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BY

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A HUNDRED NEW SPECIES OF AMERICAN SPIDERS

By

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In this paper, we describe a hundred new species of American spiders, most of them from North America, with a few from South America. These are a part of the new species which have been accumulating in the collection of the University of Utah, as well as several from the collections of the Field Museum and the American Museum which were made available for our study. The types are in the University of Utah collection, except where otherwise noted. In addition to the hundred species, one new subfamily, six new genera, five new subgenera, and six new subspecies are named. One known genus, *Chorizomma*, is reduced to the rank of a subgenus. Included also are some notes on known species, with figures and descriptions of some of them. Except in the cases of *Metepeira* and *Linyphantes*, no attempt at revisional work is undertaken. In these two genera, all of the species known to us are considered.

Family FILISTATIDAE

Genus FILISTATA Latreille, 1810

Filistata hurca Chamberlin and Ivie, new species

FEMALE. *Color:* Carapace light yellow-brown, covered with dark gray reticulations; the reticulations on the clypeus fine and dense; top of the eye tubercle dusky, and a dusky line extending back from each posterior lateral eye, the two lines converging posteriorly but not coming entirely together. Chelicerae light orange brown. Labium, endites, and sternum light yellowish brown, shaded with dusky. Legs light yellow-brown, shaded with gray, marked with yellowish longitudinal stripes, three of these stripes being especially distinct on the femora, two along the top, one along the posterior side. Abdomen brownish gray, paler on top, except for a dark lanceolate mark over the heart; sides medium gray; venter pale. The whole spider, except the carapace, thickly clothed with short, moderately coarse hairs.

Structure in general typical. Anterior eye row strongly procurved; A.M. eyes small, about a radius apart, nearly contiguous with the lateral eyes, which are about twice the diameter of the medians. Posterior row slightly recurved; eyes a little smaller than the A.S. eyes, slightly clyptical; P.M. eyes a short diameter apart, contiguous with the lateral eyes. Tibial index of leg I is 13.3.

<i>Measurements:</i>	♀ Holotype
Length	7.10 mm.
Carapace:	
Length	3.40
Width	2.60
Tibia-patella:	
I	4.80
IV	4.20

Type locality: W113°12': N37°10', 3 miles west of Hurricane, Utah; ♀ holotype, with young; March, 1939; Wilton Ivie collector. Found under a rock on a dry hillside. The young had emerged from the egg-sac. The abdomen of the female is shrunken.

Other locality: 115.32 2♀ Seeley, California; April 10, 1937.

This species is close to *F. geophila* Chamberlin and Ivie (*Bull. Univ. Utah*, 1935, (Biol.)2(8):6, *22, 23)¹.

It differs in the female in its larger size, longer legs, more elevated eye tubercle, and different color markings on the carapace—the margins of the carapace are not darkened as in *geophila*, nor is there a shield-shaped dusky patch in front of the median depression.

***Filistata geophila wawona* Chamberlin and Ivie, new subspecies**

FEMALE. *Color:* Similar to that of *geophila*, but darker. Carapace light yellowish brown covered with black reticulations; a small blackish shield-shaped mark in front of the median depression. Legs dark grayish brown, with a distinct light stripe along the posterior side of each femur, and a less distinct double stripe along the dorsal side, this latter stripe continuing along the top of the patella and tibia. Abdomen dark gray.

Structure very similar to that of *geophila*. Leg I is slightly more slender; the tibial index, according to the formula of Petrunkevitch (*Trans. Conn. Acad. Sci.*, 1929, 30:11), is 14.6, while that of *geophila* is usually 16 or more. The size is slightly larger than for a typical *geophila*.

<i>Measurements:</i>	♀ Holotype
Length	7.30 mm.
Carapace:	
Length	3.00
Width	2.30
Tibia-patella:	
I	4.20
IV	3.73

¹ An asterisk before a number indicates that it is the number of a figure

Type locality: W119°41':N37°33', Wawona Camp, Yosemite Park, California; ♀ holotype; September 17, 1941; Wilton Ivie collector. This spider was found beneath a piece of bark under a large tree on a wooded hillside. It was guarding over its egg-sac in a manner very similar to that of a *Gnaphosa*.

Family SCYTODIDAE

Genus LOXOSCELES Lowe, 1831

Loxosceles yura Chamberlin and Ivie, new species

Figs. 1-3

Color: FEMALE. Carapace yellowish, with reddish orange clypeus, margins, and radial streaks (in darker specimens, this latter color dominates); the median furrow and the cervical grooves are usually darkened, forming a Y-shaped mark. Chelicerae dark reddish brown; labium and endites slightly lighter. Sternum and legs orange. Femur and patella of palpus orange, tibia and patella dark reddish brown. Abdomen light gray.

MALE similar to the female in color, but on the whole lighter. Carapace more yellow. Chelicerae reddish brown; labium and endites orange. Sternum, coxae and femora of legs, and femur of palpus yellowish; legs and palpi beyond femur light orange; cymbium of palpus reddish.

Structure in general typical. Size large. Male palpus long. Distinguishable by the structure of the palpus and the internal structure of the epigynum; these are shown in the figures.

<i>Measurements</i> :	♂	♀
Length	9.00 mm.	13.30 mm.
Carapace:		
Length	4.60	6.60
Width	3.70	5.20
Tibia-patella:		
I	8.40	9.00
II	9.60	9.20
III	6.80	8.20
IV	9.30	9.20

Type locality: W71°:S17° *, Yura, Arequipa, Peru; ♂ holotype, ♀ allotype, ♂ ♀s paratypes; August 10, 1939; K. P. Schmidt collector. (Field Museum collection).

This species has heretofore been identified as *L. rufescens* (Dufour), which is a European species.

*These are the coordinates of the southeast corner of the quadrangle.

Family OONOPIDAE

Subfamily ORCHESTININAE, new

The genus *Orchestina* is sufficiently distinct from the other genera of the Oonopidae to warrant its separation into a separate subfamily. Its distinguishing characters are these: Abdomen high and rounded; bulb of male palpus distinct from the cybium; hind femora swollen; behavior of jumping backwards when disturbed.

Genus ORCHESTINA Simon, 1882

***Orchestina obscura* Chamberlin and Ivie, new species**

Fig. 4

MALE. *Color:* Carapace dusky brown, with radiating dusky lines. Mouthparts and sternum pale brown. Legs and palpi light yellowish brown. Abdomen dark gray, nearly black, with a pair of thin light lines forming an obtuse angle on the posterior part of the abdomen.

Structure: Clypeus nearly vertical, flat across the front. Anterior eye row procurved, eyes of about equal size; median eyes contiguous, a short radius from the side eyes. Posterior eyes smaller, contiguous with the A.S. eyes. Legs typical; hind femur swollen.

<i>Measurements:</i>	♂ Holotype
Length	1.17 mm.
<i>Carapace:</i>	
Length .....	.60
Width .....	.50
<i>Tibia-patella:</i>	
I .....	.60
IV .....	.55

Type locality: W119° N37°, Yosemite Park, California; ♂ holotype; May 8, 1931; A. M. Woodbury collector.

This species can be separated from *O. moaba* and *utahana* Chamberlin and Ivie by its dark color, and from *O. saltitans* Banks by differences in structural detail. In *saltitans*, the clypeus is protruding and rounded across the front, the median eyes are much larger than the lateral eyes, and the palpus is smaller, especially the tibia. *O. obscura* is most closely related to *utahana*.

Subfamily GAMASOMORPHINAE

Gamasomorphinae is distinguished from Oonopinae by the presence of an abdominal scutum. The scleritization of the abdomen varies all the way from almost complete encasement of the abdomen to small dorsal and ventral sclerites. This apparently is a secondary development from the soft abdomen form. Abdominal sclerites do not occur in

Scaphiella hespera Chamberlin until the adult stage. We doubt that this character alone is sufficient to maintain Gamasomorphinae as a distinct subfamily. The general structure and behavior of certain hard and soft bodied forms are very similar. Since the subfamily is already established, we retain it pending further investigation.

Genus DYSDERINA Simon, 1891

Dysderina xyphinoides Chamberlin and Ivie, new species

Figs. 5-7

MALE. *Color:* Carapace and dorsal scutum of abdomen dark reddish brown; mouthparts, sternum, and ventral scutum a little lighter. Legs and palpi orange, the tarsus of the palpus being more yellow.

Structure: The carapace is elevated in the mid-region, and bears three pairs of horns on the posterior part; each side margin of the thoracic part bears eight small tubercles. Anterior eyes and posterior median eyes large, about equal; the posterior lateral eyes a little smaller. Anterior eyes about a third of a diameter apart. Posterior row straight; median eyes contiguous with each other, subcontiguous with the lateral eyes. Clypeus vertical, height equal to a diameter of an anterior eye. The sternum is superficially lobate; the sclerite extends between the legs and fuses with the sides of the carapace, the legs joining the body through round openings. Legs I and II with two rows of long spines under the tibia and metatarsus. Abdomen completely covered above by a large sclerite; the venter, except the spinnerets, covered by a large sclerite, which fuses with the epigastric sclerite at the sides; the epigastric sclerite completely surrounds the petiole and extends across the anterior end of the abdomen above the petiole; the tube which surrounds the petiole is ringed with small ridges.

<i>Measurements:</i>	♂ Holotype
Length	2.07 mm.
<i>Carapace:</i>	
Length .....	.93
Width .....	.70
<i>Tibia-patella:</i>	
I .....	.90
IV .....	.90

Type locality: Kartabo, British Guiana; ♂ holotype.

The horns on the carapace suggest affinity with *Xyphinus*, but the presence of spines under legs I and II bar it from that genus.

Family LEPTONETIDAE

Subfamily OCHYROCRATINAE

Genus USOFILA Marx, 1891

Usofila flava Chamberlin and Ivie, new species*Lovosceles rufipes*, Chamberlin and Ivie, 1933, Bull. Univ. Utah, (Biol.)2(2):7*Usofila gracilis*, Gertsch, 1935, Amer. Mus. Nov., No. 792:22

FEMALE. *Color:* Carapace, chelicerae, endites, palpi, and legs light yellow. Sternum and labium shaded with dusky. Abdomen pale gray above, dark gray below. Spinnerets light yellow; colulus gray.

Structure: Carapace nearly as wide as long. Median depression lacking. Eyes six; median eyes contiguous, a little less than a diameter from the A.S. eyes. Palpi small. Legs long; 1 2 4 3. Abdomen high and rounded. Colulus large.

Measurements:

	♀
Length	1.60 mm.
<i>Carapace:</i>	
Length .....	.70
Width .....	.60
<i>Tibia-patella:</i>	
I	1.60
IV	1.10

Type locality: W111°2':N40°35', Provo River, Uintah Mts., Utah; ♀ holotype, ♀ s paratypes; July 28, 1936; Wilton Ivie collector.

Other localities:

111.40 ♀ s, Imm. Several localities in Wasatch and Uintah Mts.

113.41 Imm. Raft River Mts., Utah; Sept. 4, 1932; W. Ivie.

This species is very close to *Usofila pacifica* (Banks), which it resembles in size and color. It differs, in the female, by the longer legs, tibia I being about as long as tibia and patella I of *pacifica*.

Usofila oregona Chamberlin and Ivie, new species

Fig. 8

Color: Carapace light brown, shaded with dusky. Legs pale brown, lightly shaded at the joints. Sternum dusky. Abdomen dark gray, lighter on top, with a band, or row of light spots, extending along the midline to the spinnerets.

Structure of female similar to that of *pacifica* and *flava*, except that the legs are shorter. The male has longer legs than the female, especially leg I. The palpal bulb is large and smooth.

<i>Measurements:</i>	♂	♀
Length	1.65 mm.	1.65 mm.
<i>Carapace:</i>		
Length .....	.70	.66
Width .....	.62	.57
<i>Tibia-patella:</i>		
I	1.30	1.15
IV .....	.95	.85

Type locality: About W123°22':N44°27', Oak Creek, Oregon; ♂ holotype, ♀ allotype; May 10, 1936; J. C. Chamberlin collector.

Other locality:

123.43 ♀ ♂ Comstock, Oregon; Sept. 9, 1935; R. V. Chamberlin and W. Ivie.

This species is distinguishable from *pacifica*, which occurs in the same region, by the shaded carapace and shorter legs.

Subfamily LEPTONETINAE

Genus LEPTONETA Simon, 1872

Leptoneta sylvia Chamberlin and Ivie, new species

FEMALE. Color: Carapace light yellow brown, with the margins shaded and a fine dusky median line extending back from the posterior eyes. Chelicerae light brownish. Sternum, labium, and endites shaded with dusky. Legs and palpi light yellowish brown, lightly shaded with dusky. Abdomen gray, more dusky below, with a series of whitish W-shaped marks along the dorsum.

Structure: Essentially typical. Width of clypeus a little more than the diameter of an anterior eye; posterior eyes smaller, round, less than one of their diameters from the lateral eyes. The four anterior eyes raised on a tubercle; the posterior eyes slightly raised; a distinct depression between the two groups. Legs long, becoming very slender distally. Abdomen high and rounded. Spinnerets short; colulus very small. Epigynum swollen, apparently not chitinized.

<i>Measurements:</i>	♀ Holotype
Length	2.75 mm.
<i>Carapace:</i>	
Length	1.05
Width .....	.95
<i>Tibia-patella:</i>	
I	2.40
IV	2.05

Type locality: W123°:N42°, 19 miles north of Wolf Creek, Oregon; ♀ holotype; April 6, 1937; J. C. Chamberlin collector.

This species is close to *L. californica* Banks. Its size is a little larger and the color pattern on the abdomen is different. An immature specimen from Pinehurst, Oregon (W122:N42), which we take to be *californica*, has a series of eight distinct white chevrons crossing the abdomen.

Leptoneta coeca Chamberlin and Ivie, new species

Fig. 9

MALE. *Color*: Carapace, sternum, legs, and palpi light yellowish. (Abdomen missing).

Structure: Eyes of typical arrangement, but reduced to small white spots, without dark borders. Width of clypeus equal to the length of the whole eye area. Palpus simple, as shown in the figure.

Measurements: ♂ Holotype

Carapace:

Length70 mm.
Width56

Tibia-patella:

I (Missing)
IV 1.27

Type locality: W98°6':N29°42', Heidrich Cave, New Braunfels, Texas; ♂ holotype; June 20, 1938.

The degenerate eyes of this species correlates with its cave habitat.

Family PHOLCIDAE

Genus PSILOCHORUS Simon, 1893

Psilochorus bantus Chamberlin and Ivie, new species

Figs. 10-13

Color: Carapace pale yellowish, with a light dusky Y over the median and cervical furrows; the head and a broad median area of the clypeus shaded. Mouthparts, legs, and palpi pale yellowish brown. Sternum pale yellowish. Abdomen mottled gray, with a row of darker spots along each side of the dorsum, and with a pale mark over the heart; venter pale gray.

