerae dark reddish brown, the bases in front covered with white hairs. Endites, labium and coxa I reddish brown. Sternum orange—yellowish in center, darker along edge. Leg I brownish black, except tarsus, which is yellowish. The other legs yellowish, with the two distal joints on leg IV darkened with dusky. Abdomen dark brownish gray, with a broken stripe along each side, and a broader median one above lighter—the lateral stripes joining across base and broken into spots posteriorly; the medium stripe containing chevron-like marks on posterior half. Venter blackish, with a whitish stripe, speckled with black, along each side. Upper spinnerets dusky; lower spinnerets whitish on basal half, black on distal half.

STRUCTURE: Eye area occupying nearly the full width of the carapace. Anterior eye row longer than posterior. Middle eyes nearer the posteriors than the anterior laterals. Clypeus narrow. Chelicerae ordinary; vertical; with one tooth on posterior side of fang. Legs stout; heavily spined, 1 4 3 2. Abdomen small and narrow, tapering from near the base to posterior end. Palpus as figured.

MALE		
Length	6.0	mm.
Carapace:		
Length	3.8	
Width	2.1	
Tibia-patella:		
I	3.0	
II	1.9	
III	2.1	
IV	2.2	

TYPE LOCALITY: Barro Colorado Island, Panama. Male holotype.

Freya nannispina Chamberlin and Ivie, new species.

Pl. VII, ff. 51-52.

COLOR:—*Male*. Carapace with integument black on top, very dark brown on sides and posterior slope; a wide band of white scales along margin of each side, these extending onto clypeus in front; a small patch of white hairs between posterior and middle eye on each side, and another such patch over median depression. Chelicerae dark reddish brown. Sternum, labium, and endites dark blackish brown—the labium and endites with whitish tips. Leg I dark brown with patches of white hairs above. Other legs with coxae yellowish; femora dark brown, except IV which is yellowish at base; patellae brown, with III and IV light yellowish brown in middle, tibiae and metatarsi brown, with III and IV light on top and bottom; tarsi yellowish. Palpus dark brown, except patella and distal end of femur above, which are yellowish.

Abdomen brownish gray, with two spots of whitish along mid-line on posterior half, and two such spots on each side,—a narrow line extending from the anterior spot across base and joining its mate on the opposite side; basal half above largely clothed with rufous red hairs. Venter blackish with a sort of H-shaped patch of whitish near center. Epigastric region and spinnerets dark dusky brown.

STRUCTURE: Clypeus very narrow. Chelicerae with one tooth on lower margin of furrow. Legs 4 1 3 2. A small low cone-like elevation between anterior lateral and middle eye on each side.

MALE		
Length	5.5	mm.
Carapace:		
Length	2.8	
Width	1.9	
Tibia-patella:		
I	2.1	
II	1.5	
III	1.5	
IV	1.8	

TYPE LOCALITY: Barro Colorado Island, Panama. Male holotype.

Freya uncinella Chamberlin and Ivie, new species.

Pl. VII, ff. 53-55.

COLOR:—Male. Carapace blackish brown, with a transverse white spot on front of head, a white median streak on thoracic part, and a wide white submarginal stripe along each side and extending across clypeus; red hairs around anterior median eyes. Mouthparts and sternum blackish brown, the chelicerae with white hairs in front, the labium and endites with white tips. Papli blackish, brown—the patella and distal part of femur heavily covered with white hairs above. Legs orange yellow; leg I splashed with dusky black. Abdomen blackish with a white median stripe, and a white stripe along each side, the two side stripes joining across base, and connecting with the anterior end of the median stripe.

STRUCTURE: Essentially typical, without conspicuous modifications. Palpus as figured.

MALE

Length 5.10 mm.

Carapace:

Length 2.30

Width 1.90

Tibia-patella:

I 2.20

II 1.65

III 1.82

IV 1.80

TYPE LOCALITY: Barro Colorado Island, Panama. Male holotype, male paratype.

Freya saggitifer Chamberlin and Ivie, new species.

Pl. VIII, f. 64.

COLOR:—Female. Carapace dark reddish brown, blackish around the eyes; and with a distinct arrow-shaped white mark along median line of thoracic part, the arrow pointing anteriorly. Carapace clothed with white hairs, these tending to form patches on sides and about the eyes. Mouth parts reddish brown. Sternum light orange. Legs and palpi light orange yellow, with heavy black annuli—two on femur of leg, one on petalaella, two on tibia, and two on metatarsus.

Abdomen with a wide irregular light grayish median stripe, containing black specks; each side of this dusky black. Sides and venter light grayish. the sides heavily specked and splashed with dusky black, venter distinctly specked with black.

STRUCTURE essentially typical. One tooth on posterior side of fang of chelicera. Leg I with spines 2-2-2 on underside of tibia, 2-2 on underside of metatarsus.

FEMALE

Length 5.8 mm.

Carapace:

Length 2.55

Width 2.00

Tibia-patella:

I 1.90

II 1.65

III 1.75

IV 2.00

TYPE LOCALITY: Barro Colorado Island, Panama. Female holotype, immature paratype.

Cobanus erythrocras Chamberlin and Ivie, new species.

Pl. VI, ff. 43-44.

COLOR:—*Male*. Carapace reddish brown—thoracic part darker than on top of head; eyes joined by black, a median streak of white hairs back of median furrow. Labium dark dusky brown. Palpus reddish brown; cymbium dusky; white hairs above. Leg I has coxa, trochanter, and femur dusky reddish brown; petalla, tibia and metatarsus reddish brown, with dusky markings; tarsus light yellowish. Leg II similar to I, except that femur is lighter above on basal half, and the tibia and metatarsus are lighter, with two wide indistinct dusky annuli on tibia, a distinct blackish annulus at distal end of metatarsus, and a less distinct and much lighter annulus near base. Legs III and IV have coxae, trochanters, and femora pale yellowish, the femur with a wide blackish annulus at distal end; patella light brownish, with a wide indistinct dusky annulus; the distal segments as in leg II. The legs are clothed with black slender hairs, and a moderate number of white scale-like hairs. Abdomen dark grey above, with pale gray markings, consisting of: a median basal stripe, a streak on each side near base, a series of chevron-like marks on posterior half, and a number of streaks and spots along the sides. Venter dark dusky below, with sides and posterior part pale grayish. Spinnerets brownish yellow, each with a wide dusky streak along ectal side.

STRUCTURE: Carapace moderately high; top of head nearly as wide as carapace at margin. Middle eyes slightly nearer the posterior eyes than to the anterior side eyes. Chelicerae long and widely divergent; fang long and with a double curve; a large tooth on each side at base of fang, and a small tooth on each side toward base of chelicera, the

anterior tooth being farther toward base than the posterior. Legs 1 4 2 3. Spines on underside of tibia I 2-2-2-2; on underside of metatarsus 2-2-2. Leg I stouter than the others. Abdomen small. Palpus slender; the femur with a strong curve; tarsus small.

MALE

Length 5.6 mm.

Carapace:

Length 2.7

Width 2.0

Tibia-patella:

I 2.6

IV 2.2

TYPE LOCALITY: Barro Colorado Island, Panama. Male holotype, male paratype.

Phiale lineola Chamberlin and Ivie, new species.

Pl. VIII, f. 66.

COLOR:—*Female*. Carapace rich dark brown, slightly darkened on the head; sides narrowly margined with a stripe of white hairs, and a similar stripe along center from posterior eye row for more than half the distance to base. Mouthparts and sternum rich dark brown. Palpi clear yellow. Leg I with femur and basal segments dark brown, the remainder light brown with a dorsal and a prolateral stripe of dark brown along patella and tibia. Other legs light brown with femora darkened, and with a darker prolateral stripe along patella, tibia, and metatarsus of each leg; leg IV with a similar stripe along retrolateral side also. (Abdomen discolored.)

STRUCTURE: Anterior lateral and posterior eyes about equal in size. Anterior and posterior rows of about the same length. Median eyes about midway between the other two rows, slightly nearer the anterior lateral eyes if anything. Leg 4 3 1 2; anterior legs stoutest. Tibia I has spines 2-2-2 below; metatarsus 1-2. Tibia II has spines 1-2-2 below; metatarsus 2-2. Chelicera has one tooth on lower margin. Epigynum as figured.

FEMALE

Length 7.0 mm.

Carapace:

Length 3.8

Width 1.8

Tibia-patella:

I 1.73

IV 1.90

TYPE LOCALITY: Barro Colorado Island, Panama. Female holotype.

***Psecas euoplus* Chamberlin and Ivie, new species.**

Pl. VIII, f. 67.

COLOR:—Female. Top of head and sides of thoracic part of carapace blackish, becoming reddish brown on top of thoracic part; covered with light silvery gray scales. Chelicerae dark reddish brown. Sternum and labium dusky brownish yellow, sternum lighter in the center, and labium with a narrow light tip. Endites reddish brown, with a lighter edge on mesal side. Paipus light yellow, heavily shaded with dusky on femur. Leg I reddish brown on coxa, trochanter, on top and under side of femur, and a patch on top of the patella and the tibia; the rest of these segments dark dusky brown; metatarsus and tarsus light orange to yellowish; the light patches on the top of the tibia and patella covered with silvery white scales. Legs II, III, and IV entirely light yellow. Abdomen above refous red, with four broad evenly spaced blackish transverse bands, these black bands partially concealed by silvery gray scales. Venter light yellowish, with a light dusky strip along center—darker toward spinnerets.

STRUCTURE: Carapace elongate, low, and flat on top. Abdomen slender, about two and one-half times as long as wide. Leg I much stouter than the others; with four pairs of long stout spines on under side of tibia, and two pairs of such spines on under side of metatarsus. Chelicerae with six teeth on lower margin, two on upper.

FEMALE

Length 6.2 mm.

Carapace:

Length 2.9

Width 1.6

Tibia-patella:

I 2.3

IV 2.1

TYPE LOCALITY: Barro Colorado Island, Panama. Female holotype.***Scopocira panamena* Chamberlin and Ivie, new species.**

Pl. VIII, ff. 58-60.

COLOR:—Male. Carapace reddish orange, except top of head which is yellowish. Posterior eyes each on a black spot; median eye and anterior lateral eye of each side both together on a single black spot. Chelicerae orange, fang more reddish. Sternum, labium, and endites orange, labium darker, tips of endites lighter. Leg I orange, other legs more yellowish; all legs with a blackish stripe along each lateral side for the full length beyond trochanter—these stripes wide and distinct on legs I and IV, but very faint for the larger part on leg II. Abdomen

light yellowish gray, with dusky markings. A large dusky spot on each side near distal end; sides dusky along basal two-thirds; a light dusky area along top, containing a light median streak on basal half, and a large darker spot posteriorly.

STRUCTURE: Carapace high: much wider at margins than on top. Anterior median eyes very large; anterior lateral eyes scarcely larger than posterior eyes. Anterior lateral eyes situated a short distance back of median eyes. Middle eyes nearer anterior laterals than to the posterior eyes. Legs 1 & 2 3. Leg I much larger and stouter than the others. Spines on tibia I 2-2-2-2 below, metatarsus 2-2 below. Chelicerae and palpus as figured.

MALE

Length 3.3 mm.

Carapace:

Length 2.1

Width 1.7

Tibia-patella:

I 3.1

IV 1.9

TYPE LOCALITY: Barro Colorado Island, Panama. Male holotype.

Thiodina pseustes Chamberlin and Ivie, new species.

Pl. VIII, ff. 61-62.

COLOR:—Male. Carapace scarlet, with clypeus black, eyes surrounded by black, a patch of white hairs between posterior eyes, streaks of white hairs below each posterior eye, a pair of streaks of white hairs on posterior decline, and a long line of white hairs across clypeus. Chelicerae reddish, covered with shiny black in front. Sternum orange. Labium dusky brown with a narrow white tip. Endites reddish with white tips. Palpi and legs I and II reddish brown, shaded with black. Legs III and IV: coxae dusky reddish brown, femora light yellow basally, blackish distally; the distal segments reddish brown, becoming more yellowish on metatarsus and tarsus. Abdomen grayish green above, with two narrow white stripes running the full length. Sides below whitish. Venter black. Epigastric plates and spinnerets dark dusky brown.

STRUCTURE typical for the genus. Detailed differences in the palpus shown by the figures.

MALE

Length	9.0 mm.
Carapace:	
Length	3.8
Width	3.0
Tibia-patella:	
I	4.7
IV	3.0

TYPE LOCALITY: Barro Colorado Island, Panama. Male holotype.

Menemerus delus Chamberlin and Ivie, new species.

Pl. VIII, f. 63.

COLOR:—*Female*. Carapace reddish brown, with sides and base of thoracic parts blackish near the margin, though the very edge is white, due to white scales; the whole top hoary with white scale-like hairs; the front of the head clothed with long wooly white hairs. Chelicerae dark reddish brown. Sternum amber brown. Labium and endites dusky reddish brown with lighter tips. Palpi and legs light orange brown, mottled with light dusky; clothed with white hairs—those on the palpi long and wooly. Abdomen mottled whitish to light brownish gray above, with a V-shaped mark of dusky brown on posterior part—the angle of the V pointing forward. The large light area above bordered with dusky brown. Venter dusky, with sides whitish to light gray.

STRUCTURE: Carapace oval, a little longer than wide; rather low, with a basin-like median depression. The anterior row of eyes is longer than the posterior. Median eyes about half way between the other two rows. Legs stout. Leg I with spines 2-2-2 on underside of tibia, and 2-2 on metatarsus. Abdomen about twice as long as wide, flattened on top. Epigynum as figured.

FEMALE

Length	9.7 mm.
Carapace:	
Length	4.3
Width	3.4
Tibia-patella:	
I	3.8
IV	3.8

TYPE LOCALITY: Barro Colorado Island, Panama. Female holotype, immature paratypes.

LYSSOMANIDAE

Genus LYSSOMONEA Chamberlin and Ivie, new.

MALE

Carapace moderately high; width of clypeus a little less than the diameter of an anterior median eye; flat on top; steeply descending to base. Carapace longer than wide; eye area occupying nearly the full width. Anterior median eyes very large; anterior side eyes a little back of and ectal to the anterior medians, scarcely forming a separate row. Median eyes much nearer the anterior side eyes than to the posterior eyes. Quadrangle formed by anterior side eyes and posterior eyes wider than long, and wider in front than behind.

Chelicerae slender, vertical, without special modifications; six small teeth on posterior side of fang, four in front. Labium longer than wide. Endites more than one and one-half times the length of the labium. Legs 1 3 4 2. Leg I stoutest; leg IV most slender. Legs moderately spined; leg I with spines 2-2-2 on under side of tibia, and 2-2 beneath metatarsus. Abdomen slender; thicker and wider at base, slender posteriorly. Spinnerets long and slender.

Lyssomonea saphes Chamberlin and Ivie, new species.

Pl. V, f. 36; pl. VIII, ff. 56-57.

COLOR:—*Male*. Carapace dusky reddish brown on sides and posterior slope; top of head yellowish brown covered with buff hairs; a crescent-shaped patch of white hairs under each posterior eye, and a large patch of white hairs in middle just back of median depression. Mouth parts reddish brown, endites with whitish tips, labium more dusky. Sternum dusky brown. Palpi light yellowish, shaded with dusky on tarsus. Legs yellowish white, more or less darkened with brownish beyond distal part of femur on legs I and II, and with joints of legs III and IV lightly shaded with dusky. Abdomen dark greenish gray above with lighter markings; a narrow white band across base; a wide median stripe of whitish color, with two pairs of lateral extensions to enclose two pairs of small white spots. Sides whitish. Venter light greenish gray.

STRUCTURE as given under generic characters. Palpus as shown in figures.

MALE

Length	5.1 mm.
Carapace:	
Length	2.4
Width	1.65
Tibia-patella:	
I	2.3
II	1.8
III	2.0
IV	1.6

TYPE LOCALITY: Barro Colorado Island, Panama. Male holotype.