Structure: The distinctive features of the structure are the palpus and chelicerae of the male and the epigynum of the female. These are shown in the figures. Size small.

Measurements:	♂	♀
Length	1.80 mm.	2.35 mm.
Carapace:		
Length .....	.80	.90
Width .....	.80	.90
Tibia-patella:		
I	3.83	3.60
IV	2.60	2.17

Type locality: W119°50':N34°28', 10 miles west of Santa Barbara, California; ♂ holotype, ♀ allotype; July 12, 1934; H. Rasmussen and W. Ivie collectors.

Other locality: 119.34 ♂ ♀ Santa Cruz Island, California; R. V. Chamberlin.

***Psilochorus topanga* Chamberlin and Ivie, new species**

Figs. 14-17

Color: Carapace light yellowish, with a dusky Y-shaped mark over the median and cervical grooves; eyes margined with black; clypeus with the middle area, extending down from the eyes, grayish brown, containing a black needle-like median mark which extends from the A.M. eyes about halfway to the margin. Chelicerae light yellowish brown; labium and endites similar, but lighter. Sternum pale yellowish. Legs and palpi pale brownish. Abdomen mottled gray, with a narrow, whitish, branched, lanceolate mark over the heart; lower sides whitish, without marks.

Structure: Essentially typical, except for differences in the palpus and chelicera of the male and epigynum of the female. These are figured.

Measurements:	♂	♀
Length	2.65 mm.	3.00 mm.
Carapace:		
Length	1.00	.85
Width	1.05	.85
Tibia-patella:		
I	5.47	4.30
IV	3.67	2.90

Type locality: W118°32':N34°3', Topanga Canyon, near Santa Monica, California; ♂ holotype, ♀ allotype, ♂ ♀ paratypes; March 18, 1941; W. Ivie collector.

This species is near *P. californiae* Chamberlin, which also occurs in the same locality, and was collected at the same time. The male differs from that of *californiae* in the shorter spur on the chelicera and in details of the palpus, of which the extension of the cymbium is not

flared at the end and the tip of the bulb is distinctly different. In the female, the lobe in front of the epigynum is conical in this species, while in *californiae* it is low and rounded. The anterior part of the epigynum has two small lobes at the tip, and back of the epigynum are two stout hairs on each side; these are reduced in *californiae*.

***Psilochorus acanthus* Chamberlin and Ivie, new species**

Figs. 18-21

Color: (The specimens are poorly preserved and the color is not clear, but is evidently close to that of *topanga*). Carapace pale yellowish, with a thick Y over the grooves. Eyes margined with black, which fills in the spaces between the eyes, except that between the P.M. eyes; median area of clypeus dusky for about the width of the eye area. Chelicerae light brown. Sternum, endites, labium, legs, and palpi pale yellow-brown, the legs with diffuse dusky annuli near the distal end of the femora and near each end of the tibiae. (Abdomen faded.)

Structure: The general structure is typical. The palpus of the male and the epigynum show distinctive differences. The chelicera of the male entirely lacks the frontal spur which characterizes all other known American species of this genus.

<i>Measurements:</i>	♂ Holotype	♀ Allotype
Length	2.10 mm.	2.50 mm.
<i>Carapace:</i>		
Length .....	.88	1.00
Width .....	.90	.95
<i>Tibia-patella:</i>		
I	5.30	.....
IV	3.30	2.75

Type locality: W119°41':N34°23', Santa Barbara, California; ♂ holotype, ♀ allotype; March, 1913; R. V. Chamberlin collector.

***Psilochorus simplicior* Chamberlin and Ivie, new species**

Figs. 22-23

Color: Carapace pale yellowish; median area broadly shaded, but no distinct Y present; clypeus not shaded. Anterior median eyes separated from the lateral groups by a narrow yellowish strip. Chelicerae light brown. Sternum, labium, and endites pale brownish. Legs and palpi light brownish yellow; the femora shaded near the distal end, while the extreme distal ends are whitish. Abdomen mottled gray above and on sides, with a pale, irregular, median band above, which has four pairs of lateral branches; venter pale gray.

Structure essentially typical. The epigynum distinctive; this is simpler in structure than most.

Measurements:	♀ Holotype
Length	2.20 mm.
Carapace:	
Length .....	.85
Width .....	.85
Tibia-patella:	
I	3.12
IV	2.43

Type locality: W121°55':N36°38', Pacific Grove, California; ♀ holotype; August 15, 1931; W. Ivie collector.

Family UROCTEIDAE

Subfamily OECOBIINAE

Genus OECOBIUS Lucas, 1845

Oecobius parvus Chamberlin and Ivie, new species

IMMATURE. *Color:* Carapace light yellowish, shaded with dusky; a light triangle-shaped mark in front of the eyes, and four light spots along the margin of each side, set off by darker gray. The black spots of the anterior eyes and the posterior lateral eyes form a half circle of black, open behind. Mouthparts, sternum, and legs pale yellowish; the legs marked with a series of about six blackish spots along each side and a complete black ring at the distal end of the metatarsus. Abdomen whitish above, mottled, with a dusky, branched, lanceolate mark over the heart; sides whitish, with a few gray specks; a trilobed gray mark at each side of the spinnerets; venter light gray.

The structure is of the usual *Oecobius* form.

Type locality: W113°50':N36°57', Virgin Narrows, near Littlefield, Arizona; immature holotype; June 11, 1934; Wilton Ivie collector. Found under a rock near the river.

This species is closely related to *O. beatus* Gertsch and Davis, but is distinguishable by its color.

Family AGELENIDAE

Subfamily CYBAEINAE

Genus CYBAEUS L. Koch, 1868

Cybaeus scopulatus Chamberlin and Ivie, new species

Figs. 39, 40

MALE. *Color:* Carapace light brown, with reticulate markings on the sides of the head, and dusky radial wedges on the sides of the thorax. Chelicerae reddish brown. Labium and endites light brownish. Sternum light brown, shaded on the margins, pale in the center. Legs

pale brown, with light dusky rings, indistinct, except on under sides of femora. Abdomen dark gray above, with the typical pattern of whitish marks—a long slender lanceolate mark over the heart, with irregular coalescent spots lateral to this, and with medially divided cross-bars on the posterior half; venter pale gray.

Structure in general typical. Height of clypeus a little more than the diameter of an A.S. eye. Eye rows essentially straight. A.M. eyes much smaller than the others, a little more than a radius apart, a little less than a radius from the side eyes. P.M. eyes a scant diameter apart, a full diameter from the side eyes. Chelicerae vertical; hind margin of fang groove bearing three small teeth and four denticles. Tibia I semi-scapulate along the under side; with three pairs of ordinary spines on the ventral side plus a pair of small spines at the distal extremity. Palpus slender, details as illustrated.

<i>Measurements:</i>		♂ Holotype
Length		4.40 mm.
<i>Carapace:</i>		
Length		2.45
Width		1.90
<i>Tibia-patella:</i>		
I		2.60
IV		2.60

Type locality: W121°38':N45°40', Perham Creek, Columbia River Gorge, Oregon; ♂ holotype; November 28, 1940; Wilton Ivie collector.

This species is closely related to *C. calinae* Chamberlin and Ivie and *C. silicis* Barrows.

Cybaeus multnoma Chamberlin and Ivie, new species

Fig. 43

Cybaeus conservans Chamberlin and Ivie, (in part), 1932, Bull. Univ. Utah, (Biol.) 2(1):21, *50.

FEMALE. *Color:* Carapace light brown, more reddish on head, with dusky reticulations on sides of head and radial marks on thorax. Chelicerae reddish brown. Labium and endites light reddish brown, with pale tips. Sternum light orange, darker on the margins, lighter in the center. Legs light yellowish brown, with faint gray rings, which are more distinct on the under sides of the femora. Abdomen dark gray above, with a light mark over the heart and a series of paired whitish spots along the middle; venter pale gray.

Structure similar to that of *C. morosus* Simon and *C. conservans* Chamberlin and Ivie. Chelicerae strongly geniculate; hind margin of fang groove with four teeth and five denticles. Tibiae and metatarsi I and II each with three pairs of spines on the ventral side. Epigynum close to that of *conservans*.

Measurements:	♀ Holotype
Length	7.00 mm.
Carapace:	
Length	3.60
Width	2.60
Tibia-patella:	
I	3.33
IV	3.33

Type locality: W123°25':N43°10', Canyon Creek, near Roseburg, Oregon; ♀ holotype, ♂ paratype; August 30, 1931; W. Ivie collector.

Cybaeus constrictus Chamberlin and Ivie, new species

Fig. 49

FEMALE. *Color:* Pale. Carapace orange, slightly darker on front of head, without markings. Chelicerae reddish brown. Labium and endites light reddish brown, with white tips. Sternum light orange. Legs orange yellow, darker distally, without rings. Abdomen gray above, with the typical pattern of light gray spots (e.g., as in *morosus*); venter pale gray.

Structure close to that of *C. morosus* Simon. Chelicerae with three teeth and four denticles on hind margin of fang groove. Tibiae I and II each with three pairs of spines on the underside. Epigynum resembles that of *morosus*, but has much smaller openings.

Measurements:	♀ Holotype
Length	6.50 mm.
Carapace:	
Length	2.80
Width	1.80
Tibia-patella:	
I	2.50
IV	2.50

Type locality: W123°:N45°, Tillamook County, Oregon; ♀ holotype; August, 1931; R. W. Macy collector. (American Museum).

Cybaeus janus Chamberlin and Ivie, new species

Fig. 44

FEMALE. *Color:* Carapace brownish yellow, with light dusky markings of the usual pattern. Chelicerae orange brown. Labium and endites orange, with pale tips. Sternum light orange, narrowly shaded on the margins. Legs light yellowish brown, with faint dusky rings. Abdomen dark gray above, with a diffused light gray mark over the heart and a series of paired whitish spots along the top; sides finely specked and streaked with light gray; venter light gray. Spinnerets and epigastric sclerites yellow.

Structure near that of *C. cutypus* Chamberlin and Ivie (*Bull. Univ. Utah*, 1932, (Biol.)2(1):19, *43-45). The size is smaller and the epigynum varies in details. Eyes small; posterior row slightly recurved, eyes about one and one-third diameters apart, equidistant; anterior row straight, A.M. eyes about a diameter apart, about a radius from the side eyes. Chelicerae with four teeth and five denticles on the hind margin of the fang groove. Tibia I with three pairs of spines on the ventral side.

<i>Measurements:</i>	♀
Length	5.60 mm.
<i>Carapace:</i>	
Length	2.70
Width	1.80
<i>Tibia-patella:</i>	
I	2.51
IV	2.50

Type locality: W123°10':N43°45', Comstock, Oregon; ♀ holotype, ♀ paratype; September 9, 1935; R. V. Chamberlin and W. Ivie collectors.

Cybaeus angelus Chamberlin and Ivie, new species

Fig. 50

FEMALE. *Color:* Carapace light brown, with markings indistinct. Chelicerae light reddish brown. Endites and labium dark orange, with whitish tips. Sternum light orange, with margins shaded. Legs pale yellowish brown, without markings. Abdomen dark gray above, with a light gray line over the heart, a pair of light spots near the base, a pair of large oblique spots behind these, followed posteriorly by a series of nearly divided cross bars; venter pale gray.

Structure very similar to that of *C. consocius* Chamberlin and Ivie (*Bull. Univ. Utah*, 1932, (Biol.)2(1):25, *61). The epigynum is also similar, except that the dark anterior marking showing through the integument is of a different shape.

<i>Measurements:</i>	♀ Holotype
Length	5.00 mm.
<i>Carapace:</i>	
Length	2.30
Width	1.65
<i>Tibia-patella:</i>	
I	2.40
IV	2.35

Type locality: W118°:N34°, Los Angeles, California; ♀ holotype. (American Museum).

Cybaeus septatus Chamberlin and Ivie, new species

Figs. 41, 42

Color: Carapace orange, darker on the front of the head. Chelicerae reddish brown. Labium and endites light reddish brown, with pale tips. Sternum yellowish orange. Legs yellowish, without markings. Abdomen dark gray above, with the usual lighter streak over the heart, two pale gray spots on each side of this, and a series of pale gray, slightly divided chevrons on the posterior part; lower sides and venter smooth light gray. Spinnerets yellow.

Structure: Carapace typical. Eyes small; both rows slightly re-curved. P.M. eyes nearly two diameters apart, slightly closer to the side eyes. A.M. eyes much smaller than the others, which are subequal (ratio about 1:2); A.M. eyes about one and one-third diameters apart, nearly a diameter from the side eyes. Height of clypeus about two diameters of an anterior side eye. Chelicerae slightly geniculate; hind margin of fang groove with 3 teeth and 5 denticles or 4 teeth and 4 denticles. Tibia I with 3 pairs of spines on ventral side, the distal pair terminal and small. The epigynum is of a distinctive form, as shown in the figure; the openings are separated by a broad median septum. In the male, the eyes are closer together than in the female. The tibia of the palpus has a well-developed process, on the dorso-ectal side of which are 6 or 7 small black conical points.

<i>Measurements</i> :	♂	♀ Holotype
Length	4.30 mm.	6.00 mm.
<i>Carapace</i> :		
Length	2.10	2.80
Width	1.60	1.93
<i>Tibia-patella</i> :		
I	2.40	3.20
IV	2.30	3.12

Type locality: W123°:N40°, Potter Creek Cave, California;
♀ holotype: July 1, 1937; R. V. Chamberlin collector.

Other localities:

122.41 ♂ Allotype. Weed, California; Sept. 8, 1935; R. V. Chamberlin and W. Ivie collectors.

123.42 ♀ Grants Pass, Oregon; September 9, 1936; R. V. Chamberlin and W. Ivie collectors.

This species appears to be most closely related to *C. hesper* Chamberlin and Ivie.

Cybaeus devius Chamberlin and Ivie, new species

Fig. 48

FEMALE. *Color:* Carapace light brown, without distinct markings, except for a double line extending from the P.M. eyes to the median furrow. Chelicerae reddish brown. Labium and endites dark orange, with whitish tips. Sternum light orange. Legs light brownish yellow, without markings. Abdomen light gray, with a series of darker chevrons on the posterior half; venter light gray.

Structure similar to that of *C. hystrix* n. sp., except for distinct differences in the epigynum.

<i>Measurements:</i>	♀ Holotype
Length	4.70 mm
Carapace:	
Length	2.20
Width	1.50
Tibia-patella:	
I	2.00
IV	2.00

Type locality: W119°30':N37°15', North fork, California; ♀ holotype.

Cybaeus cribelloides Chamberlin and Ivie

Figs. 45, 46

Cybaeus cribelloides Chamberlin and Ivie, 1932, Bull. Univ. Utah, (Biol.)2(1):26, *62

A male of this species, which was described from a female, is here figured for the first time. It is from the same locality as the female holotype.

Cybaeus hystrix Chamberlin and Ivie, new species

Fig. 47

FEMALE. *Color:* Carapace light brown, with dusky reticulations on the sides of the head and dusky radial streaks. Chelicerae light reddish brown. Labium and endites dark orange, with whitish tips. Sternum yellow. Legs light yellowish brown, with faint gray rings. Abdomen dark gray above, with a light gray line over the heart and a series of paired oblique spots along the dorsum; sides specked and streaked with pale gray; venter light gray shaded with darker gray.

Structure similar to that of *cribelloides*. Chelicerae with 4 teeth and 4 denticles on hind margin of the fang groove. Tibia I with 3 spines in prolateral row of ventral side and 2 in the retrolateral row; none near the distal end. Anterior part of epigynum elevated.

<i>Measurements:</i>	♀ Holotype
Length	5.00 mm.
Carapace:	
Length	2.00
Width	1.45
Tibia-patella	
I	2.00
IV	1.90

Type locality: W123°:N38°, Redwood Highway, California; ♀ holotype; April; Cockerell collector. (American Museum).

Genus CYBAEINA Chamberlin and Ivie, 1932

Cybaeina confusa Chamberlin and Ivie, new species

Fig. 38

FEMALE. *Color:* Carapace light brownish yellow. Chelicerae orange. Labium and endites light orange, with pale tips. Sternum yellow. Legs light brownish yellow. Abdomen light yellowish gray. Spinnerets yellow.

Structure essentially similar to that of *C. minuta* (Banks). Posterior eye row recurved; median eyes smaller than the laterals (ratio about 3:4), slightly more than a diameter apart, about a diameter from the side eyes. Anterior row straight, median eyes much smaller than the laterals (ratio about 1:2), about a radius apart, and about the same distance from the side eyes. The side eyes of the two rows about equal in size. Chelicerae vertical; hind margin of fang groove with 4 small teeth and 4 tiny denticles. Tibiae I and II with 4 pairs of spines on ventral side.

<i>Measurements:</i>	♀ Holotype
Length	4.00 mm.
Carapace:	
Length	2.00
Width	1.53
Tibia-patella:	
I	2.45
IV	2.60

Type locality: Oregon; ♀ holotype.

Subfamily AGELENINAE

Genus YORIMA Chamberlin and Ivie, new

Eyes six; the posterior row slightly recurved, the median eyes a little closer to the laterals than to each other. Tibia I with two pairs of spines on the ventral side, one pair near base, one pair near middle. Epigynum of female with two funnel-shaped bursae, with openings

close together; connecting canal short. The male palpus has the cymbium unmodified, a slender, moderately short embolus, a well-developed conductor, and no processes on the tegulum (as in (*Blabomma*)); the distal end of the tibia is sculptured into short processes (not a long blade as in *Cicurina*); the patella and femur are not modified. Hind spinnerets with apical segment slender and pointed, shorter than the basal segment.

Genotype: *Yorima sequoiae* (Chamberlin and Ivie).

This genus is close to *Cicurina* Menge, *Blabomma* Chamberlin and Ivie, and *Chorizommoides* Chamberlin and Ivie.

Yorima sequoiae Chamberlin and Ivie

Chorizomma sequoiae Chamberlin and Ivie, 1937, Ann. Ent. Soc. Amer., 30:217, *29

Yorima californica (Simon)

Chorizomma californicum Simon, 1895, Bull. Soc. ent. France, 20:136

Chorizomma californicum, Chamberlin and Ivie, 1937, Ann. Ent. Soc. Amer. 30:216, *25-28

Yorima subflava Chamberlin and Ivie, new species

Fig. 26

FEMALE. *Color:* Carapace yellow. Chelicerae orange. Labium and endites light orange, with white tips. Sternum yellow to orange. Legs yellowish to light orange, unmarked. Abdomen pale gray, with dark gray markings, consisting of a series of chevrons on the posterior half and some broken patches on the basal half. Spinnerets yellow.

Structure: Anterior eyes about two-thirds diameter apart; posterior row slightly recurved. Posterior median eyes about one and two-thirds diameters apart, less than half as far from the side eyes. Posterior median eyes smaller than the others, ratio about 3:4. Spines on legs typical. Epigynum close to that of *californica*, but with noticeable minor differences.

<i>Measurements:</i>	♀ Holotype	♀ Paratype
Length	5.20 mm.	3.00 mm.
Carapace:		
Length	2.20	1.45
Width	1.55	1.00
Tibia-patella:		
I	2.05	1.45
IV	2.28	1.60

Type locality: W121°55':N36°38', Pacific Grove, California; ♀ holotype, ♀ paratype; September 1, 1937; Wilton Ivie collector.

Yorima flava (Chamberlin and Ivie)

Chorizomma flavum Chamberlin and Ivie, 1937, Ann. Ent. Soc. Amer. 30:218, *30

This is the least typical of the species placed in this genus. A study of the male may indicate that it belongs elsewhere.

Genus **CICURINA** Menge, 1869

Cicurina Menge, 1869, Preuss. Spinnen, 4:272

Cicurina, Chamberlin and Ivie, 1940, Bull. Univ. Utah, (Biol) 5(9):1-108

Chorizomma Simon, 1872, Ann. Soc. ent. France, p. 221

Subgenus **CHORIZOMMA** Simon

Type species: *Cicurina* (*Chorizomma*) *subterranea* (Simon).

The examination of a male and female of *Chorizomma subterraneum* Simon convinces us that it cannot be kept apart from *Cicurina* Menge. The male palpus is distinctly of the *Cicurina* form. The epigynum, although with a different external appearance, has the long slender connecting canals and other internal features characteristic of *Cicurina*. The fact that it has only six eyes cannot be regarded as of generic importance, since several American species of *Cicurina* have their eyes reduced to six, with other species showing intergrades (one cave species is totally blind).

Genus **TEGENARIA** Latreille, 1804**Tegenaria castro** Chamberlin and Ivie, new species

Figs. 27-29

FEMALE. *Color:* Carapace light yellow-brown, marked with dusky reticulate markings on the sides of the head, coming together in a dark spot on each side just in front of the median furrow; margins of thorax reticulate; a broad light dusky band along upper side of the thorax, extending onto side of head; three dark radial streaks on each side of the thorax. Chelicerae reddish brown; labium and endites a little lighter. Sternum dark dusky, with a median whitish band which is trifurcate behind, and with two light spots on each side of the anterior half. Legs light yellowish brown, with dusky rings — 4 on femur, one on patella, 3 on tibia, and 3 on metatarsus (fading out beyond middle of tibia). Abdomen a mixture of dark and pale gray spots, specks, and streaks, with a characteristic *Tegenaria* pattern above. Hind spinnerets with basal segment blackish, distal segment whitish, anterior spinnerets shaded.

MALE. Color pattern similar, but markings more faded or diffuse.

Structure: Height of clypeus somewhat greater than the diameter of an A.S. eye. A.M. eyes slightly smaller than the others. Anterior row procurved; eyes subcontiguous. Posterior row slightly procurved; eyes about a diameter apart. Chelicerae with 5 teeth on hind margin of fang groove. Distal segment of hind spinnerets about equal to the basal segment. The palpus and epigynum are distinctive.

<i>Measurements:</i>	♀ Holotype	♂ Allotype
Length	9.00 mm.	6.10 mm.
<i>Carapace:</i>		
Length	4.30	3.30
Width	3.20	2.60
<i>Tibia-patella:</i>		
I	5.90	5.50
IV	5.90	5.30

Type locality: W121°: N37°, Castro Valley, Alameda County, California; ♀ holotype; October 16, 1938; W. M. Pearce collector. (American Museum).

Other localities:

- 97.34 ♂ Allotype. Lindsay, Oklahoma.
 119.36 ♀ Friant, California.
 122.37 ♀ San Mateo County, California; 1938.

Genus CALYMMARIA Chamberlin and Ivie. 1937

Calymmaria lora Chamberlin and Ivie, new species

Figs. 30, 31

FEMALE. Color typical, as in *C. californica* (Banks), etc. Carapace light brownish yellow, with dusky markings. Chelicerae red-brown; labium and endites a little lighter, with pale tips. Sternum brown, lighter in the center. Legs light brownish, with typical dusky rings. Abdomen dark gray, finely and thickly specked, streaked, and spotted with pale gray.

Structure: Typical, except for minor differences in the epigynum. The atrial depression is larger than in *californica*, which it otherwise resembles rather closely.

<i>Measurements:</i>	♀
Length	7.00 mm.
<i>Carapace:</i>	
Length	2.70
Width	1.95
<i>Tibia-patella:</i>	
I	4.10
IV	3.90

Type locality: W119°45': N36°60', Friant, California; ♀ holotype, ♀ paratype.

Calymmaria aspenola Chamberlin and Ivie, new species

Figs. 32-34

Color, size, and structure similar to *C. monicae* Chamberlin and Ivie (*Ann. Ent. Soc. Amer.*, 1937, 40:213). It differs in details of the palpus and epigynum. The middle lobe of the tibia of the palpus has a sharp, tooth-like process underneath, which is absent in *monicae*.

<i>Measurements:</i>	♂	♀
Length	5.30 mm.	6.00 mm.
<i>Carapace:</i>		
Length	2.40	2.50
Width	2.00	1.80
<i>Tibia-patella:</i>		
I	4.10	3.33
IV	3.60	3.33

Type locality: W119°47':N37°48', Aspen Valley, Yosemite Park, California; ♂ holotype, ♀ allotype, ♂ ♀ paratypes; August 11, 1931; Wilton Ivie collector.

These specimens were included under *C. monicae*, when that species was described. Evidently *monicae* does not occur in Yosemite Park.

Genus **SALTONIA** Chamberlin and Ivie, new

The position of this genus is uncertain. Its general appearance is that of a *Cicurina*, but details are very different. ♂—Carapace low, longer than wide, of typical shape; the head narrowed to about half the width of the thorax; median furrow long and line-like. Eyes eight. A.M. eyes slightly smaller than the others. Posterior eye row straight, the median eyes about a diameter apart, slightly closer to the side eyes. Height of clypeus less than the diameter of an A.S. eye. Chelicerae moderately stout, vertical, a little convex at base in front; fang groove with two small teeth on the hind margin. Labium longer than wide. Endites long and slender, widely separated at the tips. Sternum ovoid, slightly wider than long; short posterior point narrowly separating hind coxae. Legs long and moderately stout; bearing many long stout spines; order of length 4 1 2 3, the hind legs much the longest; two pairs of spines under tibiae I and II; third claw nearly straight, not curved downward. Abdomen oval, nearly twice as long as wide, wider than high. Front spinnerets widely separated; hind spinnerets with the apical segment very short. Femur and patella of palpus not modified; tibia short, with a slight modification at the distal end on the ectal side; the dorsal and ectal sides of cymbium sculptured at the base. The palpal organs are somewhat as in *Cybaeus*, without special developments.

Genotype: *Saltonia imperialis* Chamberlin and Ivie, n. sp.

Saltonia imperialis Chamberlin and Ivie, new species

Figs. 24, 25

MALE. *Color*: Carapace yellowish. Chelicerae orange. Labium pale brown. Endites, sternum, legs, and palpi pale yellow, with distal end of palpus brownish. Abdomen whitish, unmarked. Spinnerets whitish.

<i>Measurements:</i>	♂ Holotype
Length	3.30 mm.
Carapace:	
Length	1.60
Width	1.27
Tibia-patella:	
I	1.60
IV	2.00

Type locality: W116°5':N33°22', Fish Springs, Salton Sea, California; ♂ holotype; March 12, 1941; Wilton Ivie collector. Found under a stick on the open ground.

Genus ETHOBUELLA Chamberlin and Ivie, 1937

Subgenus DIRKSIA Chamberlin and Ivie, new

Carapace longer than wide; head not elevated above the highest part of the thorax. Eyes eight, all dark. Posterior eyes larger than the anteriors; A.S. eyes larger than the A.M. eyes. Posterior eye row slightly recurved; eyes about a radius apart. Anterior eye row slightly procurved; A. M. eyes slightly more than a radius apart, closer to the side eyes. Height of clypeus less than a diameter of an A.S. eye. Chelicerae vertical; hind margin of fang groove with four teeth. Labium wider than long. Endites nearly twice as long as labium, not convergent at tips. Sternum slightly longer than wide, typical shield-shaped, with a narrow point slightly separating hind coxae. Legs moderately large, heavily spined; tibiae I and II with five pairs of spines on the ventral side. Abdomen somewhat flattened. Hind spinnerets scarcely longer than the front pair; apical segment very short. Epigynum simple, as shown in the figure. Male palpus with femur and patella unmodified; tibia with ectal side sculptured; cymbium short, typical, unmodified; bulb simple, embolus and conductor short.

Type species: *Ethobuella (Dirksia) anyphaenoides* n. sp.

The principle differences between *Dirksia* and *Ethobuella* sens. str. may be summarized thus:

1. Posterior median eyes about a radius apart; A.M. eyes about half the diameter of the A.S. eyes. Tibia I with 5 pairs of ventral spines. Cymbium of male palpus not modified. Epigynum with median plate narrowly constricted.....DIRKSIA.

2. Posterior median eyes much less than a radius apart; A.M. eyes much less than half the diameter of the side eyes. Tibia I with four pairs of ventral spines. Cymbium of male palpus with a tuft of specialized bristles on the basal end above. Epigynum with median plate broad and somewhat spoon-shaped.....ETHOBUELLA.

Ethobuella (Dirksia) anyphaenoides Chamberlin and Ivie, n. sp.

Figs. 35-37

Color: Carapace yellowish, with a narrow black margin on the sides, and with a broad patch of dusky along the upper side of the thorax, extending forward onto the side of the head; large black spots around the eyes. Chelicerae light reddish brown, with dusky markings near base. Endites orange with whitish tips. Labium slightly shaded. Sternum yellowish, with a narrow dusky margin all around. Legs light yellowish, with dusky rings—the rings largely broken and faded, except for 3 on the femur, one near the end of the tibia, and one at the end of the metatarsus, which are fairly distinct. Abdomen whitish, specked, marked, and streaked with gray and blackish, somewhat in the pattern of a typical *Anyphaena*; venter pale gray. Spinnerets yellowish brown, lightly shaded with dusky on the sides.

Structure as given under the generic diagnosis.