THERIDIIDAE

Chrosiothes conservativus Chamberlin and Ivie, new species.

Pl. X, f. 81.

COLOR:—*Female*. Carapace orange brown, heavily reticulated with light dusky. Sternum and labium dusky brown. Chelicerae orange brown; endites lighter. Legs and palpi yellowish at base, dusky orange beyond middle of femur. Abdomen dark gray, with a large V-shaped mark of light gray, the V extending from the spinnerets to near the base, and made up of irregular fused spots. Venter medium gray.

STRUCTURE: Carapace wide in thoracic part, head narrow. Eyes rather large, sub-equal, anterior median eyes being slightly smaller than the others. Anterior row straight, posterior row recurved. Anterior median eyes nearly a diameter apart, less than a half radius from side eyes. Posterior eyes equidistant, about a radius apart. Lateral eyes on each side contiguous. Median eyes of the two rows about an eye diameter apart. Median ocular area slightly longer than wide, about as wide behind as in front.

Legs stout and long; 4 1 2 3. Abdomen ovoid, about one and two-thirds as long as wide. Epigynum as figured.

FEMALE

Length	3.4 mm.
Carapace:	
Length	1.33
Width	1.15
Tibia-patella:	
I	2.10
IV	2.30

TYPE LOCALITY: Barro Colorado Island, Panama. Female holotype.

Genus *THERIDILELLA* Chamberlin and Ivie, new.

Characteristics based on female of genotype:

Cephalothorax with thoracic part broad, low, and rounded; the head part rather slender, elevated, and extending forward. Eyes eight, in two rows rather large. Posterior row slightly longer than the anterior. Anterior median eyes dark, others light. Anterior lateral and posterior median eyes somewhat larger than the other two pairs. Anterior row straight, posterior row slightly procurved. Eyes of anterior row only slightly separated from each other. Posterior median eyes sub-contiguous, about a radius from the side eyes. Lateral eyes of each side contiguous. Median eyes of the two rows about a diameter of a posterior median eye apart. Median ocular area longer than wide, sides about parallel. Width of clypeus about one diameter of anterior median eye. Anterior median eyes projecting forward over clypeus.

Chelicerae vertical; furrow with two teeth on lower side toward base of fang and four teeth on upper side, one at base of fang, a small one near tip, and two close together near middle. Sternum rather large, rounded cordate, separating hind coxae by fully a diameter of one of them. Endites large and squared distally, extending far beyond tip of labium; tips slightly convergent. Labium wider than long. Legs stout, appearing short in proportion to their thickness; without distinct spines. Palpus of female slender, extending to distal end of patella I. Abdomen nearly round as viewed from above, nearly as wide as long; somewhat flattened. Abdomen overlaps cephalothorax for some distance.

Theridilella zygops Chamberlin and Ivie, new species.

Female: Carapace dark brown, with median area posterior to the eye area lighter. Chelicerae, endites, labium, and sternum light brownish yellow—the sternum with dusky margins. Legs and palpi light brownish yellow, somewhat shaded with dusky, especially at the joints. Abdomen dark blackish gray, with a recurved transverse line of light gray across top toward base, and four longitudinal rows of small, indistinct, light gray spots extending from this line to spinnerets.

STRUCTURE as given under generic characters.

Length 1.7 mm.; tibia-patella I .62, IV .53 mm.

TYPE LOCALITY: Barro Colorado Island, Panama. Female holotype.

Theridion metabolum Chamberlin and Ivie, new species.

Pl. X, f. 79.

COLOR:—*Female*. Carapace, chelicerae, and endites yellowish. Labium and sternum dusky. Legs and palpi light yellow, with black markings, thus: Leg I, a longitudinal streak on middle of ventral side of

femur, annuli at distal end of femur, middle of tibia, distal end of tibia, distal end of metatarsus, and near distal end of tarsus. Leg II, annuli at distal end of tibia and metatarsus. Leg III, without markings. Leg IV with a black spot on distal end of patella,—dorso-anterior; annulus at distal end of tibia, extending onto base of metatarsus; annulus at distal end of metatarsus. Abdomen light grayish yellow with varying spots of opaque white or yellow on dorsum and with various markings of black spots and streaks, of which a spot at each side of the spinnerets and a vertical streak near each end of the genital furrow are probably constant.

In structure, this species has long slender legs and other features which are similar to those of *T. frondeum* Hentz and *T. trepidum* Cambridge.

Measurements

FEMALE

Length	2.9 mm.
Carapace:	
Length	1.20
Width .....	.93
Tibia-patella:	
I	3.20
IV	1.75

TYPE LOCALITY: Barro Colorado Island, Panama. Female holotype, female paratype.

Theridion aztecum Chamberlin and Ivie, new species.

Pl. XI, ff. 97-98.

COLOR:—*Male*. Carapace dusky brown, with the interocular area more blackish. Chelicerae light dusky brown. Endites, labium, and sternum light yellowish, somewhat darkened with dusky,—the sternum with a small black triangular mark opposite each leg on the border. Palpus dusky brown. Legs pale yellowish with black or dusky markings and anuli. Abdomen with the basal half on top and sides whitish, heavily mottled and spotted with dark gray, and with a dark irregular median band. The posterior half is light yellowish gray, spotted with dark gray, the spots being especially concentrated on top of the hump, and in a strip from the hump to the spinnerets on each side. The anterior half is separated from the posterior half by an undulating white line. Venter dusky with the median area whitish, and a spot each side of the epigastric region. Spinnerets and epigastric plates dusky brown.

STRUCTURE: General shape of the usual *Theridon*. Legs 1 2 4 3; the front pair decidedly the longest. The abdomen with a distinct dorsal hump in middle at the highest place, from which it descends almost vertically behind. The chelicerae are long and slender.

Anterior eye row slightly procurved. Anterior median eyes a little more than a diameter apart, and about a radius from the side eyes. Posterior row slightly recurved. Posterior median eyes about two-thirds diameter apart and same distance from side eyes, and about one diameter from the anterior median eyes. Median ocular area slightly longer than wide, about the same width in front as behind. Eyes in order of size: posterior eyes, anterior laterals, anterior medians.

Measurements:

MALE

Length	1.93 mm.
Carapace:	
Length .....	.86
Width .....	.75
Tibia-patella:	
I	1.52
IV .....	.95

TYPE LOCALITY: Near Chilopa, Guerrero, Mexico.

Chrysso lyparus Chamberlin and Ivie, new species.

Pl. X, f. 84.

COLOR:—*Female*. Carapace orange. Chelicerae, sternum, labium and endites a lighter orange. Legs and palpi have coxae, trochanters, and under side of femora yellowish, the rest dusky brown to black. Abdomen pale grayish yellow, with several slightly darker vertical striations along the sides.

STRUCTURE: *Female*. Eyes about equal. Both rows essentially straight, the posterior row being very slightly recurved. Eyes in the two rows about equidistant, being about an eye diameter apart. Abdomen egg-shaped as seen from above, the posterior end rounded, but narrower than the base. Abdomen projecting about one-third its length beyond spinnerets; somewhat flattened on top. Legs slender.

Measurements:

FEMALE

Length	3.1 mm.
Carapace:	
Length	1.13
Width .....	.95
Tibia-patella:	
I	2.00
IV	(Missing)

TYPE LOCALITY: Barro Colorado Island, Panama. Female holotype.

Chrysso diplostichus Chamberlin and Ivie, new species.

Pl. X, f. 83.

COLOR:—Female. Carapace orange; interocular area and clypeus blackish. Chelicerae, endites, labium, and sternum orange,—the sternum shaded with dusky, especially the posterior tip, from which a broad streak extends forward for nearly half the length of the sternum. Legs yellow,—tarsi I slightly darkened, and leg IV with a narrow dusky line along the posterior side for nearly the entire length. Palpi yellow at base, dusky beyond middle of patella. Abdomen light grayish yellow, with a lanceolate pattern of opaque whitish spots on dorsum, a series of similar spots along each side, and with three black spots, one on each side about one-third distance from base, and one on posterior tip.

Abdomen ovoid, with posterior part extending far beyond spinnerets, tapering gradually to a narrow rounded tip. Epigynum as figured.

Measurements:

FEMALE

Length 2.7 mm.

Carapace:

Length87

Width70

Tibia-patella:

I 1.53

IV 1.00

TYPE LOCALITY: Barro Colorado Island, Panama. Female holotype.

Chrysso indicifer Chamberlin and Ivie, new species.

Pl. X, f. 82; pl. XI, f. 96.

COLOR:—Female. Carapace, sternum, mouthparts, and palpi blackish. Legs pale yellowish, legs I and II becoming darker and more brownish on trassus. Abdomen black, with a longitudinal row of white vertical bars along each side, and a lanceolate mark above formed of white spots.

STRUCTURE: Legs slender. Abdomen with a long finger-like process projecting posteriorly. Epigynum as figured.

Measurements:

FEMALE

Length 3.20 mm.

Carapace:

Length 1.00

Width73

Tibia-patella:

I 1.86

IV 1.10

TYPE LOCALITY: Barro Colorado Island, Panama. Female holotype.

Argyrodes parvior Chamberlin and Ivie, new species.

Pl. IX, ff. 68-69; pl. X, ff. 85-87.

COLOR: Carapace and under parts of cephalothorax dusky brown. Legs yellowish brown, shaded with dusky brown, especially on femur, tibia, and distal half of metatarsus. Abdomen silver, with black or gray markings, which vary considerably in density and extent,—but apparently there is usually a dark stripe extending back along each side of the dorsum over the posterior end, then forward below to the spinnerets; and a black spot in middle of posterior end.

STRUCTURE: Head of male without special modifications. Abdomen projecting far posterior to the spinnerets, and in the male is trituberculate (the two lateral tubercles being smaller and not as far posterior as the middle); in the females the tubercles are less distinct and more rounded, and the middle tubercle is broken up into four smaller tubercles. Epigynum and palpus as figured.

Measurements:

MALE

FEMALE

Length 2.5 mm.

3.0 mm.

Carapace:

Length 1.2

1.2

Width75

.75

Tibia-patella:

I 2.2

2.5

IV8

.85

TYPE LOCALITY: Barro Colorado Island, Panama. Male holotype, female allotype; male and female paratypes.

Argyroides dracus Chamberlin and Ivie, new species.

Pl. IX, ff. 73-75; pl. X, ff. 88-89.

COLOR: Carapace, mouthparts, sternum, and palpi brownish, more or less shaded with dusky. Legs light yellowish brown, shaded with dusky, which tends to become annulate, especially on leg IV. Abdomen silver with blackish markings, the more conspicuous of these marks being a black spot on posterior tip of abdomen, and a stripe extending along each side above, back over the lateral humps, and forward beneath to the spinnerets. Epigynum and spinnerets dusky brown.

STRUCTURE: *Female.* Cephalothorax and legs essentially typical. Abdomen straight along dorsal line, with a truncate median tubercle, and a pair of lateral humps posteriorly.

Male. Head rather high; clypeus projecting over the chelicerae, and bearing a small transverse groove across front, the rims of which nearly come together in the middle. Chelicerae rather small and straight. Endites large. (Abdomen missing). Palpus larger than usual.

Measurements:

	MALE	FEMALE
Length		3.30
Carapace:		
Length	1.20	1.12
Width .....	.75	.77
Tibia-patella:		
I	(Missing)	2.20
IV .....	.86	(Missing)

TYPE LOCALITY: Barro Colorado Island, Panama. Male holotype, female allotype.

Argyroides indignus Chamberlin and Ivie, new species.

Pl. X, ff. 94-95.

COLOR:—Female. Carapace orange brown, more or less dusky on thoracic part. Chelicerae brownish orange. Endites and labium brown. Sternum dark dusky. Legs light yellowish brown. Abdomen a mixture of silver and dusky, including a pair of bright silver spots just above the spinnerets.

STRUCTURE: Cephalothorax and legs typical. Abdomen short and wide, about as wide as long; with a pair of large tubercles at sides above, a large median tubercle posteriorly, and a pair of small tubercles above the spinnerets.

Measurements:

FEMALE

Length 2.1 mm.

Carapace:

Length93

Width66

Tibia-patella:

I 1.60

IV70

TYPE LOCALITY: Barro Colorado Island, Panama. Female holotype, female paratype.

Argyroides atopus Chamberlin and Ivie, new species.

Pl. IX, ff. 70-72.

COLOR:—*Male*. Carapace dusky brown, lighter in clypeal region. Chelicerae and endites brown. Sternum and labium dark dusky brown. Legs light brownish yellow, slightly shaded at the joints. Abdomen dusky with a silver strip along each side, two bright silver spots just back of spinnerets, and a small silver spot just back of genital furrow below.

STRUCTURE: Clypeus large, protruding, and grotesquely modified, as shown in the figure. Abdomen essentially typical; broadly protruding posteriorly beyond spinnerets, the distal end bearing a small lateral tubercle on each side. Palpus as shown in figures.

Measurements:

MALE

Length 2.8 mm.

Carapace:

Length 1.4

Width7

Tibia-patella:

I 2.1

IV9

TYPE LOCALITY: Barro Colorado Island, Panama. Male holotype, male paratype.

Argyroides vexus Chamberlin and Ivie, new species.

Pl. IX, ff. 76-78.

COLOR:—*Male*. Carapace, sternum, labium and endites brown, shaded more or less with dusky. Chelicerae red-brown. Legs yellow, variously shaded with dusky brown. Abdomen dusky, with sides (and sometimes parts of dorsum and venter) silvery.

Structure typical, except for head and chelicerae, the modifications of which are shown in the figures. Palpus as figured.

Measurements:

MALE

Length 3.2 mm.

Carapace:

Length 1.5

Width9

Tibia-patella:

I 3.00

IV 1.05

TYPE LOCALITY: Barro Colorado Island, Panama. Male holotype, Male paratypes.

Argyroides socius Chamberlin and Ivie, new species.

Pl. X, f. 90-91.

COLOR:—*Female*. Carapace, mouthparts, sternum, coxae, and palpi dusky brown. Legs brownish yellow, shaded with dusky. Abdomen blackish, with a silver stripe along each side,—this stripe dull on basal part, but bright posteriorly.

STRUCTURE: Cephalothorax and legs essentially typical. Abdomen long, two-fifths of the length posterior to the spinnerets, projecting horizontally and not narrowed laterally behind. Distal end finely wrinkled. Epigynum as figured.

Measurements:

FEMALE

Length 3.70 mm.

Carapace:

Length 1.36

Width75

Tibia-patella:

I (Missing)

IV 1.05

TYPE LOCALITY—Barro Colorado Island, Panama. Female holotype.

Argyroides pachysomus Chamberlin and Ivie, new species.

Pl. X, ff. 92-93.

COLOR:—*Female*. Carapace dark dusky brown. Chelicerae and endites brown. Labium and sternum blackish. Legs medium dusky brown, somewhat darkened at the joints. Abdomen dusky gray, with posterior tip blackish, sides silvery; a bright silver spot just back of genital furrow, a pair of similar spots just above spinnerets, and several smaller silver spots on underside of posterior tubercle.

STRUCTURE: Eyes nearly equal in size, anterior median eyes being slightly larger than the others. Anterior row very slightly procurved, posterior row slightly recurved. Anterior median eyes a full diameter apart, about a radius from the side eyes. Posterior median eyes one and one-half diameters apart, less than a radius from the side eyes. Lateral eyes on each side contiguous. Median eyes of the two rows about an eye diameter apart. Median ocular area wider than long, about as wide in front as behind.

Legs rather short. Abdomen short, with a truncate cone-like tubercle on caudal end, and a low swelling on each side a little farther forward. Epigynum as figured.

Measurements:

FEMALE

Length 2.50 mm.