<i>Measurements:</i>	♂ Holotype	♀ Allotype
Length	4.10 mm.	3.20 mm.
Carapace:		
Length	2.30	1.65
Width	1.60	1.20
Tibia-patella:		
I	2.68	1.65
IV	2.30	1.55

Type locality: Boyer, Oregon; ♂ holotype, ♀ allotype; August 21, 1938; Jane C. Dirks collector.

Family HAHNIIDAE

Genus HAHNIA C. Koch, 1841

Hahnia cinerea seminola Gertsch

Figs. 51-53

Hahnia cinerea race *seminola* Gertsch, 1934, Amer. Mus. Nov., No. 712:8

This subspecies, common in Florida, is readily distinguishable from *H. cinerea cinerea* Emerton by its distinctly banded legs. The palpus and epigynum of the two are very similar.

Hahnia arizonica Chamberlin and Ivie, new species

Figs. 54, 55

Color: Carapace brown, with darker radial and reticulate markings. Chelicerae reddish brown, faded at the tips. Endites light brown; labium light brown, lightly shaded with dusky. Sternum brown, shaded with dusky, more so on the side and rear margins, less so in the center. Legs brown, with the coxae, patellae, and all joints pale. Abdomen dark gray above, with a series of paired whitish spots along the top, the anterior ones separated, the posterior ones joined to form transverse bars; sides colored with a broken mixture of dark and pale gray; venter pale gray, with a dark gray patch on each side. Epigynum brown. Spinnerets light yellowish to pale brown.

Structure very similar to that of *H. cinerea* Emerton. The most significant difference is in the epigynum (see figures). The eye rows are both slightly more procurved than in *cinerea*. The male palpi are similar.

<i>Measurements:</i>	♂	♀
Length	2.00 mm.	2.30 mm
Carapace:		
Length .....	.93	1.00
Width .....	.75	.80
Tibia-patella:		
I .....	.77	.82
IV .....	.93	1.00

Type locality: W111°28':N35°1', Oak Creek Canyon, about 20 miles south of Flagstaff, Arizona; ♀ holotype, ♂ allotype, ♂s ♀s paratypes; April 12, 1935; Wilton and Alcen Ivie collectors. Sifted from dead leaves imbedded in live grass and small shrubs.

Hahnia inornata Chamberlin and Ivie, new species

Figs. 56, 57

Color: Carapace brown, with dusky radial and reticulate markings, and with a large, dusky, shield-shaped spot on the posterior part of the head. Chelicerae light reddish brown. Endites, labium, and sternum light brown, the labium lightly shaded with dusky, and the sternum evenly shaded with dusky. Legs light brown, with the coxae, patellae, and joints somewhat lighter. Abdomen dark gray above, without markings, or with a series of faint chevrons on the posterior half; venter pale gray in the center, dark gray elsewhere. Spinnerets light yellowish brown.

Structure similar to that of *H. cinerea* Emerton, except for differences in the epigynum and palpus, as shown in the figures.

Measurements:	♂	♀
Length	2.10 mm.	2.50 mm.
Carapace:		
Length .....	.85	.93
Width .....	.70	.72
Tibia-patella:		
I .....	.73	.73
IV .....	.78	.85

Type locality: About W110°50':N38°10', Pine Springs, Henry Mts., Utah; ♀ holotype, ♂ allotype, ♂ ♀ paratypes; September 11, 1929; R. V. Chamberlin collector.

Other localities:

- 106.38 ♂ West Elk Creek, Gunnison River, Colorado; September 1937; R. V. Chamberlin.
 109.38 ♂ La Sal Mts., Utah; October 19, 1931; W. Ivie.
 110.44 ♂ ♀ Madsen Junction, Yellowstone Park, Wyoming; June 22, 1938; W. Ivie.
 110.38 2♂ Mt. Ellen, Henry Mts., Utah; September 10, 1929; R. V. Chamberlin.
 111.38 4♀ Fish Lake, Utah; September 5, 1929; R. V. Chamberlin.

Genus *HAHNISTEA* Chamberlin and Ivie, new

This genus is close to *Hahnia* C. Koch. It differs mainly in the eyes and the much longer legs. Carapace nearly as wide as long, narrowed in front. Height of clypeus greater than the diameter of an A. S. eye. Eye area occupying nearly the full width of the head. Eyes in order of size are A.S., P.S., P.M., A.M., in ratios of about 10:10:8:5, respectively. Anterior eye row very slightly procurved; eyes subcontiguous. Posterior row straight, P.M. eyes a full diameter apart, half as far from the side eyes. Chelicerae vertical, with one tooth on hind margin of fang groove. Labium much wider than long. Endites wide, twice as long as labium, slightly convergent anteriorly, but not touching. Sternum large, wider than long; posterior end truncate, separating hind coxae by a full diameter or more. Legs long and slender, bearing long setae, but no spines. Abdomen simple, somewhat flattened. Spiracle openings about mid-way between spinnerets and genital furrow. Spinnerets moderately long; apical segment of outer pair about half as long as the basal segment.

Genotype: *Hahnistea longipes* Chamberlin and Ivie, n.sp.

Hahnistea longipes Chamberlin and Ivie, new species

Fig. 58

Color: Carapace light brown, with darker radial marks extending all the way to the edge; interocular spaces black. Chelicerae light brown, paler at the tips. Endites pale brown, darker at base. Labium and sternum light brown. Legs light yellowish brown. Abdomen gray above, with a series of paired light spots, which join into transverse bands behind. Venter pale gray. Spinnerets light yellowish brown.

Structure as given under the generic diagnosis.

<i>Measurements</i> :	♀ Holotype
Length	2.00 mm.
<i>Carapace</i> :	
Length .....	.80
Width .....	.79
<i>Sternum</i> :	
Length .....	.50
Width .....	.58
<i>Tibia-patella</i> :	
I	1.40
IV	1.05

Type locality: W123°:N40°, Potter Creek Cave, California; ♀ holotype; July 1, 1937; R. V. Chamberlin collector.

Genus NEOANTISTEA Gertsch, 1934

Neoantistea coconino Chamberlin and Ivie, new species

Figs. 59, 60

MALE. *Color*: Carapace dark brown, with dusky reticulations. Chelicerae orange brown. Sternum and labium brown. Endites pale yellowish. Legs light yellowish, with dusky rings—2 on femur, one on patella (faint), 2 on tibia, and two on metatarsus. Abdomen dark gray above, with light gray markings; a pair of light spots over muscle impressions, about one-third way from base; a series of six narrow chevrons on the posterior part; a narrow blackish median line on the posterior two-thirds, and the whole dorsum marked with many light specks. Venter lighter, mottled. Spinnerets pale, with dusky rings on basal segments of the two outer pairs, with distal segment of outer pair dusky.

Structure: Carapace nearly as wide as long, flattened on thoracic part, head more elevated. A.M. eyes slightly larger than the A.S. eyes; anterior eyes subcontiguous. P.M. eyes a little more than a diameter apart, a little less than a diameter from the side eyes. Median ocular

area about as wide in front as behind, slightly longer than wide. Hind margin of fang groove with a large tooth, followed mesally with two closely spaced small teeth. Sternum slightly wider than long. Endites modified as shown in the figure. Legs I and II with small tubercles on the underside of the femur, tibia, and metatarsus. Legs III and IV with a few slender spines. Patella of palpus with a stout basal spur on the cetal side; tibia with a stout recurved spur.

<i>Measurements:</i>	♂ Holotype
Length	3.70 mm
<i>Carapace:</i>	
Length	1.80
Width	1.55
<i>Tibia-patella:</i>	
I	1.80
IV	1.80

Type locality: W112°:N36°, Kaibab Forest, Arizona; ♂ holotype; June 14, 1934; W. Ivie and H. Rasmussen collectors.

Neoantistea santana Chamberlin and Ivie, new species

Figs. 61-63

Color same as in *coconino*, except sternum orange brown with dusky margins, and chelicerae reddish brown.

Structure typical for the most part. A.M. eyes larger than the side eyes, otherwise as in *coconino*. Hind margin of fang groove of male with one large tooth and a small tooth very close to it. Outer spinnerets with apical segment a little shorter than the basal. Epigynum with a small obscure depression in which are located the openings. (The tubes of the type very assymetrical).

<i>Measurements:</i>	♂ Holotype	♀ Allotype
Length	4.00 mm.	4.45 mm.
<i>Carapace:</i>		
Length	1.85	1.80
Width	1.63	1.66
<i>Tibia-patella:</i>		
I	1.92	1.65
IV	1.89	1.95

Type locality: W117°50':N33°33', Laguna Beach, California; ♂ holotype; July 25, 1931; W. Ivie collector.

Other Localities:

117.33 ♂ Santa Ana Mts., Sept. 13, 1941; W. Ivie.

118.34 ♀ Allotype; Santa Monica, California; December 25, 1932; W. Ivie.

Family LYCOSIDAE

Genus PARDOSA C. Koch, 1848

Pardosa nebraska Chamberlin and Ivie, new species

Figs. 69-70

MALE. *Color:* Carapace brownish gray, with a series of submarginal light spots, and a median light band, which begins narrow at the base, expands over the median groove, beyond which it fades out, then reappears as a pair of crescent-shaped spots. Chelicerae blackish, streaked with yellowish. Labium and endites dull orange, shaded with dusky, with light tips. Sternum blackish. Legs heavily marked and shaded with dusky over light brown; coxae shaded on underside. Abdomen dark gray, with a faint lanceolate mark on basal part, and a row of small light gray spots along each side above; venter a little paler.

Structure similar to that of other species of the *groenlandica* group, except for differences in the palpus and epigynum.

Measurements:

	♂
Length	8.20 mm.

Carapace:

Length	4.20
Width	3.05

Tibia-patella:

I	4.10
IV	4.50

Type locality: W99°55':N40°50', 10 miles west of Lexington, Nebraska; ♂ holotype, ♂ paratype; June 6, 1933; W. Ivie collector.

Other locality:

98.40 ♂ ♀ (Poor condition). Grand Island, Nebraska; June 20, 1910; R. V. Chamberlin.

Pardosa subra Chamberlin and Ivie, new species

Fig. 71

FEMALE. *Color:* Carapace blackish, with light yellowish gray bands—a submarginal band on each side, extending from base to the posterior eye row; a median band, extending from near base onto posterior part of head, forking anteriorly. Chelicerae dusky streaked with yellowish. Sternum and labium blackish. Endites dusky orange. Coxae of legs yellowish; rest of legs yellowish, heavily marked with dusky. Abdomen dark gray, with a faint median light band in front; venter slightly lighter.

Structure, in general, similar to other species of the *groenlandica* group, especially *wasatchensis* Gertsch and *johanseni* Gertsch. The epigynum is the distinctive feature; this is figured.

<i>Measurements:</i>	♀ Holotype
Length	6.70 mm
<i>Carapace:</i>	
Length	3.20
Width	2.35
<i>Tibia-patella:</i>	
I	2.90
IV	3.70

Type locality: W118°:N43°, Malheur Lake, Oregon; ♀ holotype; June 18, 1940; L. W. Saylor collector.

***Pardosa platla* Chamberlin and Ivie, new species**

Fig. 72

Color: Eye quadrangle black, upper sides of carapace dark dusky brown; a wide, light, submarginal band, with a series of dusky spots along the margin; median band narrow at base, suddenly widens with irregular outline through the median furrow, and with a pair of crescent-shaped branches in front; a large light spot on each side of the clypeus, and a smaller one in the middle. Chelicerae light yellowish brown, with streaks or shadows of dusky at base. Endites light orange, with whitish tips. Labium shaded with dusky. Sternum yellowish brown, with a blackish Y-shaped mark over the full length, and a narrow, whitish, median band on the anterior part. Legs light yellow, with dusky rings; coxae light yellow, with distal rim touched with dusky. Abdomen dark gray above, with a pattern of markings as in *milvina*; venter light gray, with a darker streak along middle and one along each side.

Structure similar to that of *milvina* and *saxatilis*, except for the distinctive epigynum. Height of clypeus equal to two diameters of an A.M. eye.

<i>Measurements:</i>	♀ Holotype
Length	4.80 mm.
<i>Carapace:</i>	
Length	2.60
Width	1.83
<i>Tibia-patella:</i>	
I	(Missing)
IV	3.10

Type locality: W98°25':N40°55', 10 miles west of Grand Island, Nebraska; ♀ holotype, ♀ paratype; June 6, 1933; W. Ivie collector.

***Pardosa medialis* Banks**

Fig. 74

Locality: Tepic, Mexico.***Pardosa izabella* Chamberlin and Ivie, new species**

Fig. 73

FEMALE. *Color*: Carapace blackish, with a wide submarginal band, extending from base to clypeus; median band narrow at base, gradually widening to broadest place on back of head. Chelicerae yellowish brown, heavily streaked with dusky. Endites light orange. Labium shaded with dusky. Sternum yellow, with a dusky Y and small black spots along the side margins. Coxae of legs yellow; rest of legs light brown, shaded and banded with dusky. Abdomen colored as in *milvina*; venter pale, with a broken dusky band along each side.

Structure similar to that of *P. platta* n. sp. Anterior eyes equal. Epigynum with a short broad plate which covers the entire cavity.

<i>Measurements</i> :	♀ Holotype
Length	5.90 mm.
Carapace:	
Length	2.90
Width	1.93
Tibia-patella:	
I	2.55
IV	3.30

Type locality: Chichivac, Guatemala; ♀ holotype; February 4-7, 1934; K. P. Schmidt collector. (Field Museum).

***Pardosa falcifera* F. Cambridge**

Figs. 67-68

Locality record: 98.36 ♂ s ♀ s Cherokee, Oklahoma; July 4, 1934.

This appears to be the species which F. Cambridge (*Biol. Centr. Amer.*, 1901, 2:318, *30:23-24a) regarded as typical for *falcifera*. The three following species are closely related, and evidently have been confused with *falcifera*.

***Pardosa costrica* Chamberlin and Ivie, new species**

Fig. 64

FEMALE. *Color*: Carapace dusky brown, with a light submarginal band along each side of the thorax, and a broad median band, which narrows on the posterior leclivity. Chelicerae dark brown. Endites

orange brown. Labium dusky. Sternum yellowish, with a dusky V-shaped mark. Legs light yellowish brown, with faded dusky rings and markings. (Abdomen faded).

Structure close to that of *falcifera*, except for the different form of epigynum.

<i>Measurements:</i>	♀ Holotype
Length	6.30 mm.
<i>Carapace:</i>	
Length	3.30
Width	2.30
<i>Tibia-patella:</i>	
I	2.80
IV	3.60

Type locality: Costa Rica; ♀ holotype.