Carapace:

Length85

Width60

Tibia-patella:

I95

IV55

TYPE LOCALITY: Barro Colorado Island, Panama. Female holotype.

Rhomphaea anomala Chamberlin and Ivie, new species.

Pl. X, f. 80.

Female.—Color pale yellowish thruout.

Structure essentially typical. Legs long and slender. Abdomen elongated behind; this elongation, however, much less than in some species. Near the base of the "tail" is a small tubercle on each side. Epigynum as figured.

Measurements:

FEMALE

Length 4.40 mm.

Carapace:

Length 1.33

Width90

Tibia-patella:

I 4.35

IV (Missing)

TYPE LOCALITY: Barro Colorado Island, Panama. Female holotype.

MICRYPHANTIDAE

Eperigone dopainum Chamberlin and Ivie, new species.

Pl. XI, ff. 99-101.

COLORS—*Female*. Carapace dusky orange brown, with a light shield-shaped spot on posterior part of head. Chelicerae and endites reddish brown. Sternum and labium dusky brown. Legs orange. Abdomen gray, with light spots above, as shown in the figure; sides lighter gray; middle of venter, including a ring around the spinnerets, dusky gray.

STRUCTURE: A large species closely resembling *Eperigone taibo* Chamberlin and Ivie, from which it differs mainly in minor details of the epigynum. Chelicerae without teeth or serrations on anterio-ectal corner. Epigynum as figured.

Measurements:

FEMALE

Length 3.10 mm.

Carapace:

Length 1.33

Width96

Tibia-patella:

I 1.30

IV 1.33

TYPE LOCALITY: Malinoltepec, Guerrero, Mexico. Female holotype.

LINYPHIIDAE

Neriene octopunctata Chamberlin and Ivie, new species.

Pl. XI, f. 102.

COLOR:—*Female*. Carapace dark dusky brown. Chelicerae lighter dusky brown. Sternum and labium blackish. Endites dusky brown. Legs light dusky yellow, with tibiae (except base) and patellae shaded darker than the rest; coxa and trochanter IV blackish. Abdomen black with four white spots on each side, the third from the base more of a longitudinal streak, the fourth small and located just above and to the side of the spinnerets.

STRUCTURE: Posterior median eyes larger than the others; posterior side eyes smallest. Posterior median and anterior median eyes dark, lateral eyes light. Anterior median eyes less than a diameter apart, two diameters from the side eyes. Posterior median eyes nearly two diameters apart, less than one diameter from side eyes. Lateral eyes on each side contiguous. Median eyes of the two rows two diameters of an anterior median eye apart. Median ocular area a little wider than long; much wider behind than in front. Cephalothorax rather low. Abdomen with a large rounded tubercle projecting posteriorly beyond the spinnerets.

Measurements:

FEMALE

Length 4.30 mm.

Carapace:

Length 1.57

Width87

Tibia-patella:

I 2.00

IV 1.60

TYPE LOCALITY: Barro Colorado Island, Panama. Female holotype, female paratype.

Microneta sima Chamberlin and Ivie, new species.

Pl. XII, ff. 103-108.

COLOR: Carapace dusky brown. Mouthparts brownish orange. Sternum dark dusky brown. Legs and palpi yellowish to orange, with diffuse shadings of dusky. Abdomen dark gray.

STRUCTURE in general typical. Clypeus vertical or nearly so. Eyes, palpus, and epigynum as figured.

Measurements:

	MALE	FEMALE
Length	1.50 mm.	1.85 mm.
Carapace:		
Length .....	.80	.80
Width .....	.65	.65
Tibia-patella:		
I	1.00	1.00
IV	1.05	1.05

TYPE LOCALITY: Malinoltepec, Guerrero, Mexico. Male holotype, female allotype.

Microneta watona Chamberlin and Ivie, new species.

Pl. XII, ff. 109-111.

COLOR:—*Female*. Carapace brownish yellow, margins widely shaded darker; a pale yellowish triangular spot on back of head area; eyes on black spots. Chelicerae orange. Legs and palpi orange yellow. Sternum, endites, and labium dusky over a yellowish background. Abdomen pale grayish above; sides dark gray; venter pale gray. The dark gray of the sides reaches to the spinnerets and surrounds them, except below. Dorsum marked with a narrow gray median line on basal half, and two narrow transverse chevron-shaped lines on posterior half. Spinnerets light yellowish.

STRUCTURE: Legs rather long. Posterior eye row very slightly re-curved; posterior median eyes about a radius apart, and slightly farther from the side eyes. Anterior eye row straight; anterior median eyes a little less than a radius apart and a little more than a radius from the side eyes. Posterior median eyes about a diameter from the anterior median eyes. Lateral eyes contiguous. Median ocular area longer than wide; wider behind than in front. Anterior median eyes much smaller than the others, which are about equal. Clypeus about one and one-half times diameter of anterior lateral eye.

Measurements:

	FEMALE
Length	1.90 mm.
Carapace:	
Length .....	.85
Width .....	.70
Tibia-patella:	
I	1.30
IV	1.26

TYPE LOCALITY: Near Malinoltepec, Guerrero, Mexico. Female holotype.

ARGIOPIDAE

Metepeira chilapae Chamberlin and Ivie, new species.

Pl. XIII, ff. 119-121.

COLOR:—Male. Carapace blackish brown, paler brown on the front part of the head. Chelicerae dark brown, paler toward the tips. Endites and labium dark brown with light tips. Sternum brownish black with median longitudinal strip of light yellowish. Palpi light yellowish, with cymbium and palpal organs darker. Femora of all legs with basal half light yellowish, and distal half dark dusky brown. Patellae dusky brown. Tibiae I and II reddish brown, with distal half of II shaded darker. Tibiae III and IV light yellowish at base, dusky brown on distal half or so. Metatarsi and tarsi light yellowish with distal tip of metatarsi shaded darker, or narrowly annulate.

Abdomen brown above, with a dark brown folium outlined with whitish, and a pair of undulating white longitudinal lines separating off a narrow brown strip along center. A pair of white spots on folium about half way back. Venter back of furrow blackish, with a large triangular white spot in the center, pointed posteriorly. Sides of venter light grayish brown, becoming dark brown on upper part of sides. Epigastric plates dark chestnut; furrow bordered in front by light orange brown. Spinnerets dark brown.

STRUCTURE typical; to be distinguished by the palpus, which is figured. In general appearance resembling *M. labyrinthea*.

Measurements:

MALE

Length 3.8 mm.

Carapace:

Length 2.0

Width 1.75

Tibia-patella:

I 1.83

II 2.00

III 1.07

IV 1.67

TYPE LOCALITY: Chilopa, Guerrero, Mexico. Male holotype.

Araneus guerrerensis Chamberlin and Ivie, new species.

Pl. XIII, ff. 117-118.

COLOR:—Female. Carapace with head dull light brown, becoming whitish on the back part; sides of thoracic part dark brown; borders light yellowish brown, with a very narrow dark margin. Chelicerae light yellowish, with basal half mottled with darker brown. Endites

and labium dark brown, with light tips. Sternum dark brown, with a small diffuse light spot in middle near the front. Legs and palpi light yellowish, with a few dusky markings on the legs, thus: distal half of femora I and II shaded above; patellae with two faint annuli; distal ends of tibiae and metatarsi with narrow annuli; tibiae also with a very faint sub-basal annulus;—the markings beyond the femur very pale on legs I and II. Abdomen light brownish gray, with a large white three-pointed median mark on the basal half above, a whitish mark on each side of basal half, also a recurved whitish strip extending across top between the two humps back of the basal three-pointed mark; posterior half with a darker brownish folium crossed by five indistinct darker bands, each of which are set off behind by lighter color, these bands becoming paler as they extend across the whitish sides above. Venter and lower sides dusky brown, with two laterally diffused whitish strips extending back from the genital furrow, and passing back on either side of the spinnerets to join the whitish strips along each side above. Spinnerets dark brownish.

STRUCTURE: Carapace of typical shape. Posterior median eyes largest, the others about equal. Posterior eye row recurved; median eyes a diameter apart, three diameters from the side eyes. Anterior row straight; median eyes a little more than a diameter apart, twice as far from the side eyes. Median ocular area about square. Chelicerae with three teeth on lower margin, four above. Legs 1 2 4 3; spines few. Abdomen with a pair of large humps near middle; the anterior end projecting forward into a small median hump. Epigynum with scape much folded from side to side, as shown in figure.

Measurements:

FEMALE

Length 4.3 mm.

Carapace:

Length 1.7

Width 1.5

Tibia-patella:

I 2.2

IV 1.5

TYPE LOCALITY: Chilapa, Guerrero, Mexico. Female holotype.

Araneus mutatus Chamberlin and Ivie, new species.

Pl. XIV, ff. 128-129.

COLOR:—*Female.* Carapace brownish yellow with blackish markings as shown in the figure. Chelicerae brownish yellow, with bases, fangs, and furrows dark brown. Sternum dusky brown, with a yellowish median stripe. Endites and labium dark dusky brown, with whitish tips.

Legs yellowish orange, with a number of dusky annuli: one at distal end of tibia, extending onto base of metatarsus (especially dark on leg IV), a wide annulus at distal end of metatarsus, and one at distal end of tarsus. Abdomen black and white above as shown in the figure, the white areas more or less tinted with yellow. Venter light gray at the sides, this gray area extending around posterior end of spinnerets; the middle area black, bordered on each side by a white line, and split longitudinally thru the center by another white line. Epigastric region has middle area, including epigynum, blackish; each side of this light yellowish; plates brown. Spinnerets brown.

STRUCTURE: Cephalothorax and legs essentially typical; abdomen rounded in front, with a transverse row of three low humps at caudal end above, and with another low hump in the middle between the upper humps and the spinnerets. Epigynum short and wide as shown in the figure.

Measurements:

FEMALE		
Length	12.3	mm.
Carapace:		
Length	5.0	
Width	3.8	
Tibia-patella:		
I	5.4	
IV	5.1	

TYPE LOCALITY: Barro Colorado Island, Panama. Female holotype, immature paratype.

Araneus moatus Chamberlin and Ivie, new species.

Pl. XIV, f. 125.

COLOR:—*Female*. Carapace light orange, shaded with dusky on head, median ocular area black, and side eyes narrowly surrounded with black. Cheliceae orange, darkened with dusky. Sternum orange, with a dark mark in center. Labium orange, with light dusky border. Endites dusky brown, with light tips. Legs and palpi dusky brown. Abdomen black, with a few white markings above.

STRUCTURE: Posterior eye row recurved; anterior row very slightly recurved. Anterior median eyes nearly a diameter apart, nearly two diameters from the side eyes. Posterior median eyes a little more than a diameter apart and nearly three diameters from the side eyes. Lateral eyes on each side contiguous. Median eyes of the two rows slightly less than a diameter of a posterior median eye apart. Median ocular area wider than long, slightly wider in front than behind.

Spines on legs slender; reduced in number. Abdomen without basal humps, but with a small hump above spinnerets. Epigynum short and wide, as shown in figure.

FEMALE

Length 6.2 mm.

Carapace:

Length 3.2

Width 2.2

Tibia-patella:

I 3.5

IV 3.2

TYPE LOCALITY: Barro Colorado Island, Panama. Female holotype.

Araneus setospinosus Chamberlin and Ivie, new species.

Pl. XIV, f. 124.

COLOR:—*Female*. Carapace light dusky orange,—more orange and less dusky on the head. Chelicerae orange. Sternum, labium and endites dark dusky brown, the endites and labium with whitish tips. Legs light brown, with coxae and trochanters dusky below, and with broad light dusky annuli on legs III and IV. Abdomen grayish orange above, dusky beneath, with the two usual crescent-shaped white marks. Spinnerets dark dusky brown with light tips.

STRUCTURE: In general of the usual form. Eyes subequal, the anterior medians being somewhat larger than the others. Posterior row slightly recurved; anterior row recurved. Anterior median eyes a little more than a diameter apart, nearly two diameters from the side eyes. Posterior median eyes a little more than a diameter apart and more than two diameters from the side eyes. Lateral eyes on each side a little less than a diameter apart; median eyes of the two rows nearly two diameters of a posterior median eye apart. Median ocular area longer than wide, and slightly wider in front than behind.

Legs stout; armed with many small spines, which are basally stout but distally slender. Abdomen with two small basal humps, and a posterior hump above the spinnerets, somewhat as in *Eustala anastera*. Epigynum decidedly different from that of most species of *Araneus*, as shown by the figure.

Measurements:

FEMALE

Length 12.0 mm.

Carapace:

Length 6.0

Width 5.0

Tibia-patella:

I 5.5

IV 4.5

TYPE LOCALITY: Barro Colorado Island, Panama. Female holotype.

Araneus sinuoscapus Chamberlin and Ivie, new species.

Pl. XIV, f. 123.

COLOR:—*Female*. Carapace with a narrow whitish border on sides of thoracic part; inside of this is a wide brown stripe, irregular along mesal border, and extending the full length of the carapace. Inside of this is a light yellowish irregular strip, extending from the anterior eye row to the base, these light stripes joining together back of the median depression to form sort of a U-shaped mark; the median area, in the form of a wide irregular stripe extending from the clypeus to the median depression, dark brown. Clypeus dark brown. Chelicerae light yellowish in front, with a diagonal diffused band of brown on basal half; sides darker brown; fang dark chestnut. Sternum dark brown. Labium dark brown with whitish tip. Endites somewhat lighter brown, with whitish tips and a large round light spot on distal half. Legs and palpi light yellowish, with dark brown markings as follows: Palpus with light diffuse markings;—a longitudinal streak along outer side of femur above, annuli around the two distal joints. Leg I with femur all brown except sides of basal half; patella all brown; tibia with basal fifth and distal two-fifths brown. Leg II similar to leg I, with brown more extensive on femur. Legs III and IV similar to leg I, but with basal half of femur mainly yellow.

Abdomen yellowish gray above, with a folium on the dorsum of black and gray; sides blackish; venter black in middle, yellowish at sides.

STRUCTURE: Size large; general structure typical. Posterior eye row recurved, anterior row very slightly recurved. Anterior median eyes larger than the others, less than a diameter apart, and a full two diameters from the side eyes. Posterior median eyes scarcely a radius apart, more than three diameters from the side eyes. Lateral eyes on each side sub-contiguous. Median eyes of the two rows a little less than the diameter of a posterior median eye apart. Median ocular area slightly wider than long, decidedly wider in front than behind.

Legs stout, with a usual number of spines. Abdomen rounded, without noticeable humps. Epigynum with the scape long and folded from side to side, as shown in the figure.

Measurements:

FEMALE

Length	12.0 mm.
Carapace:	
Length	5.2
Width	4.2
Tibia-patella:	
I	7.0
IV	6.0

TYPE LOCALITY: Barro Colorado Island, Panama. Female holotype.

Araneus tuonabo Chamberlin and Ivie, new species.

Pl. XIV, f. 130.

COLOR:—*Female*. Carapace light yellow, with eyes on black spots. Chelicerae, sternum, labium and endites light yellow. Legs pale yellowish with dusky markings as follow: Leg I, distal tip of femur and patella dusky; tibia more or less entirely diffuse dusky, more intense distally; base and distal part of metatarsus, and entire tarsus, light dusky brown. Legs II, III and IV have trochanters dusky; femur with base and distal end (and mid-region of IV) dusky; patella dusky; distal half of tibia dusky; base and distal end of metatarsus and tarsus dusky.

Abdomen with a bright yellow design above, enclosing a dark gray design, the latter containing black spots and partially separated from the yellow by a narrow white border. (The dark gray may be absent in some specimens, leaving only two pair of black spots, one pair near base, and one pair near distal end.) Sides and venter grayish to yellowish containing a large black spot near center of venter, another black spot enclosing the spinnerets, and a third on under side of distal end. Epigynum light chestnut. Spinnerets black.

STRUCTURE: Body in general slender, with a slender abdomen, which has a posterior horizontal projection beyond spinnerets. Legs moderately stout with a reduced number of spines.

Both eye rows recurved, the anterior only slightly so. Anterior median eyes larger than the others, less than a diameter apart, and two and on-half diameters from the side eyes. Posterior median eyes a little less than a diameter apart, and nearly four diameters from the side eyes. Lateral eyes on each side subcontiguous. The median eyes of

the two rows about a radius of an anterior median eye apart. Median ocular area wider than long, and wider in front than behind. Epigynum distinct as shown in the figure.

FEMALE	
Length	4.6 mm.
Carapace:	
Length	1.0
Width	1.7
Tibia-patella:	
I	2.5
IV	2.2

TYPE LOCALITY: Barro Colorado Island, Panama. Female holotype, female paratypes.

Araneus designatus Chamberlin and Ivic, new species.

Pl. XIV, ff. 126-127.

COLOR:—*Female*. Entire cephalothorax and appendages light yellowish, with ends of legs and palpi blackish, with a blackish half annulus on distal end of femur below, and narrow indistinct longitudinal stripes of dusky on dorsal side of legs; fangs chestnut. Abdomen light yellowish, with a pinkish design along middle above; posterior point black on top. Sides and venter grayish, enclosing many light spots. Epigastric region and epigynum yellowish.

STRUCTURE: A medium sized spider, especially peculiar in the shape of the abdomen. Carapace more smooth and rounding than typical; eyes not elevated on humps. Eyes all very small. Posterior row slightly recurved; anterior row straight. Anterior median eyes two diameters apart and more than three times as far from the side eyes. Posterior median eyes one and one-half diameters apart, many diameters from the side eyes. Lateral eyes on each side nearly a diameter apart. Median eyes of the two rows nearly two diameters apart. Median ocular area nearly square, being barely longer than wide.

Abdomen with two sharp humps near base, and posterior end extending into a sharp point behind. Epigynum short.

FEMALE	
Length	3.3 mm.
Carapace:	
Length	3.2
Width	2.8
Tibia-patella:	
I	3.2
IV	2.7

TYPE LOCALITY: Barro Colorado Island, Panama. Female holotype.

Parawixia nesophila Chamberlin and Ivie, new species.

Pl. XVI, ff. 141-143.

COLOR:—*Female*. Carapace pale yellowish, with a dusky spot in the median depression, and other irregular dusky markings on the head. Front of head, between median and lateral eyes, dark. Chelicerae light yellowish, with dusky markings at base in front, and distal end dusky brown. Sternum light yellowish on sides, dusky in the middle with dusky lines extending thru the yellowish areas to margin. Labium dusky brown with light tip. Endites yellowish, with light tips, and mesal sides shaded with dusky. Legs light yellowish with heavy dusky annuli. Abdomen mottled grayish brown, with many fine dark and light specks. Venter blackish, with a transverse white spot just back of epigynum.

STRUCTURE: Carapace wide, and rather low; head broad. Eyes arranged as in *Araneus*,—four median eyes on a slight elevation, and lateral eyes of each side on an elevation far removed from the median eyes. Eyes sub-equal, anterior median eyes being slightly the largest. Both rows recurved, the posterior row strongly so. Median ocular area wider in front than behind, slightly wider than long.

Legs stout, armed with many short spines. Abdomen with twelve tubercles above, as shown in the figure. Epigynum with a long slender scape.

Measurements:

FEMALE

Length 12.0 mm.

Carapace:

Length 6.0

Width 5.0

Tibia-patella:

I 8.0

IV 6.0

TYPE LOCALITY: Barro Colorado Island, Panama. Female holotype, immature paratype.

Genus *ZIGANA* Chamberlin and Ivie, new.

Female. Carapace slightly longer than wide; wide in thoracic part, moderately narrowed in head region. Basal margin slightly indented, sides and posterior corners evenly rounded; cervical indentations deep, but not sharp; head short, anterior corners rounded, scarcely half the width of the thoracic part.

Median ocular area elevated and projecting forward and upward. Clypeus about one diameter of an anterior median eye in width. Head and thoracic part of carapace moderately low; the median ocular

elevation in the region of the posterior median eyes is the highest part. Median furrow longitudinal, small. Posterior median eyes large, the others small and about equal. Four median eyes dark, lateral eyes light. Both rows recurved. Posterior median eyes about two diameters apart, about three-fourths of a diameter from the lateral eyes. Anterior median eyes slightly more than a diameter apart, over two diameters from the lateral eyes. Lateral eyes on each side contiguous; median eyes of the two rows about a diameter of posterior median eye apart. Median ocular area wider behind than long, much wider behind than in front.

Chelicerae vertical, moderately short, stout; four teeth on upper margin of furrow, two or three below. Sternum large, scarcely longer than wide; broad in front, pointed behind; narrowly separating hind coxae. Labium short, wider than long. Endites short and thick; about as wide as long. Palpus of female small. Legs moderately slender; 4 1 2 3; a few very weak spines on legs I and II, others without spines.

Abdomen about one and one-half times as long as wide, bearing seven sharp pointed humps, in the genotype.

Zigana wixoides Chamberlin and Ivie, new species.

Pl. XVI, ff. 137-138.

COLOR:—*Female*. Carapace orange brown, with sides of thoracic part and median ocular area shaded with dusky. Chelicerae and sternum orange. Endites and labium orange brown to dusky brown. Abdomen light yellowish gray with black and white markings: A median area above more or less white; the areas lateral to this dusky to black. Sides above whitish. Sides and posterior part below blackish; median ventral area light yellowish gray. Light specimens are more orange or yellowish with less dusky; dark specimens have dusky areas more extensive and more intense.

Structure as given under generic characters.

Measurements:

FEMALE

Length 4.4 mm.

Carapace:

Length 1.80

Width 1.65

Tibia-patella:

I 2.0

IV 2.5

TYPE LOCALITY: Barro Colorado Island, Panama. Female holotype, female paratypes.

Acacesia alticeps Chamberlin and Ivie, new species.

Pl. XVI, ff. 140.

Immature. In general similar to *A. foliata* (Hentz), the abdomen having similar color markings. It is remarkably different in the shape of the head, this being highly elevated and conical, as shown in the figure.

TYPE LOCALITY: Barro Colorado Island, Panama. Female holotype.

Micrathena planata Chamberlin and Ivie, new species.

Pl. XV, ff. 132-133; pl. XVI, ff. 139.

This species is easily distinguished by the very flat body, light orange brown color, and the spines on the abdomen of the female.

COLOR:—Female. Carapace yellowish in front, becoming orange on sides and behind; eyes on black spots. Mouthparts, sternum, and coxae and trochanters of the three anterior legs orange yellow; fangs of the chelicerae reddish brown. Basal half of palpus yellowish, distal half brown. Legs dark dusky brown, femora of legs I, II, and IV darker, coxa and trochanter IV and underside of leg III lighter. Abdomen yellowish above, with many orange chitinized spots, and with a narrow dusky margin on sides and posterior end; anterior spines orange, others blackish. Venter orange yellow with chitinized spots darker and shaded with dusky, and numerous fine dark specks marking small pits on the surface; circle around spinnerets and epigynum dark dusky. Epigastric plates bright reddish. Spinnerets dusky brown.

Male. Cephalothorax and appendages brownish orange;—the legs more or less shaded with dusky, leg I more than the others, and especially beyond patella; sides of carapace lightly shaded with dusky; sternum slightly paler than the rest. Abdomen grayish yellow above with lateral and posterior edges shaded with dusky. Venter more orange along middle; sides shaded lightly with dusky; epigastric plates orange; spinnerets light dusky brown.

STRUCTURE:—Female. Carapace a little longer than wide; slightly emarginate behind, sides rounded, head broad, square in front; cervical indentations moderate. Carapace rather low; clypeus narrow, width less than one diameter of an anterior median eye; head somewhat elevated back of eyes; depressed in region of median depression; elevated again on thoracic part to a height about equal to the cephalic elevation, then gradually descending to base. The median depression is a small round pit. On each side of the carapace, on anterior half of thoracic part, is a row of three pits.

Eyes small, sub-equal; posterior median eyes slightly the largest, lateral eyes slightly the smallest. The four median eyes dark, the lateral eyes pearly white. Both rows slightly recurved. Anterior median eyes three-fourths of a diameter apart; side eyes far removed. Posterior median eyes a little more than a diameter apart; side eyes far removed. Lateral eyes of each side contiguous, elevated on a small tubercle. Median eyes of the two rows a little more than one of their diameters apart. Median ocular area slightly wider than long, and wider behind than in front.

Chelicerae very short and stout; vertical; anteriorly bulged near base; fang short stout and simple; three teeth on each side of fang. Sternum moderately small; much longer than wide; shield shaped, broadest near front end; not separating hind coxae, which are contiguous; margin bearing a rounded tubercle opposite each coxa of the first three pairs of legs, and one on posterior end. Labium a little wider than long, pentagonal. Endites about as long as wide, in general square at anterior end, with ectal corners rounded; about twice the length of the labium; densely scopulate on mesal margin and antero-mesal corner. Palpi small. Legs 1 4 2 3, leg I and IV being of about equal length,—the femur of leg IV longer, and the other segments shorter, than on leg I. Legs of moderate size and length; femora smoothly rugose; essentially spineless,—a few weak spines on under side of tibia I; three very small spines on prolateral side of femur I, and one near base, but more orsal; a small spine on each end of femur IV above.

Abdomen large and very flat; wide behind, somewhat narrower in front; a little longer than wide. Anterior margin concave, each anterior corner bearing a stout spine on the margin, which is directed forward over carapace; from these corners, the margins expand convexly and become widest near posterior end; a small spine on each margin near middle, and three large spines on each postero-lateral corner; posterior margin concave. Surface with many smooth chitinized spots above, and finely wrinkled between spots. Venter roughened with many minute sharp-rimmed pits; also bears large chitinized spots. Spinnerets near middle of abdomen; encircled by a dark chitinized ring. Epigynum conical.

Male. Carapace a little longer than wide; base and sides rounded; head very short, and narrow, the middle part extending farther forward than the corners. Carapace low; evenly convex; of about equal height for most of its length; clypeus retreating, negligible. Median depression and lateral pits as in female, but smaller and less conspicuous.

Median eyes dark, noticeably larger than the laterals, which are pearly white. Both eye rows slightly recurved. Anterior median eyes about a radius apart and a full two diameters from the laterals. Posterior median eyes three-fourths diameter apart, and a little over two diameters from the lateral eyes. Lateral eyes on each side contiguous,

elevated on a small tubercle. Median eyes of the two rows about three-fifths diameter apart. Median ocular area a little wider than long, slightly wider behind than in front.

Chelicerae small, straight; three teeth on each side of fang. Sternum more or less small; connected by narrow intercoxal extensions to a chitinized piece along each side lateral to the coxae;—in other words, the whole underside of the cephalothorax is covered with a chitinous plate, thru which there are large openings for the legs to pass. Hind coxae narrowly separated. Labium and endites as in female, but proportionately smaller. Palpus short, of ordinary size for this genus; details as figured. Coxa I bears a small hook at distal end below. Legs moderately stout; 1 2 4 3; three legs directed forward, one backward; bearing a number of long spines, these most numerous on tibiae I and II, and reduced in number on leg IV.

Abdomen very flat; about one and one-half times as long as wide; anterior margin concave, sides nearly parallel (slightly convex), posterior end rounded; covered above with a thin chitinous shield. Venter chitinized along middle, wrinkled along sides. Spinnerets near posterior end; surrounded by a chitinous ring.

Measurements:

	MALE	FEMALE
Length	4.1 mm.	11.3 mm.
Carapace:		
Length	2.0	3.4
Width	1.6	2.9
Tibia-patella:		
I	1.85	3.4
IV	1.25	2.9

TYPE LOCALITY: Barro Colorado Island, Panama. Female holotype, male allotype; male and female paratypes.

Microthena coleophora Chamberlin and Ivie, new species.

Pl. XVI, f. 136.

COLOR:—*Male*. Carapace rich red brown, shaded with dusky on base and sides. Under parts, palpi, and legs brownish red, legs III and IV shaded with dusky. Abdomen dusky brown at ends above, mid-region dull grayish yellow. Venter colored as above, with epigastric plates reddish brown.

STRUCTURE: The carapace and abdomen as viewed from above are shown in the figure. The abdomen is elongate, hard, and constricted in the middle; flattened. Legs rather slender; three pairs extend forward, one pair backward. Legs I and II stouter than the others.

Legs I and II with a moderate number of spines, legs III and IV without spines.

Measurements:

MALE

Length 5.6 mm.

Carapace:

Length 2.5

Width 1.6

Tibia-patella:

I 1.9

IV 1.6

TYPE LOCALITY: Barro Colorado sland, Panama. Male holotype, male paratype.

Micrathena retracta Chamberlin and Ivie, new species.

Pl. XIV, f. 131.

COLOR:—*Female*. Carapace brown, darker on the thoracic part, yellowish on front of head. Chelicerae dark brown. Endites and labium brown, with light tips. Sternum blackish brown. Legs brown, slightly darkened at the joints. Abdomen light yellowish above with spots and other markings brown and dusky. Under side blackish with light yellowish markings.

STRUCTURE in general similar to that of *M. rediviana* (Walck.), to which it is related. It differs mainly in having much larger spines on the abdomen. The abdomen bears a pair of small basal humps; a pair of large spines on posterior corners; and just beneath the large spines a pair of short stout spines. Legs rugose. Abdomen roughened by fine serrations and pits.

Measurements:

FEMALE

Length 5.4 mm.

Carapace:

Length 5.2

Width 2.0

Tibia-patella:

I 2.0

IV 1.7

TYPE LOCALITY: Barro Colorado Island, Panama. Female holotype.

***Micrathena nigrior* Chamberlin and Ivie, new species.**

Pl. XVI, ff. 134-135.

COLOR:—Female. Carapace brownish black, with light margin on sides of thoracic part. Chelicerae black. Labium and endites blackish brown with light tps. Sternum blackish on the sides, but medially containing a large yellowish mark. Legs and palpi brownish black, becoming more brownish distally, and with tarsus and metatarsus IV light yellowish brown with the joints dark. Abdomen black with whitish yellow marks as shown in the figures.

STRUCTURE very similar to that of *Micrathena gracilis* (Walck.). The abdomen high and having many sharp spine-like processes. This species is distinguishable from *gracilis* by its much darker color.

Measurements:**FEMALE**

Length 10.7 mm.

Carapace:

Length 3.1

Width 2.3

Tibia-patella:

I 2.4

IV 2.3

TYPE LOCALITY: Barro Colorado Island, Panama. Female holotype, female paratypes.

***Mangora pia* Chamberlin and Ivie, new species.**

Pl. XII, f. 112.

COLOR:—Female. Cephalothorax and legs orange yellow, with faint dusky markings, but none of these distinct, except a broad black annulus on distal end of tibia IV, and a broad dusky annulus towards base of the same segment. Abdomen light yellowish with indistinct whitish markings, and a pair of longitudinal blackish spots on caudal end above, the area between these darker than the rest of the abdomen and extending forward for a short distance. Dusky markings around spinnerets.

STRUCTURE: A large stout species. Carapace high, being highest in region of median furrow. Legs stout and well spined. Abdomen elongate, anterior end elevated and overlapping cephalothorax. Epigynum as shown in the figure.

Measurements:

FEMALE

Length 6.7 mm.

Carapace:

Length 3.55

Width 2.20

Tibia-patella:

I 3.5

IV 3.5

TYPE LOCALITY: Barro Colorado Island, Panama. Female holotype, female paratypes.

Mangora dentembolus Chamberlin and Ivie, new species.

Pl. XII, ff. 114-116.