Pardosa zionis Chamberlin and Ivie, new species

Fig. 65

Color. FEMALE: Carapace dusky brown, with eye quadrangle blackish, with a broken submarginal light band on each side, and with a light median band, which begins narrow at the base, expands over the median furrow, constricts, then becomes broad and trifurcate on the back of the head. Chelicerae light brown, with a blackish oblique band across the front, and with other blackish markings. Endites orange brown, lightly shaded with dusky. Sternum and labium blackish, the labium with a whitish tip, and the sternum with a narrow, light, median band on the anterior half. Coxae of legs yellowish brown beneath; rest of legs yellowish brown, with characteristic dusky markings. Abdomen brownish gray above, with obscured light markings, similar to those of *sternalis*, *falcifera*, etc.; venter lighter, shaded with darker.

MALE. Color darker than in female. Carapace blackish; submarginal and median light bands present, but anterior part of median band obscured. Chelicerae blackish, with tips of inner side yellowish. Endites dusky brown; labium blackish; sternum black, with a narrow median light streak on anterior part. Palpus all black. Coxae and basal two-thirds of femora blackish; rest of leg I pale yellowish, without distinct markings; other legs as in female, but more dusky on femur, and more yellowish beyond. Abdomen dusky above, slightly lighter beneath, without distinct markings.

Structure similar to that of *falcifera*; the palpus of a similar form; the epigynum distinct.

<i>Measurements:</i>	♂	♀
Length	6.20 mm.	6.20 mm.
<i>Carapace:</i>		
Length	3.10	3.40
Width	2.38	2.40
<i>Tibia-patella:</i>		
I	2.84	3.06
IV	3.50	4.00

Type locality: W112°57':N37°15', Zion Park, Utah; ♀ holotype, ♂ allotype; June 9, 1934; W. Ivie and H. Rasmussen collectors; ♂ s ♀ s paratypes; various dates and collectors.

Pardosa hopi Chamberlin and Ivie, new species

Fig. 66

FEMALE. Color, structure, and size essentially the same as in *zionis* n.sp. The epigynum is distinctly different.

<i>Measurements:</i>	♀ Holotype
Length	7.00 mm.
<i>Carapace:</i>	
Length	3.30
Width	2.40
<i>Tibia-patella:</i>	
I	2.80
IV	3.80

Type locality: W112°33':N34°30', 3 miles southwest of Prescott, Arizona; ♀ holotype; April 8, 1935; W. Ivie collector.

Pardosa hetchi Chamberlin and Ivie, new species

Fig. 75

FEMALE. *Color:* Carapace dusky brown, with a narrow and irregular submarginal band of lighter color, and with a broad median band which narrows on the posterior declivity, constricts just in front of the median groove, and is trilobed in front; ocular quadrangle nearly black. Chelicerae brown, marked and shaded with dusky; mesal side of distal end orange. Sternum, labium and endites dusky brown, the sternum with a light median streak on the anterior part. Legs brown, with broad dusky rings. Abdomen brownish gray, with a brown mark over the heart, and with subdued blackish and pale gray spots above. Venter light brownish gray. Spinnerets dusky brown.

Structure similar to that of *P. mackenziana* (Keys.) and *P. uncata* (Thorell), except for differences in the epigynum.

<i>Measurements:</i>	♀ Holotype
Length	6.00 mm
<i>Carapace:</i>	
Length	3.20
Width	2.50
<i>Tibia-patella:</i>	
I	3.50
IV	3.90

Type locality: W119°47':N37°48', Aspen Valley, Yosemite Park, California; ♀ holotype, ♀ s paratypes; August 12, 1931; Wilton Ivie collector.

Genus *TROCHOSA* C. Koch, 1848

Trochosa cherokee Chamberlin and Ivie, new species

Fig. 76

FEMALE. *Color:* Carapace brownish gray, with a wide median band extending from the base to nearly the middle row of eyes; this band is narrowest at the base and widest on the posterior part of the head; carapace otherwise slightly mottled, but not marked. Chelicerae very dark brown, with a light patch at distal end in front. Labium and endites brown, with light tips. Sternum dark brown. Legs brown, without markings. Abdomen brownish gray, without a distinct pattern, but with a blackish patch on each side of the anterior end; venter brownish gray.

Structure: Posterior eye row occupying about three-fifths the width of the head. Posterior eyes separated by about three diameters, about two diameters from middle eyes. Middle eyes largest, about one diameter apart. Anterior eye row slightly procurved, median eyes much larger than the laterals; eyes about equidistant, less than a radius of an A.M. eye apart. Clypeus about one diameter of an A.M. eye in height. Chelicerae with three teeth on hind margin of fang groove. Labium wider than long. Tibiae with three pairs of spines on the under side. Epigynum with a typical inverted T-shaped septum, but with its parts wider than in *T. frondicola* (Em.)

<i>Measurements:</i>	♀ Holotype
Length	12.00 mm.
<i>Carapace:</i>	
Length	6.00
Width	4.65
<i>Tibia-patella:</i>	
I	6.00
IV	6.60

Type locality: W95°20':N35°48', Fort Gibson, Oklahoma; ♀ holotype; July 21, 1937; Standish-Kaiser collector.

In size and color, this species closely resembles *frondicola*, but the epigynum is different.

Trochosa guatemala Chamberlin and Ivie, new species

Fig. 77

FEMALE. *Color:* Carapace dusky brown, with a faint, narrow, irregular submarginal band along each side of the thorax, and a distinct median band, which begins narrow at the base, widens slightly over the median furrow, constricts slightly, then widens abruptly on the back of the head to nearly twice its former width, and fades out on the eye quadrangle; the wide part of the median band on the head contains a small band of dark hairs on each side. Chelicerae dark brown. Endites reddish-brown, with whitish tips. Labium dusky brown. Sternum yellowish along the middle, more brownish on the sides. Coxae of legs light brown below, lightly shaded with dusky; rest of legs brown, with dusky rings and mottlings. Abdomen brownish gray, with the anterior corners black, set off by an angle of light gray; venter lighter, with darker specks and a dusky band along each side. Spinnerets orange brown.

Structure similar to that of *pratensis* and *frondicola*. Height of clypeus less than the diameter of an anterior eye. Anterior eye row slightly procurved; A.M. eyes larger than the laterals, about a radius apart, and about the same distance from the side eyes. Middle eyes scarcely more than a radius apart, a full diameter from the posterior eyes. Posterior eyes three diameters apart. Ratio of eyes (A.S., A.M., middle, posterior) about 5:7:15:12. Chelicerae with three teeth on hind margin of fang groove. Epigynum figured.

<i>Measurements:</i>	♀ Holotype
Length	10.75 mm.
Carapace:	
Length	5.50
Width	4.30
Tibia-patella:	
I	5.10
IV	5.10

Type locality: Chichivac, Guatemala; ♀ holotype; February 4-7, 1934; K. P. Schmidt collector. (Field Museum).

Subgenus VARACOSA Chamberlin and Ivie, new

This subgenus is proposed for those species of *Trochosa* wherein the cross-piece of the epigynum has the ends curved far forward.

Type species: Trochosa (Varacosa) avara Keyserling.

In addition to *avara*, this subgenus contains *gosiuta* (Chamberlin), *parthenus* (Chamberlin), and *shenandoa* n. sp.

Trochosa (Varacosa) shenandoa Chamberlin and Ivie, new species

Fig. 78

FEMALE. This species closely resembles *avara* in color, size, and structure, but may be readily distinguished by the form of the epigynum. The space on each side of the epigynum is filled with a smooth, egg-shaped tubercle.

<i>Measurements:</i>	♀ Holotype
Length (abdomen shrunken)	8.00 mm.
Carapace:	
Length	4.70
Width	3.20
Tibia-patella:	
I	3.75
IV	4.10

Type locality: W78°23':N38°40', Shenandoah National Park, Virginia ♀ holotype; July 5, 1933; W. Ivie collector.

Genus LYCOSA Latreille, 1804

Lycosa labrea Chamberlin and Ivie, new species

Figs. 79-80

This species closely resembles *L. antelucana* Montgomery in color and structure, but is readily distinguished by the form of the epigynum.

<i>Measurements:</i>	♂	♀
Length	15.00 mm.	18.70 mm.
Carapace:		
Length	8.30	8.50
Width	6.00	6.30
Tibia-patella:		
I	8.75	7.50
IV	9.00	8.30

Type locality: W118°:N34°, Los Angeles, California; ♀ holotype, ♂ allotype; ♂ ♀ paratypes.

Lycosa santrita Chamberlin and Ivie, new species

Figs. 81, 82

FEMALE. *Color:* Carapace longitudinally striped; the median stripe is light yellowish, becoming white in front, widest at the base and gradually narrowing anteriorly, extending to the A.M. eyes; next to

this is a pair of wide dusky brown stripes, which enclose the eyes; next, a wide yellowish stripe, extending the full length, enclosing in it a small dark streak below the large eyes; finally, a marginal stripe of dusky brown. Chelicerae dark brown. Endites orange. Labium dusky brown. Sternum yellowish, lighter along mid-line. Legs light yellowish brown, gradually becoming dark brown distally, without markings, except at distal end of tibia IV, where it is blackish on the under side. Abdomen in general brownish gray above, with a pair of longitudinal yellowish white stripes, enclosing between them a broad band, which is blackish on the basal part, and grayish brown on the posterior part, cut by fine cross-lines of lighter color. Venter light yellowish gray, finely specked with black.

MALE: Color similar to that of female, except that the first pair of legs are a little darker (but not black, as in *rabida*).

Structure very close to that of *L. rabida* Walckenaer.

Measurements:	♂	♀
Length	16.00 mm.	22.0 mm.
Carapace:		
Length	9.0	10.0
Width	6.5	7.6
Tibia-patella:		
I	9.0	9.0
IV	9.5	10.0

Type locality: W110°55':N31°40', Madera Canyon, Santa Rita Mts., Arizona; ♀ holotype, ♂ allotype, many ♂s ♀s paratypes; September 11, 1941; W. Ivie collector. Found among green plants along the edge of a small stream; active at night, concealed during the daytime.

This species is close to *rabida*, but the dorsal pattern of the abdomen is slightly different, and the front legs of the male are not so black.

Genus SCHIZOCOSA Chamberlin, 1904

Subgenus AVICOSA Chamberlin and Ivie, new

This new subgenus is proposed for those species grouped around *avida* (Walckenaer). The epigynum has the septum more or less dilated near the middle of its length, and the cross-piece lacks the split tip at each end, which is characteristic of the more typical species.

Type species: *Schizocosa* (*Avicosa*) *minnesotensis* (Gertsch).

In addition to *minnesotensis*, we place in this subgenus *S. avida* (Walckenaer) with its numerous varieties, and *wasatchensis* n. sp.

Schizocosa (Avicosa) wasatchensis Chamberlin and Ivie, new species

This species is close to *avida*, with which it agrees in general structure and in the form of the palpus and epigynum. The size, however, is larger, and the color much plainer.

Color: Carapace dusky brown, with a narrow, irregular, light, submarginal band, and a wide median band, which begins narrow at the base and gradually widens forward to the posterior eyes. The ocular quadrangle is covered with white hairs and black setae; the white hairs extend narrowly between the middle eyes. Chelicerae dark brown. Endites reddish brown, with whitish tips. Labium dusky brown, with a whitish tip. Sternum yellowish, shaded with dusky. Legs and palpi light yellowish brown, becoming darker distally in the female, without markings. Abdomen dark gray above, without distinct markings; venter light gray, sometimes shaded with darker gray.

Structure: Three pairs of spines beneath tibia I, with a long space between the middle and distal pair; tibia I scopulate for the distal two-thirds of its length in the female. Size variable. The following measurements are taken from medium-sized specimens).

<i>Measurements</i> :	♂	♀
Length	12.5 mm.	20.0 mm.
Carapace:		
Length	6.0	9.0
Width	4.7	7.0
Tibia-patella:		
I	7.8	8.6
IV	7.8	9.7

Type locality: W111°45':N40°32', Hughes Canyon, Wasatch Mts., Utah; ♀ holotype, ♂ allotype, ♂ s ♀ s paratypes.

This species is common in the Wasatch Mountains, where it matures in July. It inhabits semi-dry slopes in partially shaded areas not far from streams. It is active at night and hides under stones and leaves during the daytime. Since half grown young are common along with adults, we presume that this species requires two years to mature. This is not uncommon in the Lycosidae.

Family THERIDIIDAE

Genus STEATODA Sundevall, 1833

Steatoda atascadera Chamberlin and Ivie, new species

Figs. 83, 84

Color: Carapace, mouthparts, and sternum dark reddish brown. Legs and palpi yellowish brown to reddish brown, with faint dusky rings—at base, middle, and distal end of femur, and at the distal end of the other segments, including the tarsus; some or all of these rings

may be inconspicuous or absent. Abdomen black above, marked with white; a white line circle around the base, and is joined in the middle by a median white line, which extends along the anterior part of the dorsum. There is a whitish band on the lower sides of the abdomen, which extends around the distal end of the abdomen above the spinnerets. Venter black, with a white triangular mark just back of the genital furrow. Epigastric plates light reddish brown. Spinnerets reddish brown, with white tips.

Structure: Essentially the same as in *S. hespera* Chamberlin and Ivic. The epigynum is near that of *hespera* and *borcalis*. The palpus is similar to that of *hespera*, except that the free tip of the horse-shoe shaped process is modified as shown in the figure.

<i>Measurements</i> :	♂	♀
Length	5.60 mm.	5.60 mm.
Carapace:		
Length	2.35	2.40
Width	2.00	2.05
Tibia-patella:		
I	3.20	3.30
IV	2.67	2.80

Type locality: W120°40':N35°29', Atascadero Lake, California; ♂ holotype, ♀ allotype, ♂ ♀ paratypes; September 17, 1941; W. Ivic collector. Found under a concrete bridge at the south end of the lake.

Genus ENOPLIGNATHA Pavesi, 1880

Subgenus MARMATHA Chamberlin and Ivic, new

This subgenus is distinguished by the form of the chelicerae in the male. The fang is stout, sharp pointed, and relatively short. The posterior margin at the distal end is provided with a heavy, double-toothed process.

Type species: *Enoplognatha (Marmatha) marmorata* (Hentz).

Enoplognatha (Marmatha) marmorata (Hentz)

Fig. 85

- Theridion marmoratum* Hentz, 1850, J. Boston Soc. Nat. Hist., 6:273, *9:3
Enoplognatha tecta Keyserling, 1884, Spinnen Amerikas, Theridiidae, 1:138, *6:86
Lithyphantus mimoides Chamberlin, J. Ent. and Zool., 1920, 12:8, *3:4
Steatoda marmorata (in part), Emerton, 1882, Trans. Conn. Acad. Sci., 6:20, *1:3, 3d, 3e.

Locality Records:

- 78.38 ♀ Shenandoah Park, Virginia; July 5, 1933; W. Ivic.
 82.36 ♂ ♀ Erwin, Tennessee; July 8, 1933; W. Ivic.
 82.35 ♀ North of Asheville, North Carolina; July 7, 1933; W. Ivic.