COLOR: *Female*. Carapace orange yellow, with a narrow median stripe, and a wider curved stripe on each side, of light dusky. Chelicerae orange yellow. Sternum a deeper orange, with margins shaded. Endites and labium dusky orange. Legs light orange, without distinct markings. Abdomen light yellowish gray, with more or less silvery white above, a large blackish patch at distal end above, and two rows of irregular spots along dorsum.

Male holotype lighter than the females (possibly freshly molted).

STRUCTURE: Female essentially typical; epigynum as figured. Male has a distinctive sharp stout spine on underside of femur IV at base. Palpus as figured.

Measurements:

MALE

FEMALE

Length 2.3 mm.

3.4 mm.

Carapace:

Length 1.1

1.4

Width9

1.1

Tibia-patella:

I 1.3

1.75

IV 1.2

1.70

TYPE LOCALITY: Barro Colorado Island, Panama. Male holotype, female allotype; female paratypes.

Mangora belligerens Chamberlin and Ivie, new species.

Pl. XII, ff. 113.

COLOR: Male. Entire cephalothorax and appendages light orange yellow,—the carapace with a faint median dusky stripe, and sternum with a dusky median streak on posterior half. Abdomen light grayish, with sides above silver-white, and median region light dusky; a pair of large black spots near posterior end.

STRUCTURE: Larger and proportionately more slender than *Man-gora dentembolus* n. sp. Spines on legs long and dark. Femur IV with a basal spine below as in *M. dentembolus*. Palpus as figured.

Measurements:

MALE

Length	4.0 mm.
Carapace:	
Length	2.05
Width	1.70
Tibia-patella:	
I	2.70
IV	2.35

TYPE LOCALITY: Barro Colorado Island, Panama. Male holotype, male and immature paratypes.

Leucauge saphes Chamberlin and Ivie, new species.

Pl. XIII, f. 122A.

COLORS Female. Carapace brownish orange, darkened with brown on middle of head and sides of thoracic part. Chelicerae with brown reticulations over an orange background in front and on ectal side; brown more solid distally, except on mesal side, which is orange. Sternum, labium, and endites dark dusky brown. Legs and palpi dusky orange, further shaded with dusky, especially over the joints and distally. Abdomen silver above, with dusky to black markings, consisting of: a longitudinal median stripe; a pair of spots at base which touch the median stripe; three pairs of spots, distant from the median stripe, but connected to it by oblique lines; the most posterior pair of these spots fused to a black area which extends across the apical end. Sides and venter blackish, with a pair of small white spots in middle of venter, and three irregular and unequal white spots up along each side.

STRUCTURE: Eyes about equal in size. Both rows moderately re-curved. Anterior median eyes a radius apart, a little over two diameters from the side eyes. Posterior median eyes nearly a diameter apart, and two and one-half diameters from the side eyes. Lateral eyes of each side sub-contiguous. Median eyes of the two rows about one and one-half diameters of a posterior median eye apart. Median ocular area slightly longer than wide, about as wide behind as in front. Width of clypeus about the diameter of an anterior median eye. Femur of leg I with a row of five distinct spines on anterior side. Abdomen oval. Epigynum as figured.

Measurements:

FEMALE

Length	5.3 mm.
Carapace:	
Length	2.3
Width	1.8
Tibia-patella:	
I	1.3
IV	2.1

TYPE LOCALITY: Barro Colorado Island, Panama. Female holotype, female paratype.

Leucauge synthetica Chamberlin and Ivie, new species.

PL. XIII, f. 122.

COLOR: *Female.* Carapace light yellow, with side margins of thoracic part lightly shaded with dusky. Chelicerae light yellow, with distal end brownish black. Sternum, endites, and labium dusky brown. Legs dull orange, with blackish annuli at: distal end of femur; distal half of patella; base, middle, and distal end of tibia; distal end of metatarsus; and distal end of tarsus,—the middle annulus on the tibia and the one on the tarsus lighter and more brownish. Abdomen silvery above, with three parallel longitudinal stripes of light yellowish, the lateral stripes connected to the median by oblique lines of the same color. The distal end of the median stripe blackish, forming part of a mottled black area at apical end of abdomen. Venter grayish, with a median black patch, which narrowly includes the spinnerets, and extends half way to the genital furrow.

STRUCTURE essentially the same as in *L. saphes* new species. Epigynum as figured.

Measurements:

FEMALE

Length 9.0 mm.

Carapace:

Length 3.3

Width 2.5

Tibia-patella:

I 6.3

IV 4.3

TYPE LOCALITY: Barro Colorado Island, Panama. Female holotype, female and immature paratypes.

Leucauge gemminipunctata Chamberlin and Ivie, new species.

Pl. XII, ff. 116A.

COLOR: Carapace, chelicerae, legs and palpi yellow, more or less shaded with dusky brown. Sternum dusky brown. Labium dusky brown, with a whitish tip, and containing two lighter spots. Endites dusky brown, with a whitish tip, and containing a light spot near base. Abdomen silver above, with a narrow median black stripe, and a large irregular black spot on each side at distal end, from which there extends forward a narrower and lighter strip to base, these lateral strips being connected to the median stripe by a series of oblique light gray lines. The black spots at the posterior end above, each extend broadly along distal half of side, and contain a silver spot posteriorly. Venter light yellowish gray, with a large central black area, which contains a pair of bright silver spots. Epigynal area and spinnerets dusky.

STRUCTURE: Anterior median eyes larger than the others. Anterior eye row recurved, posterior row straight. Anterior median eyes a little less than a diameter apart, and about two-thirds diameter from side eyes. Posterior median eyes about a diameter apart and the same distance from the side eyes. Lateral eyes on each side contiguous. Median eyes of the two-rows about a diameter of an anterior median eye apart. Median ocular area about as long as wide, very slightly wider in front than behind. Anterior median eyes dark, others pearly white. Legs fairly long and rather slender, with only a few weak spines. Abdomen somewhat rectangular, with the corners rounded, as viewed from above, the ends being blunt. Epigynum as figured.

Measurements:

	FEMALE	
Length	4.3	mm.
Carapace:		
Length	1.7	
Width	1.4	
Tibia-patella:		
I	3.5	
IV	2.0	

TYPE LOCALITY: Barro Colorado Island, Panama. Female holotype.

Tetragnatha siduo Chamberlin and Ivie, new species.

Pl. XVII, ff. 148-150.

COLOR: Carapace light yellow with dusky shadings on side margins of thoracic part and forming a medial design, consisting of: a median stripe extending from base to median depression, where it broadens and becomes forked,—a conspicuous prong following the cervical groove on each side half way to margin, and a narrow median prong, which soon becomes bifurcate, sending two stripes forward toward, but not reaching, the posterior median eyes; radial streaks may also be partially evident in darker specimens.

Chelicerae bright straw yellow; the fang only slightly darker, and more reddish. Sternum dusky over yellowish, with a light medial streak. Labium and endites more or less dusky over yellow, labium usually darker than endites. Legs and palpi straw yellow; in darker specimens faint annuli and gray spots at base of spines present. Abdomen silvery yellowish, somewhat as in *T. laboriosa* McCook; darker specimens showing a faint design similar to that of *T. extensa* (Linnaeus). Venter light grayish yellow to darker grayish.

STRUCTURE: Chelicerae of male long, fully as long as the carapace; teeth and fang as illustrated. Palpus slender. Legs very long.

Measurements:

	MALE	FEMALE
Length	8.0	9.0
Carapace:		
Length	3.2	3.3
Width	1.9	2.0
Tibia-patella:		
I	13.5	11.5
IV	7.0	5.6
Chelicera	3.3	2.9

TYPE LOCALITY: Barro Colorado Island, Panama. Male holotype, female allotype; male and female paratypes.

Tetragnatha apheles Chamberlin and Ivie, new species.

Pl. XVII, ff. 151-153.

COLOR: *Male.* Carapace dull orange with faint dusky markings. Chelicerae yellowish orange; fang and teeth light reddish brown. Sternum, labium, and endites orange covered over with dusky. Legs and palpi straw yellow, without distinct markings. Abdomen silvery green,—similar to that of *T. straminea* Emerton.

STRUCTURE: General shape rather long and slender. Both eye rows strongly recurved, as viewed from above,—anterior row straight as viewed from in front. Anterior median eyes largest, anterior side eyes smallest. Lateral eyes on each side farther apart than median eyes of the two rows. Chelicerae rather large and stout; fang and teeth as shown in figure; anterior prong not forked at tip, but ends in a single point. Abdomen only slightly larger in front than behind.

Measurements:

MALE

Length	9.0 mm.
Carapace:	
Length	3.0
Width	1.5
Tibia-patella:	
I	11.8
IV	6.2
Chelicera	2.1

TYPE LOCALITY: Barro Colorado Island, Panama. Male holotype, female allotype (freshly molted).

Tetragnatha ethodon Chamberlin and Ivie, new species.

Pl. XVII, ff. 144-146.

COLOR: Carapace light yellowish, shaded with dusky along middle and narrowly along sides of thoracic part. Chelicerae dull orange in female, shaded with dusky mesally and distally; brighter orange without dusky shadings in male; fang reddish brown. Sternum, endites and labium dusky brown. Legs light yellowish with joints dusky, and the color as a whole more or less darkened with dusky brown. Abdomen yellowish silver above and on sides as in *T. laboriosa*, with two undulating rows of elongate dusky spots along dorsum; venter dusky gray.

STRUCTURE: Body, especially abdomen, long and slender; legs slender, spines reduced. Chelicerae of male rather long; enlarged distally, slender at base; fang and teeth as shown in figures.

Measurements:

FEMALE		
Length	7.5 mm.	9.0 mm.
Carapace:		
Length	2.6	2.3
Width	1.3	1.1
Tibia-patella:		
I	9.8	8.4
IV	5.0	4.3
Chelicera	2.2	1.6

TYPE LOCALITY: Barro Colorado Island, Panama. Male holotype, female allotype; female paratypes.

Tetragnatha amplidens Chamberlin and Ivie, new species.

Pl. XVII, f. 147.

COLOR: *Female*. Carapace light yellowish, marked with dusky as in *T. siduo* sp. n. Chelicerae bright light orange; fang chestnut. Sternum and labium dusky, the latter with a whitish tip. Endites orange, slightly shaded with dusky. Legs and palpi light straw yellow, with joints shaded with dusky, and base of each spine situated on a small dusky spot. Abdomen colored as in a light specimen of *T. extensa* (Linnaeus).

STRUCTURE: Lateral eyes on each side closer together than the median eyes of the two rows. Chelicerae large; fang and teeth as illustrated. Abdomen swollen on basal half, more slender and cylindrical on distal half.

FEMALE	
Length	10.0 mm.
Carapace:	
Length	3.2
Width	2.1
Tibia-patella:	
I	10.4
IV	5.1
Chelicera	2.7

TYPE LOCALITY: Barro Colorado Island, Panama. Female holotype.

Glenognatha spherella Chamberlin and Ivie, new species.

Pl. XVII, ff. 154-156.

COLOR: Carapace light yellowish to yellowish brown, shaded lightly with dusky on tip of head and along median line; and with dusky margins on sides. Eyes on black spots. Chelicerae light reddish brown, Sternum, labium, and endites dusky yellowish brown,—sternum lighter in center, darker at the margins; endites more reddish. Legs yellowish brown, with broad diffuse dusky annuli—one on femur, two on tibia; matatarsus and tarsus darker. Abdomen silvery white with an intricate gray design above and on sides. Venter dusky along middle, light along sides. Median eyes black, lateral eyes pearly white.

STRUCTURE essentially typical. To be distinguished from other known species mainly by the teeth on the chelicerae. Abdomen only slightly longer than wide.

Measurements:

	MALE	FEMALE
Length	1.65 mm.	1.80 mm.
Carapace:		
Length .....	.87	.90
Width .....	.70	.72
Tibia-patella:		
I	1.35	1.18
IV .....	.95	.88

TYPE LOCALITY: Chilapa, Guerrero, Mexico. Male holotype, female allotype.

Figures and Explanations

PLATE I

Oonops chilapensis n. sp.

1. Left palpus of male, ectal view.
2. Same, meso-ventral view.

Scytodes nannipes n. sp.

3. Body of female, lateral view.

Scytodes fusca Walckenaer.

4. Body of female from Florida, lateral view.

Storena hessei n. sp.

5. Left palpus of male, ventral view.
6. Same, ectal view.
7. Epigynum.

Uloborus mundior n. sp.

8. Epigynum.
9. Left palpus of male, ectal view.

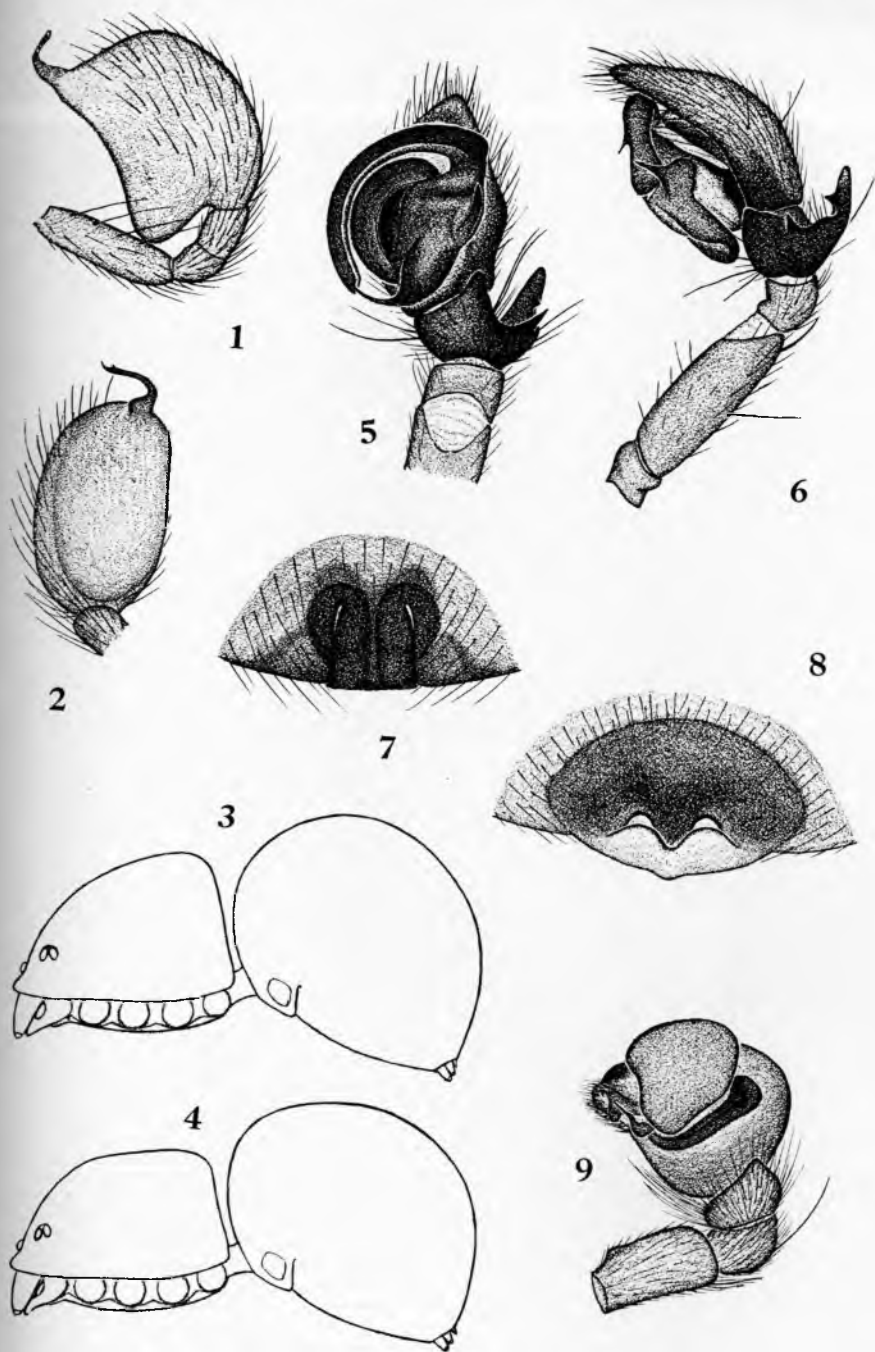


PLATE II

Uloborus tingens n. sp.