- 108.39 ♂ ♀ Grand Junction, Colorado; June 17, 1940; W. Ivie.
 111.39 2 ♂ Santaquin, Utah; June 6, 1934; W. Ivie and H. Rasmussen.
 112.40 ♂ Oquirrh Mts., Utah; May, 1929; Evelyn Swenson.
 113.41 ♀ Park Valley, Utah; Sept. 9, 1932; W. Ivie.
 117.35 3 ♀ Near Cartago, California; Aug. 6, 1931; W. Ivie.
 121.36 2 ♀ Pacific Grove, California; Sept. 1, 1937; W. Ivie.
 122.41 ♂ Mt. Shasta, California.
 124.40 ♂ ♀ Arcata, California; July 13, 1937; R. V. Chamberlin.

Enoplognatha (Marmatha) marmorata parvior Chamberlin and Ivie,
 new subspecies

Fig. 86

MALE. *Color* and structure very similar to that of *marmorata*, but differing in size and in the structure of the chelicerae. The size is much smaller than any *marmorata* that we have seen. The chelicerae are weaker; the double-lobed process on the posterior side is thinner and more appressed; the mesal lobe is smaller. The palpi appear to be identical.

<i>Measurements:</i>	♂ Holotype
Length	3.50 mm.
Carapace:	
Length	1.70
Width	1.27
Tibia-patella:	
I	2.30
IV	2.03

Type locality: W72° :N42°, Vermont; ♂ holotype.

Enoplognatha (Marmatha) puritana Chamberlin and Ivie,
 new species

Figs. 87, 88

Steatoda marmorata (in part), Emerton, 1882, Trans. Conn. Acad. Sci., 6:20, *4:3a, b, c, f.

Color: Female similar to *marmorata*, except for differences in the abdomen, as shown by Emerton's figures. The male is more like *marmorata*, but has the front legs yellowish, without the dark shading on the distal half as in that species.

Structure: Differs from *marmorata* in the epigynum of the female and the chelicerae of the male. The differences in the development of the chelicerae are shown in the figures. This species lacks the anterior spur found on the male chelicera of *marmorata*, but has a tooth close to the fang, which is absent in *marmorata*.

Measurements:	♂	♀
Length	5.20 mm.	7.00 mm.
Carapace:		
Length	2.20	2.50
Width	1.83	2.00
Tibia-patella:		
I	3.50	3.20
IV	2.93	2.80

Type locality: W76°31':N42°25', Ithaca, New York; ♂ holotype, ♀ s paratypes.

Other localities:

73.41 ♀ Allotype. Wappingus Falls, New York.

73.41 ♀ s Norwalk, Connecticut; July 2, 1933; W. Ivie.

77.38 ♂ ♀ Falls Church, Virginia.

This species appears to be the more common species in New England, although *marmorata* is also found there.

Subgenus RUGATHA Chamberlin and Ivie, new

This subgenus is characterized by the form of the chelicerae in the male. The chelicerae are long and widely separated at the tips; the fang is very long; on the mesal side of the chelicera is a large spur.

Type species: *Enoplognatha (Rugatha) pikes* n. sp.

Enoplognatha (Rugatha) pikes Chamberlin and Ivie, new species

Figs. 89-91

Color: Carapace light brown, narrowly margined with dusky on the sides. Chelicerae and endites orange brown, the chelicerae darkened at the distal end. Sternum and labium dusky over yellowish. Legs and palpi brownish yellow, with the joints darkened. Abdomen gray, with the usual pattern above, but it is darker, more diffused, with less contrast than in the other species; lower sides and venter dark gray.

Structure typical; similar to *E. rugosa* Emerton, with minor differences in the chelicerae and palpus.

Measurements:	♂	♀
Length	3.10 mm.	4.50 mm.
Carapac		
Le	1.45	1.75
W	1.09	1.40
Tibia-patella:		
I	1.83	2.10
IV	1.80	

Type locality: W105°5':N38°52', Pikes Peak, Colorado, about 11,600 feet elevation; ♂ holotype, ♀ allotype, ♀ s paratypes; June 22, 1940; Wilton Ivie collector.

Other locality:

110.44 ♂ ♀ s Summit Mt. Washburn, Yellowstone Park, Wyoming; Aug. 13, 1940; W. Ivie.

Enoplognatha (Rugatha) wyuta Chamberlin and Ivie, new species

Figs. 93-95

Color: Carapace light brownish yellow, with the side margins of thorax dusky, and with a dusky median streak on the head. Chelicerae and endites orange brown. Labium and sternum dusky, sometimes paler along the median line. Legs brownish yellow, lightly touched with dusky. Abdomen pale gray above, with black spots similar to *marmorata*; venter whitish on the sides, blackish medially.

Structure typical, with differences in the epigynum of the female, and in the palpus and chelicerae of the male.

<i>Measurements:</i>	♂	♀
Length	3.60 mm.	3.50 mm
<i>Carapace:</i>		
Length	1.90	1.60
Width	1.50	1.40
<i>Tibia-patella:</i>		
I	2.73	2.15
IV	2.43	2.20

Type locality: W110°48':N44°32', 13 miles north of Old Faithful Geyser, Yellowstone Park, Wyoming; ♂ holotype, ♀ allotype, ♀ paratype; June 17, 1938; W. Ivie collector.

Other locality:

111.40 2 ♀ Hughes and American Fork Canyons, Wasatch Mts., Utah; May 20, 1934; W. Ivie and R. Rasmussen.

Enoplognatha (Rugatha) rugosa Emerton

Fig. 92

Enoplognatha rugosa Emerton, 1909, Trans. Conn. Acad. S. 42: 1:8-8c

Locality Record:

77.38 ♂ Falls Church, Virginia.

Enoplognatha (Rugatha) joshua Chamberlin and Ivie, new species

Figs. 96, 97

Color: Carapace light brownish, lightly shaded with dusky, with four radial lines on each side. Chelicerae and endites orange brown. Sternum and labium dusky brown. Legs light brownish yellow, with the joints narrowly shaded. Abdomen light mottled gray, with a black median mark and the folium outlined in black; lower sides gray, with many small, blackish, streaks; venter whitish on the sides, dark gray medially; spinnerets surrounded with black, which is edged with white dots. Spinnerets light brown.

Structure: Typical, with minor differences in the palpus and chelicerae of the male.

<i>Measurements:</i>	♂ Holotype	♀ Allotype
Length	3.80 mm.	4.65 mm.
<i>Carapace:</i>		
Length	1.93	2.20
Width	1.43	1.75
<i>Tibia-patella:</i>		
I	2.70	3.22
IV	2.50	3.05

Type locality: W117°24':N34°29', 6 miles southwest of Victorville, California; ♂ holotype, ♀ allotype; March 9, 1941; Aleen and Wilton Ivie collectors.

Enoplognatha (Rugatha) joshua pintura Chamberlin and Ivie, new subspecies

Figs. 98-101

This subspecies is very similar to *joshua* n. sp., but shows slight differences in the male. The spur of the chelicera is longer, and the tooth at its base is situated on the base of the spur and is closely appressed; in *joshua*, this tooth is at the base of the spur and is not closely appressed. The distal process on the mesal side of the palpus is more slender.

Type locality: W113°20':N37°9', Hurricane, Utah; ♂ holotype; March, 1939; W. Ivie collector.

Other locality:

113.37 ♀ Allotype. Pintura, Utah; April 15, 1932; W. Ivie.

Enoplognatha (Rugatha) piuta Chamberlin and Ivie, new species

Figs. 102, 103

Color: Carapace yellowish brown, lightly shaded with dusky; darker along the margins. Chelicerae and endites light orange brown. Sternum and labium dusky brown. Legs light yellowish, lightly shaded with dusky; joints narrowly darkened. Abdomen gray, with the usual pattern above; sides and venter dark, mottled gray, with a small strip of white along each side of the venter.

Structure typical, with differences in the palpus and chelicera of the male. The tibia of the palpus is longer than in the other species of this group. The epigynum is similar to that of *pintura*.

<i>Measurements</i> :	♂	♀
Length	3.85 mm.	5.50 mm.
<i>Carapace</i> :		
Length	1.90	2.10
Width	1.45	1.60
<i>Tibia-patella</i> :		
I	3.00	3.15
IV	2.70	3.00

Type locality: W110°57':N39°41', Spring Canyon, Helper, Utah; ♂ holotype, ♀ allotype, ♀ paratype; April 16, 1933; W. Ivie collector.

Family LINYPHIIDAE

Genus LINYPHANTES Chamberlin and Ivie, new

This genus is close to *Bathyphantes* Menge, with which it agrees in most general characters. The anterior median eyes are slightly smaller than the others, which are about equal; both eye rows are straight or nearly so; the posterior eyes are typically equidistant. Chelicerae of female are unmodified, usually with four large teeth on the anterior margin of the fang groove, and four or more very small teeth on the hind margin. The chelicerae of the male are variously modified; aside from the stridulating file on the ectal side, the distal ends are usually slightly elongated and slender; there is usually a spur or large tooth on the anterior side, near the distal end. Legs long and slender, usually with five spines each—one on distal end of patella above, two along the top of the tibia, and one on each side of the tibia near the distal end. The male palpus is complex; the embolus is very long and slender, loosely coiled around the distal end of the palpus, usually making two complete coils or more; the slender tip is held in a conductor. The epigynum is small and simple, without the prolonged extensions found in *Bathyphantes*.

Genotype: *Linyphantes ephedrus* (Chamberlin and Ivie) (from Linyphia).

Linyphantes ephedrus (Chamberlin and Ivie)

Figs. 104-107

Color: Carapace yellowish brown, margins narrowly shaded. Chelicerae brownish orange. Endites orange, with pale tips. Sternum and labium dusky. Legs light yellow, with joints more or less darkened. Abdomen pale yellowish gray above, with angles of gray along the dorsum, joined together by a median line; venter dark gray. Spinnerets yellow.

Structure: FEMALE. Chelicerae with five large teeth in front, five small teeth behind. Posterior eye row straight; eyes slightly more than a radius apart. Anterior eye row slightly recurved; A.M. eyes subcontiguous, less than a diameter from the side eyes.

MALE. Eyes as in female. Legs long. Chelicerae with a tubercle in front; distal end concave in front. Five reduced teeth on front margin of fang groove, a keel and two or three tiny teeth behind.

<i>Measurements:</i>	♂	♀
Length	2.30 mm.	2.50 mm.
<i>Carapace:</i>		
Length	1.10	1.07
Width .....	.87	.78
<i>Tibia-patella:</i>		
I	1.77	1.33
IV	1.60	1.33

Type locality: W113°32':N41°58', Creek east of Yost, Raft River Mts., Utah; September 5, 1932; ♀ holotype; W. Ivie collector.

Known localities:

- 110.44 ♀ Morris Canyon, Yellowstone Park, Wyoming; July 18, 1926; H.K.B.
- 111.42 ♀ Fishaven, Idaho; September 5, 1921.
- 111.40 ♀ Dry Canyon, Salt Lake City, Utah; April 13, 1926.
- 111.38 ♀ Fish Lake, Utah; Sept. 9, 1929; R. V. Chamberlin.
- ” ♂ 3 ♀ Fish Lake, Utah; August, 1934; W. Ivie.
- 112.37 3 ♀ Zion Park, Utah; June 9, 1934; W. Ivie and H. Rasmussen.
- 113.41 ♀ (Type locality).
- 113.37 2 ♀ St. George, Utah; April 21, 1932; W. Ivie.
- 113.26 4 ♀ Virgin Narrows, near Littlefield, Arizona; June 11, 1934; H. Rasmussen and W. Ivie.
- 114.42 ♂ 2 ♀ Thousand Springs, Idaho; September 18, 1935; R. V. Chamberlin and W. Ivie.
- 115.40 ♂ 2 ♀ Ruby Valley, Nevada; Sept. 1937; R. V. Chamberlin.

- 116.44 ♂ ♀ Indian Valley, Idaho; Aug. 21, 1932; W. Ivie.
 116.43 2 ♀ Parma, Idaho; July 4, 1935; W. Ivie.
 117.33 ♂ Laguna Lake, near Laguna Beach, California; July 6, 1934; H. Rasmussen and W. Ivie.
 117.32 ♀ Mouth of San Diego River, California; July 12, 1931; W. Ivie.
 118.34 ♀ Los Angeles, California; June, 1932; W. Ivie.
 121.36 ♂ s ♀ s Pacific Grove, California.
 122.42 2 ♀ Ashland, Oregon; September 9, 1935; R. V. Chamberlin and W. Ivie.
 122.37 ♀ San Francisco, California; September 17, 1923; J. C. Chamberlin.
 " 2 ♀ Palo Alto, California; September 1, 1923; J. C. Chamberlin.
 124.43 ♀ Rogue River, Oregon; April 26, 1937; J. C. Chamberlin.
 124.40 ♂ 2 ♀ Eureka, California; July 13, 1937; R. V. Chamberlin.

Linyphantes nigrescens Chamberlin and Ivie, new species

Figs. 108-111

Color: Carapace dusky brown, with a dark shield-shaped mark on the back of the head; reticulations on the sides of the head, and radial streaks on the thorax. Chelicerae and endites brown, more or less heavily shaded with dusky. Sternum and labium dark dusky brown, sometimes nearly black. Legs light yellow, with joints darkened. Abdomen of light specimens gray, with dorsal pattern as shown in the figure; sides specked with pale gray; venter smooth gray, with whitish streaks along the sides, and a quadrangle of four whitish dots back of the middle. Darker specimens have the abdomen ranging from the above description to solid black. Spinnerets dark dusky brown.

Structure essentially typical. The chelicerae of the male has a small nodule in front of the fang; fang groove with five teeth on the front margin, four small teeth on the hind margin. The epigynum and palpus are as figured.

<i>Measurements:</i>	♂	♀
Length	2.30 mm.	2.60 mm.
<i>Carapace:</i>		
Length	1.07	1.10
Width .....	.80	.85
<i>Tibia-patella:</i>		
I	1.14	1.25
IV	1.12	1.26

Type locality: W121°55':N36°38', Pacific Grove, California; ♂ holotype, ♀ allotype, ♂ s ♀ s paratypes; August 17, 1931 and September 1, 1937; Wilton Ivie collector.

Linyphantes natches Chamberlin and Ivie, new species

Figs. 112, 113

Color: Carapace yellowish brown, with narrow dusky margins. Chelicerae orange brown. Endites orange. Sternum and labium orange, more or less shaded with dusky. Legs and palpi light yellow brown. Abdomen light gray above, with dark gray markings, consisting of a longitudinal median band, irregular at base, runcinate at middle, broken and laterally extended into transverse bars at the distal end; sides dark gray, with many short streaks of pale gray; venter dark gray, with four small light gray spots in front of spinnerets. Spinnerets orange.

Structure: Male chelicera with a distinct stridulating file on the ectal side; hairs on front arising from small granules; a small spur on front near distal end; distal end narrowed and extended; fang groove with four teeth on front margin, two small teeth and a sharp ridge on the hind margin.

<i>Measurements:</i>	♂	♀
Length	2.60 mm.	2.70 mm
Carapace:		
Length	1.30	1.25
Width	1.00	.95
Tibia-patella:		
I	1.63	1.60
IV	1.60	1.60

Type locality: W121°36':N47°25', Snoqualmie Falls, Washington; September 16, 1935; ♂ holotype, ♀ allotype, ♂ s ♀ s paratypes; R. V. Chamberlin and W. Ivie collectors.

Linyphantes nehalem Chamberlin and Ivie, new species

Figs. 114, 115

Color: Carapace light yellowish brown, with the sides lightly shaded with dusky at the margins. Chelicerae and endites orange. Sternum and labium dusky brown. Legs and palpi light yellowish, distal part of male palpus shaded with dusky. Abdomen pale gray, with dark gray markings; pattern above typical, but varying from an absence of markings to nearly black; sides mottled; venter varies from light gray to dark gray, with the typical four pale spots usually showing.

Structure: Chelicerae of female with four teeth in front of fang, five behind. Chelicerae of male with a frontal spur, slender tip; four reduced teeth in front, three very small teeth and a keel behind.

<i>Measurements:</i>	♂	♀
Length	2.60 mm.	2.93 mm.
<i>Carapace:</i>		
Length	1.30	1.20
Width	1.00	.90
<i>Tibia-patella:</i>		
I	1.50	1.54
IV	1.48	1.50

Type locality: W123°59':N45°30', Oceanside, Oregon; ♂ holotype, ♀ allotype, ♂ ♀ paratypes; August 25, 1936; Wilton Ivie collector.

***Linyphantes pacificus* Chamberlin and Ivie, new species**

Figs. 116, 117

Color: Carapace yellowish to light brown. Chelicerae and endites orange. Sternum and labium shaded with dusky. Legs yellow. Abdomen with a typical pattern above, although ordinarily the dark markings are much reduced, sometimes nearly absent.

Structure typical. Chelicerae of female with five or six teeth in front, five behind. Chelicerae of male with a spur in front, five teeth on front margin of fang groove, three tiny teeth and a keel behind. Stridulating file very much reduced, inconspicuous.

<i>Measurements:</i>	♂	♀
Length	2.35 mm.	2.50 mm
<i>Carapace:</i>		
Length	1.10	1.00
Width .....	.83	.75
<i>Tibia-patella:</i>		
I	1.35	1.27
IV	1.28	1.25

Type locality: W121°55':N36°38', Pacific Grove, California; ♂ holotype, ♀ allotype, ♂ s ♀ s paratypes; August 6, 1931; R. V. Chamberlin collector; August 17, 1931 and September 1, 1937; W. Ivie collector.

***Linyhantes pualla* Chamberlin and Ivie, new species**

Figs. 118-121

Color: Carapace yellow to light brown, without distinct markings, except for a pair of short dark extensions backward from the P.M. eyes in the female; these markings are indistinct or absent in the male. Chelicerae orange. Endites orange at base, paler distally. Sternum and labium dusky brown. Legs light yellow. Abdomen pale gray above,

with a typical runcinate pattern of dark gray along median areas of dorsum; a white transverse band above spinnerets; lower sides and venter dark gray. Spinnerets yellowish.

Structure: Anterior eye row straight, posterior row procurved. A.S. eyes slightly largest; posterior eyes about equal; A.M. eyes much smaller. A.M. eyes subcontiguous, about one diameter from the lateral eyes; P.M. eyes a full diameter apart, slightly closer to the side eyes. A.S. eyes slightly raised. Lateral spines on tibiae of legs missing. Chelicerae of female with three large widely separated teeth in front, five small closely spaced teeth behind. Male with one large tooth near tip of fang, and two or three minute points near it; the fang has a small process on the concave side. The palpus and epigynum as figured.

<i>Measurements:</i>	♂	♀
Length	2.10 mm.	2.45 mm.
<i>Carapace:</i>		
Length .....	.95	1.00
Width .....	.80	.80
<i>Tibia-patella:</i>		
I	1.33	1.33
IV	1.33	1.35

Type locality: W121°25':N47°25', Denny Creek Camp, Snoqualmie Pass, Washington; ♂ holotype, ♀ allotype, ♂s ♀s paratypes; September 17, 1935; R. V. Chamberlin and W. Ivie collectors.

Other locality:

123.48 ♂ Sidney, Vancouver Island, British Columbia; September 16, 1935; R. V. Chamberlin and W. Ivie.

***Linyphantes victoria* Chamberlin and Ivie, new species**

Figs. 122, 123

Color: Carapace yellowish, with dusky margins on the sides and a dusky median band. Chelicerae and endites orange. Labium and sternum dusky. Legs light yellow, with the joints darkened. Abdomen pale gray above, with dark markings of a typical pattern, but reduced. Sides dark gray; venter paler (with a dark gray longitudinal median spot in the female). Spinnerets orange brown.

Structure: Chelicerae of female with six teeth in front, the distal five close together and getting smaller toward base of fang, the sixth tooth some distance removed, mesad; five small teeth on hind margin. Male with a small, rounded spur on front of chelicerae near fang groove; teeth much reduced. Tibia-patella I of male and female distinctly longer than IV.

Measurements:	♂ Holotype	♀ Allotype
Length	2.40 mm.	2.35 mm
Carapace:		
Length	1.13	1.02
Width .....	.81	.78
Tibia-patella:		
I	1.62	1.53
IV	1.40	1.43

Type locality: W123°21':N48°25', Victoria, Vancouver Island, British Columbia; ♂ holotype, ♀ allotype; October 25, 1928.

Linyphantes eureka Chamberlin and Ivie, new species

Fig. 124

MALE. *Color:* Carapace light yellowish brown, with margins narrowly shaded. Chelicerae orange. Endites orange, with pale tips. Labium and sternum shaded with dusky. Legs yellowish, without markings. Abdomen typical; markings diffuse, as is common in males.

Structure: Chelicerae unmodified; stridulating file distinct; fang groove with four large teeth in front, three small ones behind. Palpus distinct. Posterior eye row straight; eyes scarcely more than radius apart; A.M. eyes about a radius from the side eyes.

Measurements:	♂ Holotype
Length	1.85 mm
Carapace:	
Length .....	.98
Width .....	.78
Tibia-patella:	
I	1.28
IV	1.30

Type locality: W124°1':N40°47', Eureka, California; ♂ holotype; July 13, 1937; R. V. Chamberlin collector.

Linyphantes delmarus Chamberlin and Ivie, new species

Fig. 125

Microneta sp., Chamberlin and Ivie, 1941, Bull. Univ. Utah, (Biol) 6 (3):14

FEMALE. *Color:* Carapace yellowish brown, lightly marked with dusky. Chelicerae orange. Endites yellowish, shaded on basal part with dusky. Labium and sternum dusky. Legs and palpi light yellow. Abdomen light gray above, with dark gray markings of the usual general pattern, but with the marks detached from each other; upper sides and venter dark gray, lower sides light gray. Spinnerets yellowish brown.

Structure: Chelicerae with five teeth in front and three behind. Posterior eye row slightly recurved; eyes about two-thirds of a diameter apart. Anterior row straight, typical. Epigynum simple.

<i>Measurements:</i>	♀ Holotype
Length	2.00 mm.
Carapace:	
Length .....	.78
Width .....	.59
Tibia-patella:	
I .....	.90
IV .....	.92

Type locality: W123°1':N37°40', Farallone Islands, California; ♀ holotype; April 13, 1934; L. W. Saylor collector.

Linyphantes santinez Chamberlin and Ivie, new species

Fig. 126

MALE. *Color:* Carapace light yellow-brown. Chelicerae orange. Endites orange. Labium and sternum dusky. Legs light yellow, without markings. Abdomen typical, diffused. Spinnerets yellow-brown.

Structure: Posterior eye row straight; P.M. eyes a full radius apart, slightly less than a diameter from the side eyes. Anterior row faintly procurved; A.M. eyes much smaller than side eyes, subcontiguous, a full diameter from the side eyes. Height of clypeus more than two diameters of an A.S. eye. Hind margin of fang groove with a keel and three small points, front margin with a keel near fang; a large tooth at mesal corner in front; bases of setae on front of chelicerae granulose; fang simple. Legs long and slender.

<i>Measurements:</i>	♂ Holotype
Length	2.00 mm.
Carapace:	
Length .....	.88
Width .....	.67
Tibia-patella:	
I	1.34
IV	1.30

Type locality: W119°50':N34°28', 10 miles west of Santa Barbara, California; ♂ holotype; July 12, 1934; W. Ivie collector.

Linyphantes santinez verdugo Chamberlin and Ivie, new subspecies

Fig. 127

Color and structure similar to *santinez*, except for minor details in the palpus. The most conspicuous difference is that shown by the ventral process as illustrated in the figures.

Type locality: W118°20':N34°10', Montrose, California; ♂ holotype; December 31, 1932; Wilton Ivie collector.

Linyphantes aliso Chamberlin and Ivie, new species

Fig. 128

FEMALE. *Color:* Carapace light yellow, with black eye spots, a black margin along each side, and a dusky median band. Chelicerae orange. Endites orange, with a dusky spot at the base of each palpus. Sternum and labium shaded with dusky. Legs light yellow, with narrow dark rings at the joints. Abdomen essentially typical, although the dorsal markings are sometimes reduced to a narrow median band; sides mottled; venter typically pale gray, with a darker gray, median, longitudinal spot just back of the furrow and a pair of small dusky spots in front of the spinnerets. Spinnerets yellow-brown.

Structure: Posterior eye row straight; P.M. eyes a radius apart, slightly farther from the side eyes. Anterior eye row straight; A.M. eyes proportionately larger than usual (about two-thirds diameter of A.S. eyes), nearly a radius apart, slightly more than a radius from the side eyes. Chelicerae with five small teeth on the hind margin of the fang groove, five large teeth in front, the mesal tooth some distance removed from the others.

<i>Measurements:</i>	♀
Length	2.15 mm.
Carapace:	
Length .....	.90
Width .....	.67
Tibia-patella:	
I	1.30
IV	1.15

Type locality: W117°50':N33°33', Laguna Beach, California; ♀ holotype, ♀s paratypes; December 28, 1932; W. Ivie collector.

Linyphantes microps Chamberlin and Ivie, new species

Fig. 129

MALE. *Color:* Carapace and chelicerae yellow-brown. Endites and sternum pale yellow brown. Legs pale yellow. Abdomen pale yellow gray.

Structure: All eyes small; posterior row slightly procurved; P.M. eyes a full diameter apart, more than a diameter from the side eyes; A.M. eyes subcontiguous, about a diameter from the side eyes; anterior row slightly recurved; the A.M. eyes scarcely smaller than the side eyes. Chelicerae with a spur in front on the antero-mesal corner; three small teeth in front, a small keel, but no teeth, behind. Legs slender.

<i>Measurements:</i>		♂
Length		1.95 mm.
<i>Carapace:</i>		
Length .....		.90
Width .....		.75
<i>Tibia-patella:</i>		
I		1.35
IV		1.30

Type locality: W117°47':N33°41', Irvine, California; ♂ holotype; July 13, 1931; R. V. Chamberlin collector.

***Linyphantes obscurus* Chamberlin and Ivie, new species**

Fig. 130

Color: Carapace dark dusky brown. Chelicerae dark brown at base, paler distally. Endites dark brown. Sternum and labium dark dusky brown. Legs yellowish brown, with the femora and tibiae shaded darker, except at the ends. Abdomen with the typical form of pattern, with the dark markings black, and extended so as to enclose the pale areas as spots; sides black, slashed with white, venter black, with a pale spot just back of the furrow, and with two small, pale, double spots farther back.

Structure: Posterior eye row straight; P.M. eyes larger than the laterals, slightly less than a diameter apart, somewhat closer to the side eyes; anterior row straight, A.M. eyes less than a radius apart, slightly more than a radius from the side eyes. Chelicerae with five teeth in front, four small ones behind. Epigynum distinctive, as figured.

<i>Measurements:</i>		♀ Holotype
Length		1.90 mm.
<i>Carapace:</i>		
Length .....		.80
Width .....		.55
<i>Tibia-patella:</i>		
I .....		.78
IV .....		.88

Type locality: W117°50':N33°33', Laguna Beach, California; ♀ holotype; December 28, 1932; W. Ivie collector.

***Linyphantes distinctus* Chamberlin and Ivie, new species**

Figs. 131, 132

Color: Carapace brown, with faint dusky shadings. Chelicerae orange brown. Endites orange, with pale tips. Sternum and labium dusky. Legs light yellow-brown. Abdomen pale gray above, with cross bars of dark gray on posterior half and a median patch of dark gray on basal part; venter blackish.

Structure: Eyes typical. Chelicerae of female with five teeth in front, four small teeth behind. Male chelicerae slightly convex in front, granulose, with typical front spur; a strong keel and three tiny teeth on hind margin of fang groove, a partial keel in front. Endites with a low conical elevation at center of ventral side. Cymbium of palpus extended dorsally, the extension containing a basin-like depression on the dorso-ectal side.

<i>Measurements:</i>	♂ Holotype	♀ Allotype
Length	1.65 mm.	1.70 mm.
<i>Carapace:</i>		
Length .....	.72	.72
Width .....	.62	.57
<i>Tibia-patella:</i>		
I .....	.95	.89
IV .....	.94	.89

Type locality: W121°55':N36°38', Pacific Grove, California; ♂ holotype, ♀ allotype; August 17, 1931; W. Ivie collector.

Linyphantes laguna Chamberlin and Ivie, new species

Figs. 133, 134

Color: Carapace dusky brown. Chelicerae and endites orange brown. Labium and sternum dusky brown. Legs yellowish brown. Abdomen black, with a wide, white, transverse band above the spinnerets and a series of paired, oblique spots along the dorsum (the white markings may be more or less obscured).

Structure: Essentially typical. The chelicerae of the male each have a mesal spur. The palpus and epigynum are distinct.

<i>Measurements:</i>	♂	♀
Length	1.73 mm.	1.70 mm.
<i>Carapace:</i>		
Length .....	.78	.66
Width .....	.61	.52
<i>Tibia-patella:</i>		
I .....	.94	.86
IV .....	.90	.85

Type locality: W117°50':N33°33', Laguna Beach, California; ♂ holotype, ♀ allotype, ♀ paratype; December 28, 1932; W. Ivie collector.