10. Epigynum.

Miagrammopes simus n. sp.

11. Female, dorsal view.

12. Epigynum.

Cupiennius medius n. sp.

13. Left palpus of male, ectal view.

14. Same, ventral view.

Gosiphrrurus schulzefenai n. sp.

15. Epigynum.

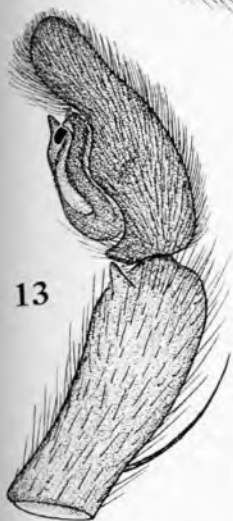
16. Eyes of female.



10



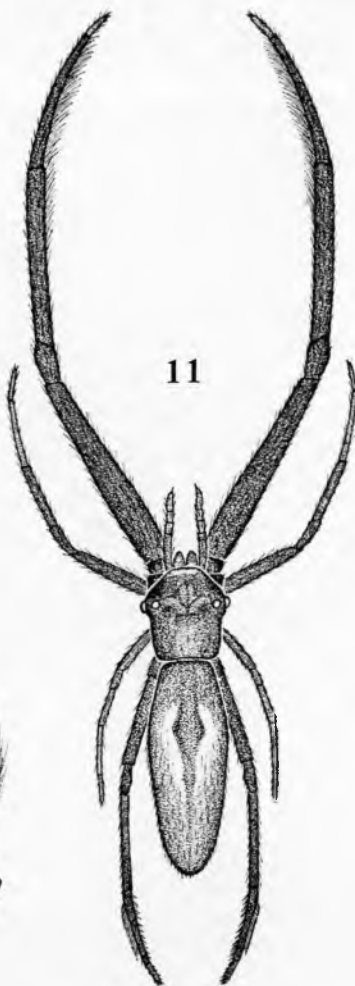
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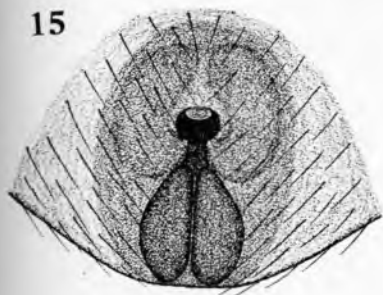
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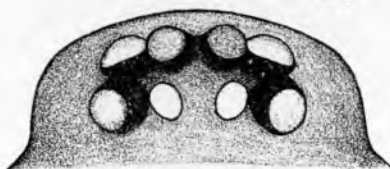
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11



15



16

PLATE III

Tivodrassus ethophor n. sp.

- 17. Female, dorsal view.
- 18. Body of female, ventral view.
- 19. Epigynum.
- 20. Right anterior leg, retrolateral view.
- 21. Eyes of female, dorsal view.

Lycosa tivior n. sp.

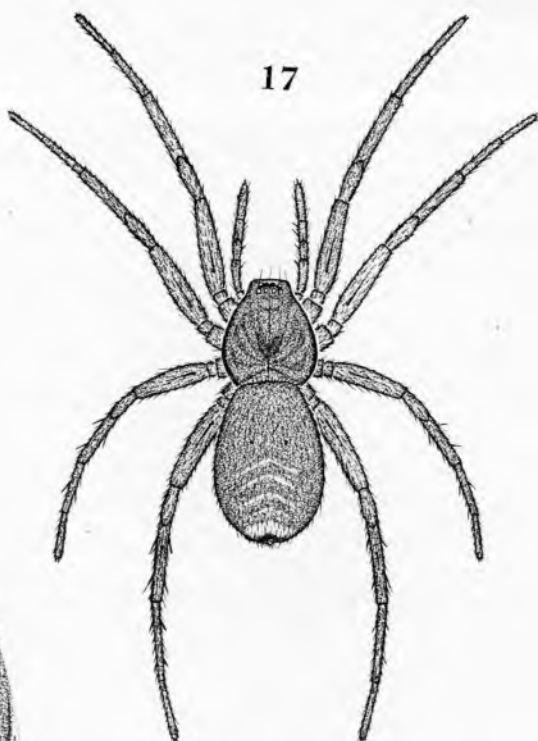
- 22. Epigynum.

Lycosa chickeringi n. sp.

- 23. Epigynum.



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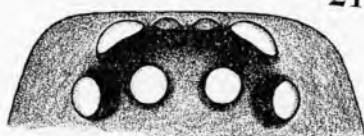
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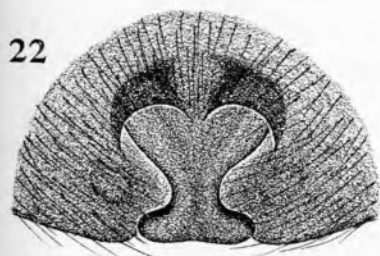
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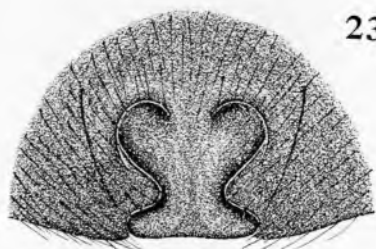
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PLATE IV

Thaumasia argyrotypa n. sp.

24. Body of immature specimen, dorsal view.

25. Epigynum.

Thaumasia heterogyna n. sp.

26. Epigynum.

Oxyopes barroanus n. sp.

27. Epigynum.

Barrisca nannella n. sp.

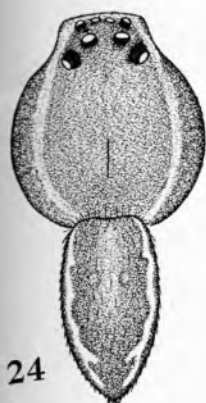
28. Body of immature specimen, dorsal view.

29. Eyes, dorsal view.

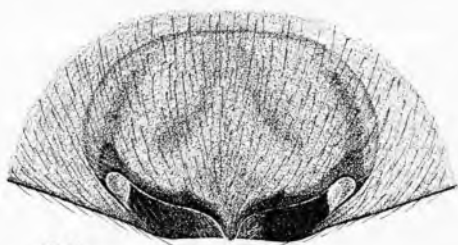
30. Chelicera, posterior view.

31. Left palpus of male, ectal view.

32. Same, vantral view.



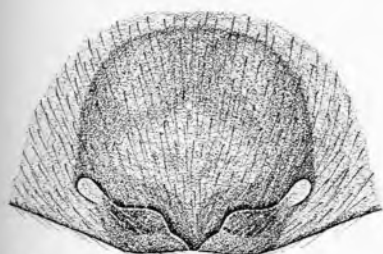
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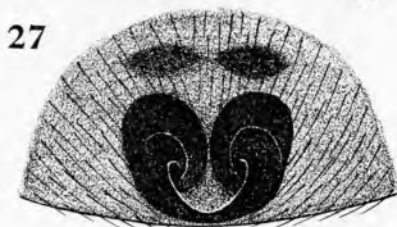
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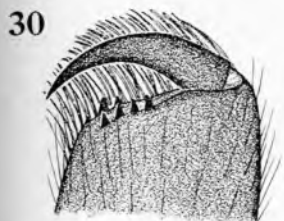
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PLATE V

Corythalia conformans n. sp.

33. Female, dorsal view.

Corythalia clara n. sp.

34. Female, dorsal view.

Sidusa tulineba n. sp.

35. Male, dorsal view.

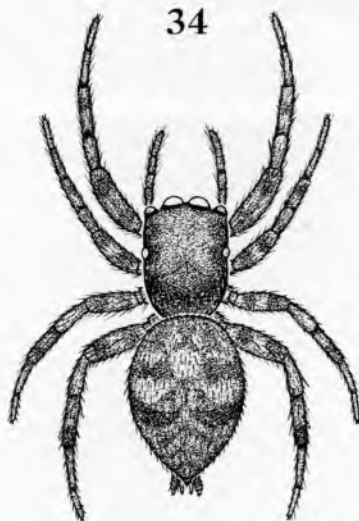
Lyssomonea saphes n. sp.

36. Male, dorsal view.

33



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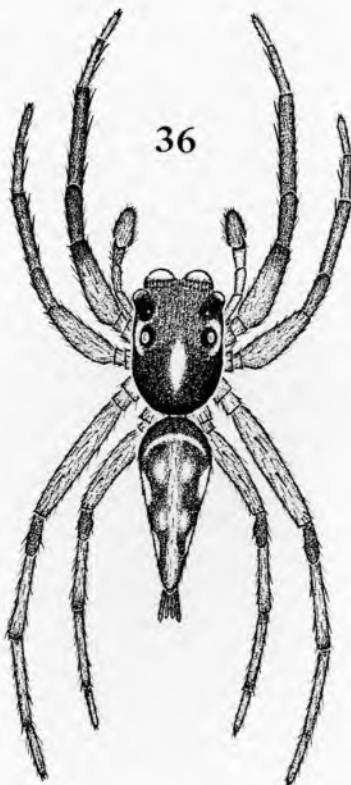


PLATE VI

Corythalia conformans n. sp.

36A. Left palpus of male, ventral view.

37. Same, ectal view.

38. Epigynum.

Sidusa tulineba n. sp.

39. Left palpus of male, ventral view.

40. Same, ectal view.

Corythalia clara n. sp.

41. Epigynum.

Corythalia endigma n. sp.

42. Epigynum.

Cobanus erythrocras n. sp.

43. Left palpus, ectal view.

44. Same, ventral view.

Corythalia diffusa n. sp.

45. Epigynum.

Corythalia sitticus n. sp.

46. Epigynum.

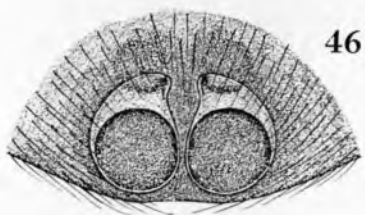
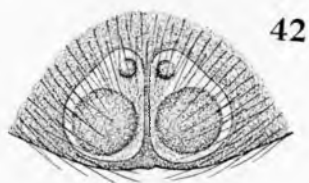
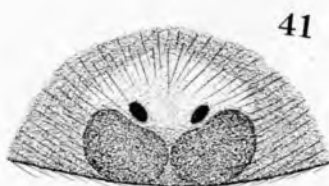
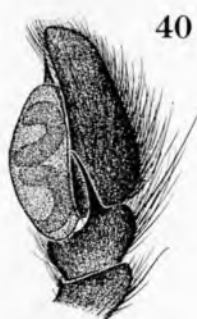
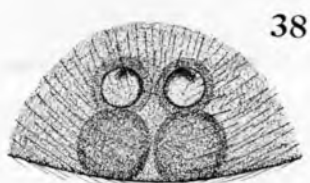


PLATE VII

Freya demarcata n. sp.

47. Left palpus of male, vantral view.

48. Same, ectal view.

Freya serrapophysis n. sp.

49. Left palpus of male, vantral view.

50. Same, ectal view.

Freya nannispina n. sp.

51. Left palpus of male, vantral view.

52. Same, ectal view.

Freya uncinella n. sp.

53. Left palpus of male, ectal view (embolus out of normal position)

54. Same, embolus in normal position.

55. Same, ventral view.



PLATE VIII

Lyssomonea saphes n. sp.

56. Left palpus, ventral view.

57. Same, ectal view.

Scopocira panamena n. sp.

58. Left palpus, ventral view.

59. Same, ectal view.

60. Chelicera of male, posterior view.

Thiodina pseustes n. sp.

61. Left palpus, ventral view.

62. Same, ectal view.

Menemerus delus n. sp.

63. Epigynum.

Freya saggitifer n. sp.

64. Epigynum.

Dendryphantes perplexans n. sp.

65. Epigynum.

Phiale lineola n. sp.

66. Epigynum.

Psecas euophus n. sp.

67. Epigynum.

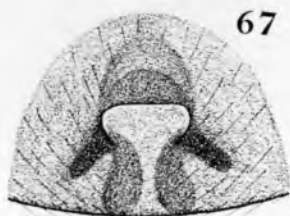
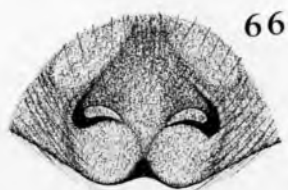
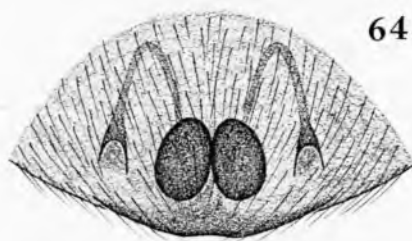
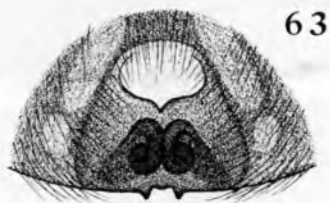


PLATE IX

Argyroides parvior n. sp.

- 68. Left palpus of male, ectal view.
- 69. Same, ventral view.

Argyroides atopus s. sp.

- 70. Left palpus of male, ectal view.
- 71. Same, ventral view.
- 72. Cephalothorax of male, lateral view.

Argyroides dracus n. sp.

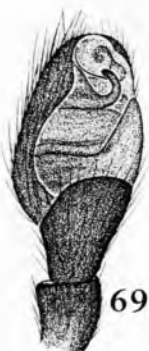
- 73. Cephalothorax of male, lateral view.
- 74. Left palpus of male, ectal view.
- 75. Same, ventral view.

Argyroides vexus n. sp.

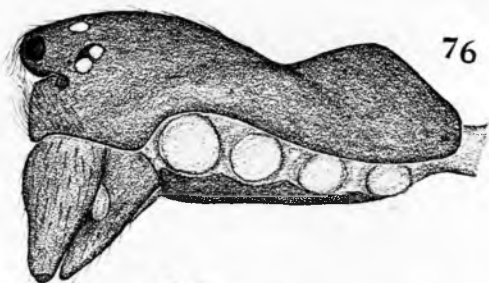
- 76. Cephalothorax of male, lateral view.
- 77. Left palpus of male, ventral view.
- 78. Same, ectal view.



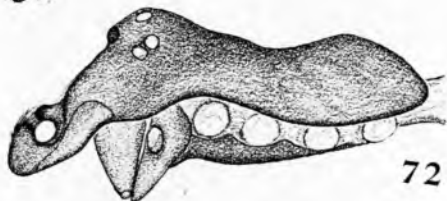
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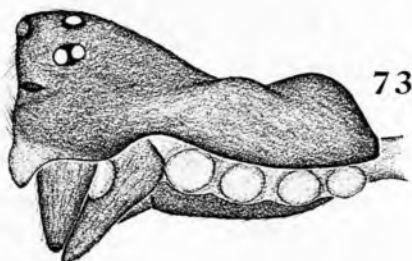
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PLATE X

***Theridion metabolum* s. sp.**

79. Epigynum.

***Rhomphaea anomala* n. sp.**

80. Epigynum.

***Chrosiothes conservativus* n. sp.**

81. Epigynum.

***Chrysso indicifer* n. sp.**

82. Epigynum.

***Chrysso diplostichus* n. sp.**

83. Epigynum.

***Chrysso lyparus* n. sp.**

84. Epigynum.

***Argyroides parvicr* n. sp.**

85. Epigynum, lateral view.

86. Same, postero-ventral view.

87. Cephalothorax of male, lateral view.

***Argyroides dracus* n. sp.**

88. Epigynum, lateral view.

89. Same, postero-ventral view.

***Argyroides socius* n. sp.**

90. Epigynum, lateral view.

91. Same, postero-lateral view.

***Argyroides pachysoma* n. sp.**

92. Epigynum, postero-lateral view.

93. Same, lateral view.

***Argyroides indignus* n. sp.**

94. Epigynum, postero-ventral view.

95. Same, lateral view.

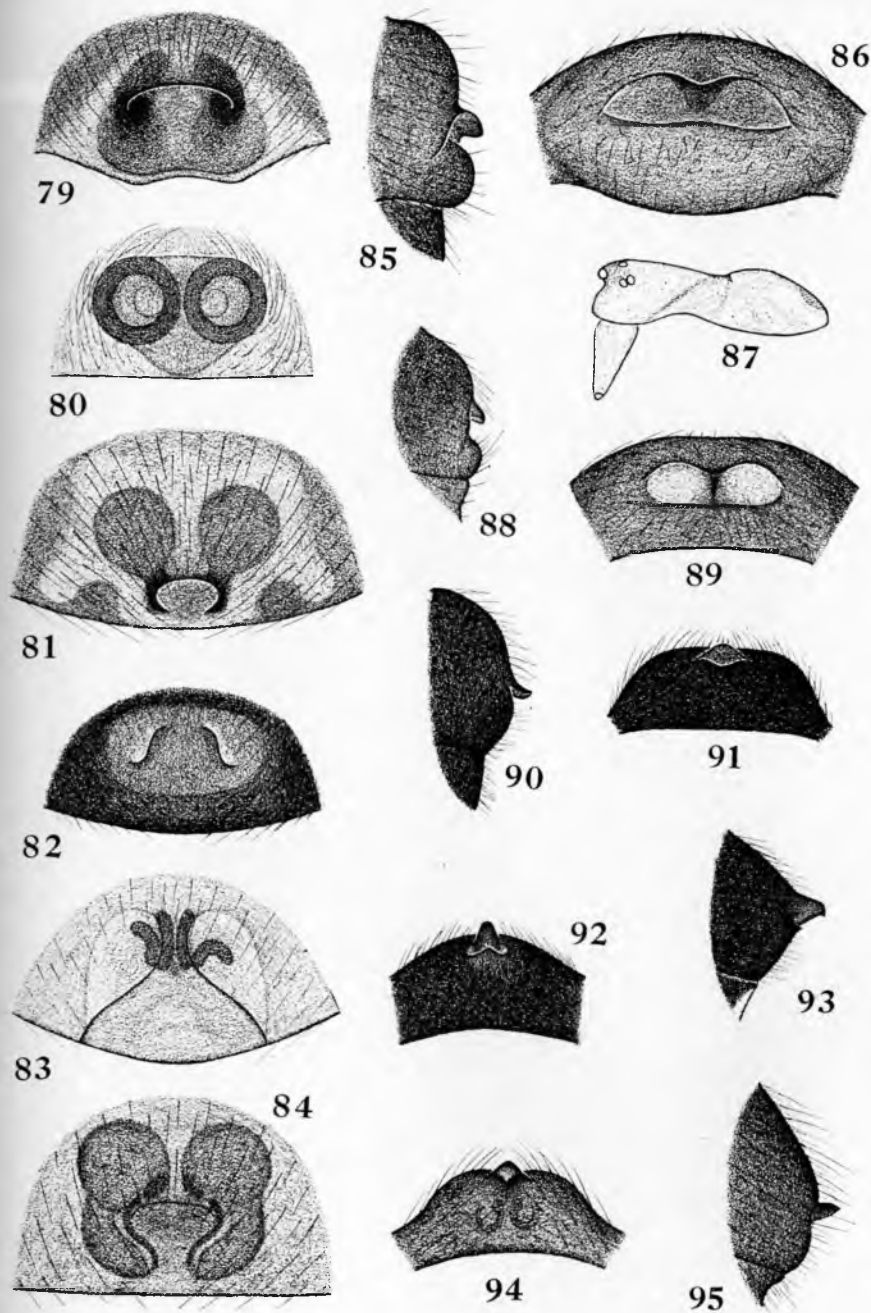


PLATE XI

Chrysso indicifer n. sp.

96. Female, dorsal view.

Theridion aztecum n. sp.

97. Left palpus of male, ectal view.

98. Same, ventral view.

Eperigone dopainum n. sp.

99. Abdomen of female, dorsal view.

100. Epigynum, anterio-ventral view.

101. Same, lateral view.

Nerienne octopunctata n. sp.

102. Epigynum.

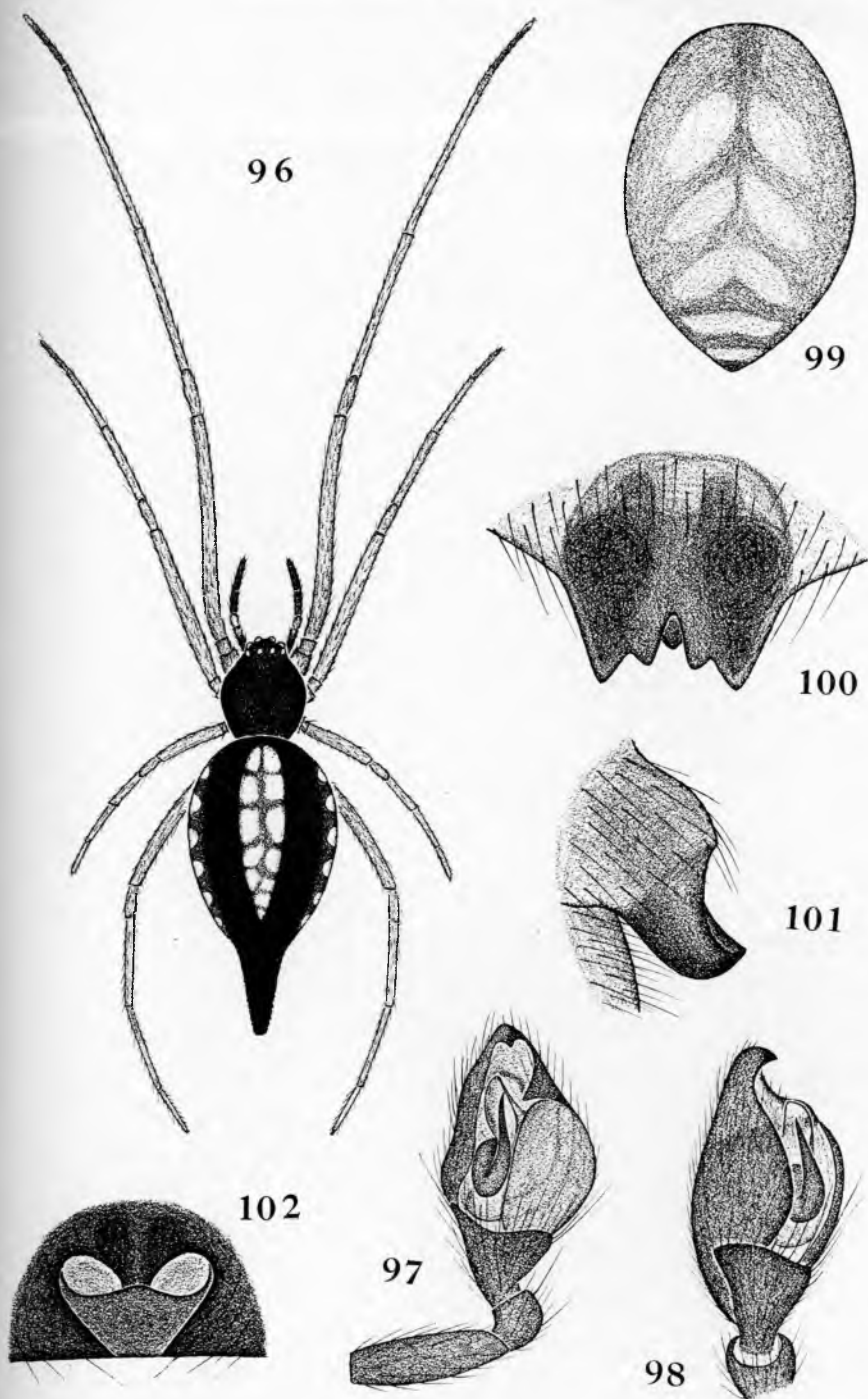


PLATE XII

Microneta sima n. sp.

- 103. Epigynum, ventral view.
- 104. Scape of epigynum.
- 105. Epigynum, lateral view.
- 106. Left palpus of male, ventral view.
- 107. Same, ectal view.
- 108. Eys of male, dorsal view.

Microneta watona n. sp.

- 109. Epigynum, lateral view.
- 110. Same, ventral view.
- 111. Scape of epigynum.

Mangora pia n. sp.

- 112. Epigynum

Mangora belligerens n. sp.

- 113. Left palpus, mesal view.

Mangora dentembolus n. sp.

- 114. Epigynum.
- 115. Left palpus of male, ectal view.
- 116. Right femur of leg IV of male, retrolateral view.

Leucauge gemminipunctata n. sp.

- 116A. Epigynum.

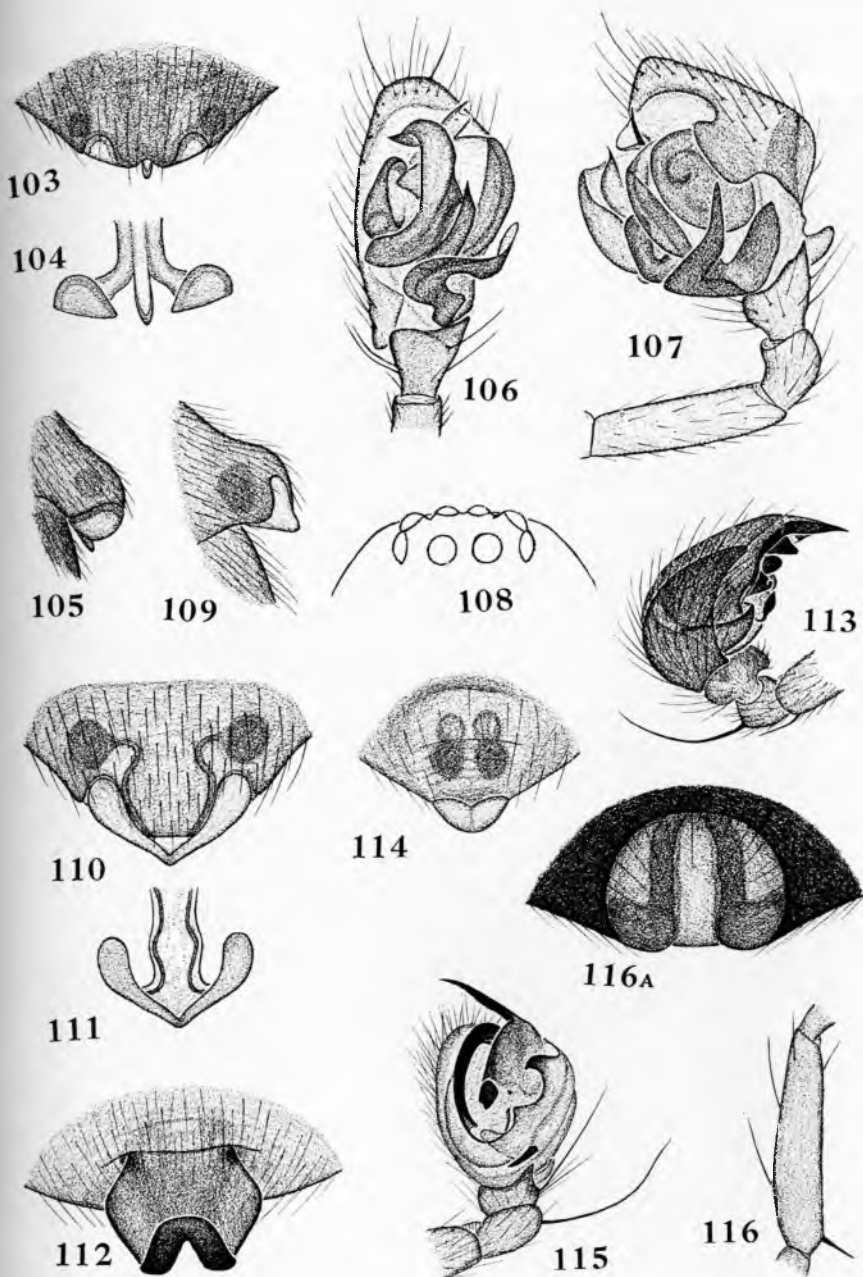


PLATE XIII

Araneus guerrerensis n. sp.

117. Female, dorsal view.

118. Epigynum.

Metepaira chilapae n. sp.

119. Male, dorsal view.

120. Body of male, ventral view.

121. Left palpus of male, meso-ventral view.

Leucauge synthetica n. sp.

122. Epigynum.

Leucauge saphes n. sp.

122A. Epigynum.

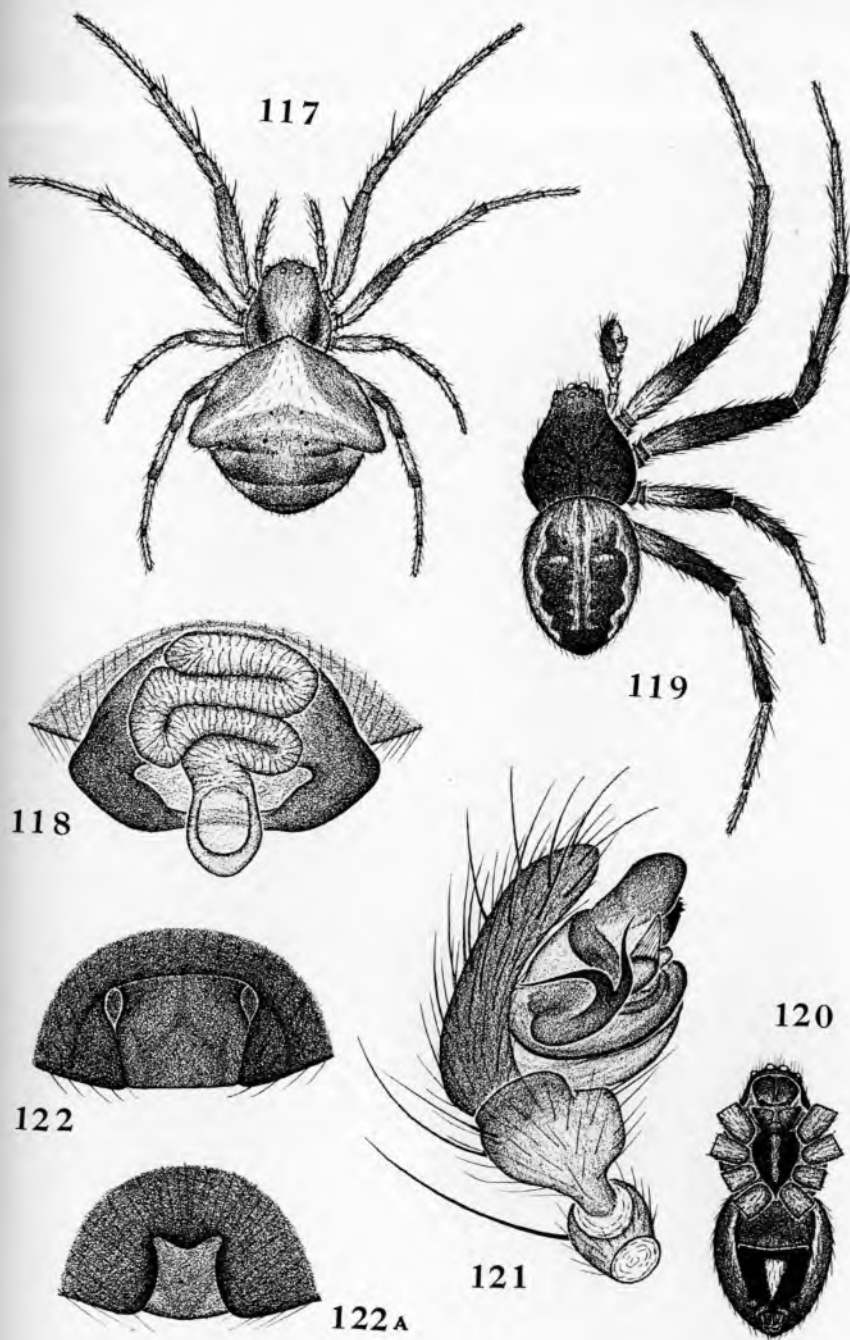


PLATE XIV

Araneus sinuoscapus n. sp.

123. Epigynum.

Araneus setospinosus n. sp.

124. Epigynum.

Araneus moatus n. sp.

125. Epigynum.

Araneus designatus n. sp.

126. Epigynum (not quite fully developed).

127. Abdomen of female, lateral view.

Araneus mutatus n. sp.

128. Epigynum.

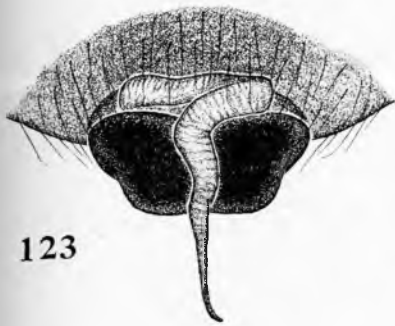
129. Body of female, dorsal view.

Araneus tuonabo n. sp.

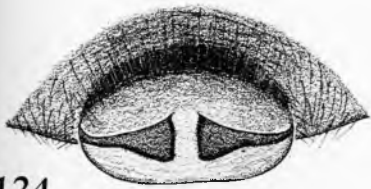
130. Epigynum.

Micrathena retracta n. sp.

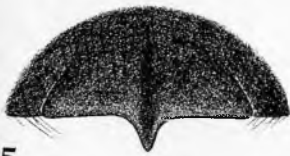
131. Female, dorsal view.



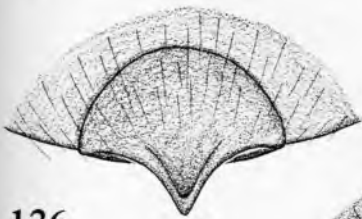
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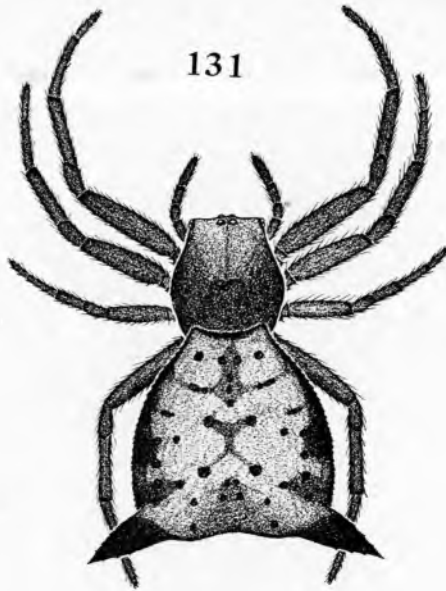
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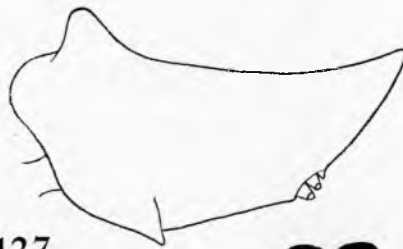
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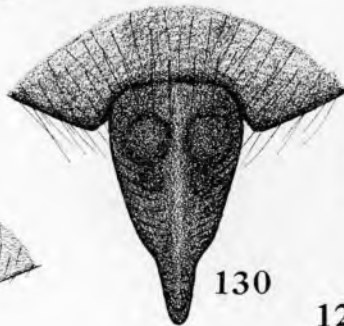
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PLATE XV

Micrathena planata n. sp.

132. Male, dorsal view.

133. Female, dorsal view.

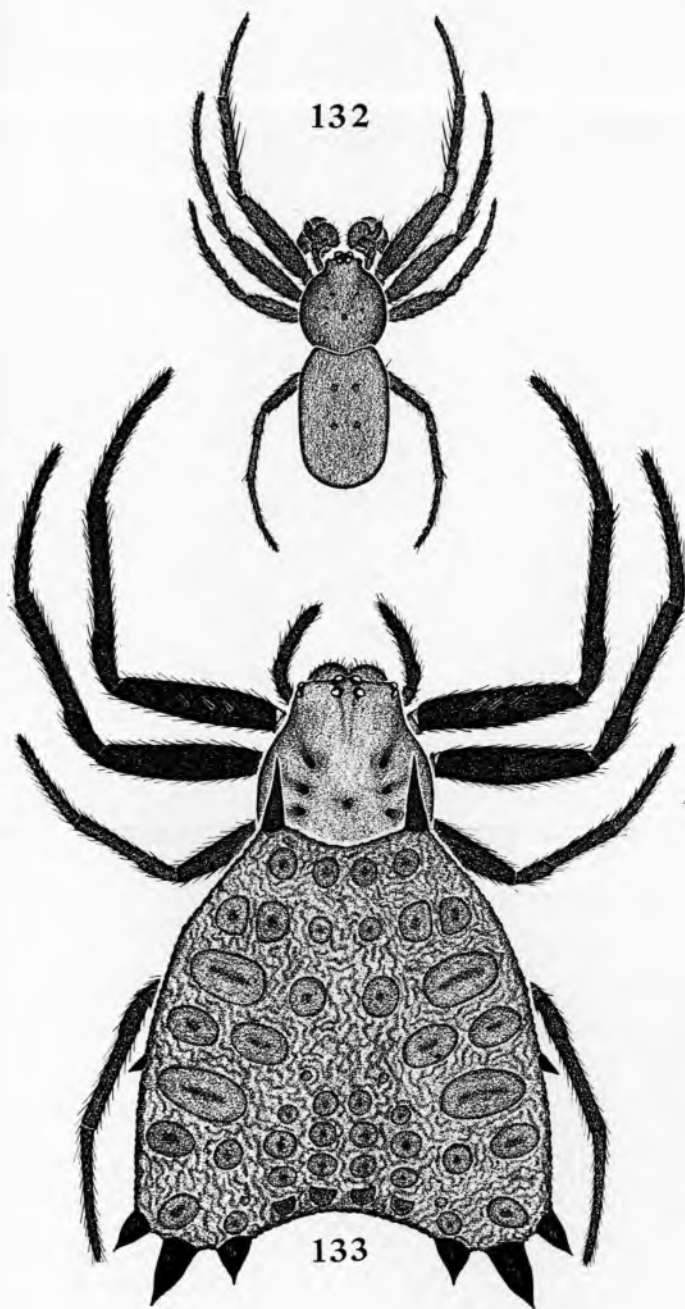


PLATE XVI

***Micrathena nigrrior* n. sp.**

134. Body of female, dorsal view.

135. Same. lateral view.

***Micrathena coleophora* n. sp.**

136. Body of male, dorsal view.

***Zigana wixoides* n. sp.**

137. Body of female, dorsal view.

138. Epigynum.

***Micrathena planata* n. sp.**

139. Left palpus of male, ventral view.

***Acacesia alticeps* n. sp.**

140. Cephalothorax of immature specimen, lateral view.

***Parawixia nesophila* n. sp.**

141. Abdomen of female, dorsal view.

142. Epigynum, lateral view.

143. Same, lateral view.

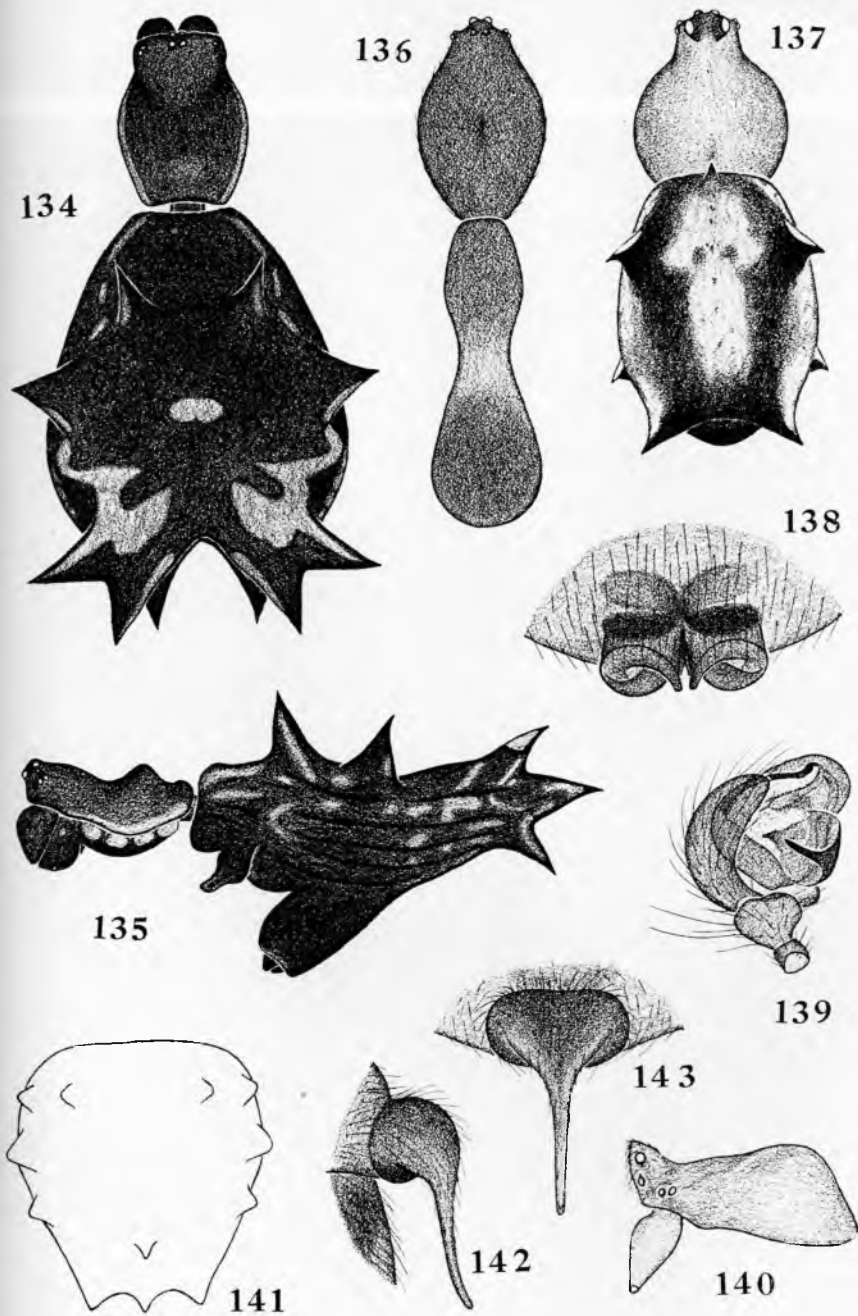


PLATE XVII

Tetragnatha ethodon n. sp.

144. Left palpus of male, ectal view.

145. Chelicera of male, ventral view.

146. Same, ectal view of distal end.

Tetragnatha amplidens n. sp.

147. Chelicera of female, ventral view.

Tetragnatha siduo n. sp.

148. Left palpus of male, ectal view.

149. Chelicera of male, ventral view.

150 Same, ectal view of distal end.

Tetragnatha apheles n. sp.

151. Chelicera of male, ventral view.

152. Same, ectal view of distal end.

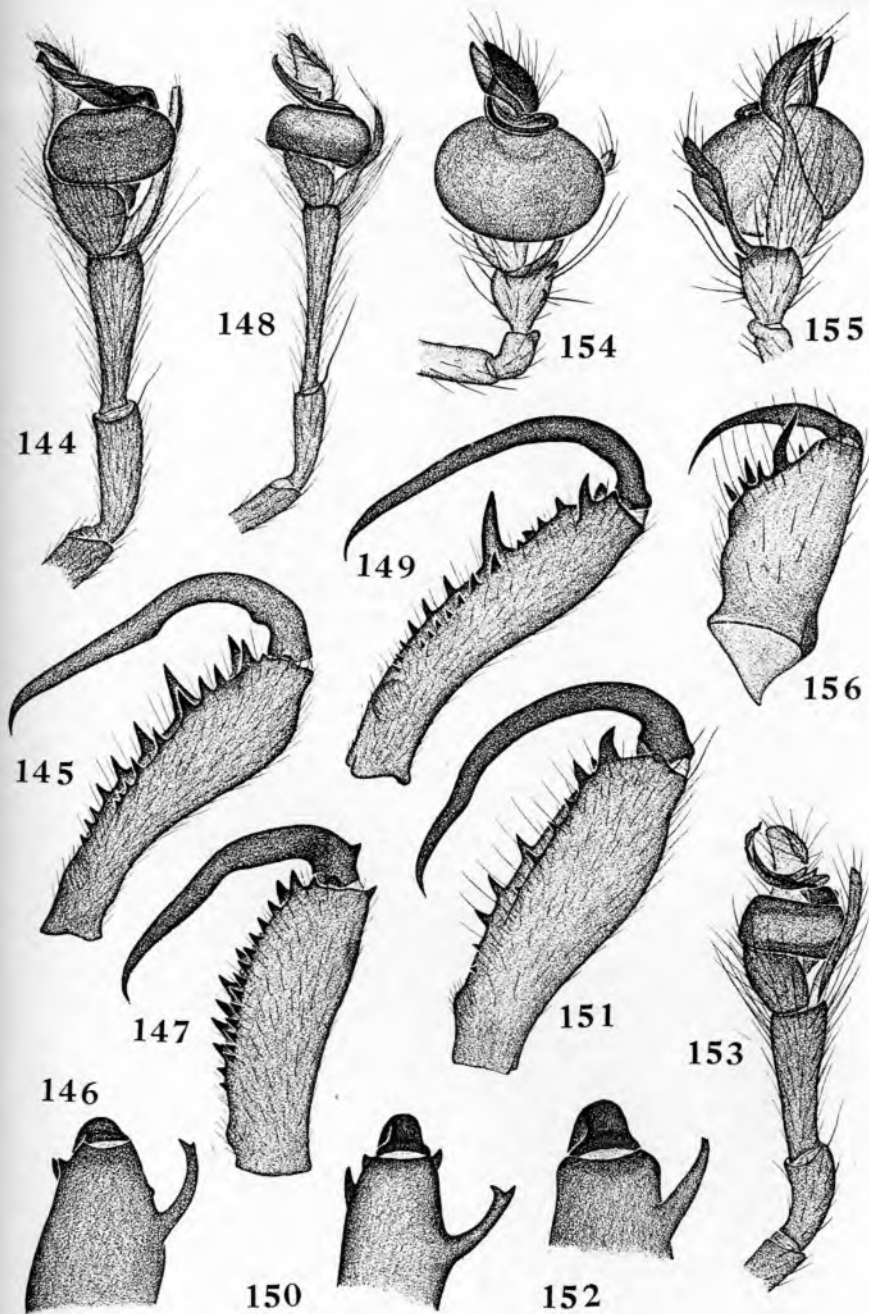
153. Left palpus of male, ectal view.

Glenognatha spherella n. sp.

154. Left palpus of male, ectal view.

155. Same, mesal view.

156. Chelicera of male, posterior view.



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