Linyphantes anacortes Chamberlin and Ivie, new species

Figs. 135, 136

Color: Carapace pale yellow, with the side margins of the thoracic part broadly shaded with dusky. Chelicerae and endites light orange. Labium yellow, shaded with dusky. Sternum and legs light yellowish, sometimes lightly shaded, the legs with rings at the distal end of the tibia and metatarsus. Abdomen whitish, with a narrow, median, runcinate band of blackish on the dorsum, and a pair of longitudinal spots on the dorsal sides above the spinnerets. Lower sides more or less gray; venter pale, unmarked.

Structure: Chelicerae of female typical; those of the male simple, with four teeth in front and four behind. Palpus and epigynum distinctive.

<i>Measurements</i> :	♂	♀
Length	1.90 mm.	2.47 mm.
<i>Carapace</i> :		
Length .....	.90	1.00
Width .....	.70	.80
<i>Tibia-patella</i> :		
I	1.10	1.30
IV	1.10	1.30

Type locality: W122°30':N48°40', Larabee Park, Washington; ♂ holotype, ♀ allotype, ♂ s ♀ s paratypes; September 11, 1935; R. V. Chamberlin and W. Ivie collectors.

Other localities:

121.36 2 ♀ Pacific Grove, California; August 17, 1931; W. Ivie.

124.40 ♀ Eureka, California; July 13, 1937; R. V. Chamberlin.

Linyphantes longivulva Chamberlin and Ivie, new species

Figs. 137-139

Color: Carapace dark brown, with typical dusky markings. Chelicerae brown, more or less shaded with dusky. Sternum and labium blackish. Endites dusky, with pale tips. Legs light yellow, with blackish rings—one at distal end of femur, one on patella, two on tibia, and two on metatarsus (some of these rings may be faded or absent in light specimens). Abdomen light gray above, with a runcinate black pattern or it may vary to almost black; a distinct white spot above the spinnerets. Sides of abdomen mottled to black. Venter blackish in front, pale behind, except for black marks around base of spinnerets.

Structure: Female chelicerae with three or four teeth in front, two or three behind. Scape of epigynum long and slender. Male chelicerae unmodified, as in female.

<i>Measurements:</i>	♂	♀
Length	1.85 mm.	2.15 mm.
<i>Carapace:</i>		
Length .....	.81	.87
Width .....	.67	.70
<i>Tibia-patella:</i>		
I .....	.93	1.05
IV .....	.95	1.05

Type locality: W121°55':N36°38', Pacific Grove, California; ♂ holotype, ♀ allotype, ♂ s ♀ s paratypes; August 16, 1931; W. Ivie collector. ♂ s ♀ s paratypes; August 6, 1931; R. V. Chamberlin collector. ♂ ♀ s paratypes; September 1, 1937; W. Ivie collector.

Genus PITYOHYPHANTES Simon, 1929

Pityohyphantes brachygynus Chamberlin and Ivie, new species

Fig. 140

FEMALE. *Color:* Carapace light yellow, with a narrow blackish seam along the margins of the thorax, and with a median dusky band, which begins relatively narrow at the base, continues at the same width to in front of the median depression, then expands gradually to a width greater than the width of the eye area, then narrows, sending a short branch to each of the posterior eyes. Chelicerae orange brown. Endites dusky at base, light distally. Sternum dusky, with a light yellowish brown median streak. Legs yellow, with dark markings—the femora dotted, with a dark ring at distal end; tibia with a wide terminal ring. Abdomen pale gray, with the characteristic ornate median band of dark gray; sides with a few oblique stripes of dark gray; venter with a median band of dark gray.

Structure: Typical in general, but differs in the much shorter scape of the epigynum.

<i>Measurements:</i>	♀ Holotype
Length	6.00 mm.
<i>Carapace:</i>	
Length	2.30
Width	1.55
<i>Tibia-patella:</i>	
I	3.15
IV	2.35

Type locality: W119°:N37°, Yosemite Park, California; ♀ holotype; 1935.

Pityohyphantes cristatus Chamberlin and Ivie, new species

Figs. 141-143

Color: In general, similar to *brevigyna*, but darker. Carapace light brown, with the margins shaded, including the clypeus; median band similar to that of *brevigyna*, but more diffuse posteriorly, and split anteriorly by a light median line, which extends from between the P.M. eyes to the median depression. Chelicerae dusky brown, lighter distally. Endites blackish at base, orange distally, with whitish tips. Labium blackish, with pale tip. Sternum entirely blackish. Legs yellowish brown, with dusky markings; the femora are heavily spotted, with a terminal dark ring, and a subterminal light ring; tibiae dusky, with a light ring near base and another beyond the middle; metatarsi with two shaded rings, one terminal, one proximad of middle. Abdomen as in *brevigyna*, but a little darker.

Structure: The female is distinguishable by the form of the epigynum. The male differs in details of the palpus. The head is elevated, with a tuft of stout bristles just back of the eyes; this slightly more prominent than usual. The patellar apophysis of the male palpus is sharply pointed, as in *P. hesperus* (Chamberlin), but is dark on the tip instead of pale.

<i>Measurements:</i>	♂	♀
Length	4.25 mm.	6.10 mm
Carapace:		
Length	2.10	2.40
Width	1.65	1.73
Tibia-patella:		
I	3.25	3.87
IV	2.20	2.90

Type locality: About W110°30':N44°40', Bear Dump, Yellowstone Park, Wyoming; ♂ holotype, ♀ allotype.

Pityohyphantes cristatus coloradensis Chamberlin and Ivie,
new subspecies

Figs. 144, 145

This subspecies is very similar to *cristatus*, but is a little lighter in color, and shows minor differences in the palpus. The epigyna are essentially identical. The size is about the same.

Type locality: Pingree Park, Colorado; ♂ holotype, ♀ allotype, ♀ paratype.

Pityohyphantes vancouveranus Chamberlin and Ivie, new species

Fig. 146

MALE. Color: Carapace light yellowish, with a diffused dusky median band, as wide as the eye area in front, gradually narrowing posteriorly. Chelicerae light orange. Endites and labium light orange, with whitish tips. Sternum yellowish orange. Legs light yellowish, with distal end of tibia shaded. Abdomen whitish, with a medium light brown band above.

Structure: Head with a tuft of bristles on top, similar to *cristatus*, but head not so elevated above thorax. Patellar apophysis of palpus curved slightly inward at the tip; tip slender, but not sharp. Embolic division distinct, as shown in the figure.

Measurements:	♂ Holotype
Length	4.80 mm.
Carapace:	
Length	2.27
Width	1.50
Tibia-patella:	
I	3.50
IV	2.15

Type locality: W124°:N49°, Lake Cameron, Vancouver Island, British Columbia; ♂ holotype; September 13, 1935; R. V. Chamberlin and W. Ivie collectors.

Pityohyphantes pallidus Chamberlin and Ivie, new species

Figs. 147, 148

MALE. Color: General color pale. Carapace pale yellow, with a median dusky band, which begins at base, continues narrowly through the median groove, then forks into two narrow parallel bands, which continue forward to the P.M. eyes. Chelicerae and endites light orange. Labium light dusky brown. Sternum light yellow, with the posterior point, a narrow median band, and the side margins dusky (these dusky markings may be reduced or absent). Legs pale yellow, with light gray markings; the femora with small spots, and a ring near the distal end; the patella has a distal ring; the tibia has two rings, one proximad of middle and one distal (the latter the darkest of all leg markings); the metatarsus has a terminal ring; the tip of the tarsus is shaded. Abdomen white above, with a light gray runcinate median band; lower sides light gray; venter white on the sides, gray along the middle. Spinnerets light brown, with dusky tips.

Structure: Head only slightly elevated, with the usual tuft of bristles back of the eyes. Legs with a normal amount of conspicuous black spines. The spur on the patella of the palpus is short and conical (pale whitish in color). The terminal division of the palpus as shown in the figure.

<i>Measurements:</i>	♂ Holotype
Length	3.90 mm.
<i>Carapace:</i>	
Length	1.90
Width	1.50
<i>Tibia-patella:</i>	
I	3.70
IV	2.47

Type locality: W122°25':N41°25', Weed, California; ♂ holotype, 2 immature paratypes; September 8, 1935; R. V. Chamberlin and W. Ivie collectors.

***Pityohyphantes tacoma* Chamberlin and Ivie, new species**

Figs. 149, 150

Color very similar to that of *pallidus*, except that the sternum is more evenly shaded with dusky.

Structure similar to that of *pallidus*, except for minor differences in the palpus; these are figured.

<i>Measurements:</i>	♂ Holotype
Length	4.10 mm.
<i>Carapace:</i>	
Length	1.90
Width	1.50
<i>Tibia-patella:</i>	
I	4.10
IV	2.85

Type locality: W121°:N46°, Rainier National Park, Washington; August 9, 1929; R. V. Chamberlin collector.

***Pityohyphantes navajo* Chamberlin and Ivie, new species**

Figs. 151, 152

Color pattern much the same as in *cristatus* n. sp. Carapace with a dusky median band as wide as the eye area in front, narrowing to a point at the base; this is split for the anterior half of its length by a light median band. Sternum dusky, with an anterior light triangle. Legs speckled, with a wide dusky ring at the distal end of the tibia. Abdomen pale, but of the usual pattern.

Structure: Near *pallidus*, but head not so elevated, and the palpus slightly different.

<i>Measurements:</i>	♂	Holotype
Length	4.60	mm
<i>Carapace:</i>		
Length	2.10	
Width	1.45	
<i>Tibia-patella:</i>		
I	3.60	
IV	2.40	

Type locality: About W110°10':N38°10', Henry Mts., Utah; ♂ holotype; September 10, 1929; R. V. Chamberlin and W. J. Gertsch collectors.

Family EPEIRIDAE

Subfamily TETRAGNATHINAE

Genus TETRAGNATHA Latreille, 1804

Tetragnatha manitoba Chamberlin and Ivie, new species

Figs. 153-158

Color: Carapace light brown, lightly shaded with dusky. Chelicerae orange brown. Endites orange, shaded with dusky. Labium dusky. Sternum blackish, with a yellowish brown median wedge on the anterior two-thirds. Legs yellowish brown, lightly shaded with dusky at the joints. Abdomen silvery white along the sides above, grayish brown along the mid-region, with two blackish scallops extending into the silver on each side. Venter deep black along the median area; a silver white band along each side of the black, and above this, on the lower sides, a brownish band.

Structure similar to *T. munda* Chamberlin and Gertsch in general. Runs out to '*T. extensa* (Linnaeus)' in Seeley's key (1928). Lateral eyes on each side closer together than the middle eyes of the two rows. Chelicerae much as in '*extensa*'. Palpus differs in the tip of the conductor.

<i>Measurements:</i>	♂	♀
Length	5.00 mm.	6.00 mm
<i>Carapace:</i>		
Length	2.10	2.00
Width	1.30	1.45
<i>Tibia-patella:</i>		
I	4.70	4.10
IV	2.90	2.50

Type locality: W94°:N58°, Churchill, Manitoba; June-July, 1936; ♂ holotype, ♀ allotype, ♂ ♀ paratypes; H. E. McClure collector.

Other localities:

115.44 ♂ 2 ♀ Bear Valley, Idaho; July 12, 1935; W. Ivie

110.44 ♂ 2 ♀ Bridge Bay, Yellowstone Park, Wyoming;
July 9, 1935; W. Ivie.***Tetragnatha guatemalensis* Cambridge**

Fig. 159

Tetragnatha guatemalensis O.P.-Cambridge, 1889, Biol. Centr. Amer., 1:8, *2:6-7*Tetragnatha guatemalensis*, F. Cambridge, 1902, Ibid., 2:431, *40:12-13*Tetragnatha laudativa* Gertsch and Mulaik, 1936, Amer. Mus. Novitates, No. 863:15,
*33-35.*Locality Record:*117.33 3 ♂ ♀ Elsinore Reservoir, California; July 12, 1931;
W. Ivie.***Tetragnatha elmora* Chamberlin and Ivie, new species**

Fig. 160

FEMALE. *Color:* Carapace pale yellow, with the side margins shaded, and with a light dusky median band, which begins narrow at the base and gradually widens anteriorly until it is as wide as the eye area, and which is split on the anterior half by a yellow median line. Chelicerae and endites yellowish. Sternum and labium dusky over light yellow. Legs pale yellow, with light dusky rings at the ends of the segments, and with a number of blackish spine spots. Abdomen light grayish, with gold 'scales' above; sides of venter pale gold white, ending in a conspicuous white spot near the spinnerets on each side; median area of venter gray. Spinnerets light brown.

Structure: A.M. eyes on a slightly protruding tubercle; lateral eyes slightly closer to each other than are the middle eyes of the two rows. Chelicerae long, with ten teeth on each margin of the fang groove; the fang is laterally sinuous, with a short spur on the under side, near the base, as shown in the figure.

<i>Measurements:</i>	♀ Holotype
Length	8.00 mm
Carapace:	
Length	3.10
Width	1.85
Tibia-patella:	
I	6.40
IV	4.20
Chelicerae	2.40

Type locality: W108°8':N35°19', Bluewater Lake, New Mexico; ♀ holotype; September 4, 1941; W. Ivie collector. Taken from a juniper tree near the lake.

The peculiar shape of the fang will distinguish this species from other nearctic species.

Subfamily EPEIRINAE

Genus METEPEIRA F. Cambridge, 1903

This genus, which F. Cambridge has very well characterized (*Biol. Centr. Amer.*, 2:457), contains many more species than has heretofore been supposed. Due to the general similarity in color and instincts, and to the small size of the epigynum and palpus, details have been overlooked, and most of the species have been thrown into *M. labyrinthea* (Hentz.). We are here listing all of the species which we are able to place in this genus, with descriptions of the new species.

Metepeira labyrinthea (Hentz)

Figs. 161-164

Epeira labyrinthea Hentz, 1847, J. Boston Soc. Nat. Hist., 5:471, *31:3

Color: Carapace dusky brown, with the front of the head light yellowish, the yellowish color extending posteriorly along each side of the head, but not along the mid-line; the sides of thorax above sometimes faded to light brown. Chelicerae brown, light at base, darker distally. Labium and endites blackish at base, with light tips. Sternum black on the sides, white along the middle. Legs light yellow, marked with black or dusky brown—the trochanters lightly shaded; the distal part of each of the segments beyond the trochanter darkened, with blackish spine spots on the light parts (the distal half to two-thirds of the femora of the male blackish). Abdomen with a typical black, white, and gray folium above; this contains a pair of conspicuous white marks in front of the middle; the whole dorsum more or less washed with light reddish-brown or orange. Venter black, containing a white median band, and a U-shaped light gray line, which extends along each side and connects across in front of the spinnerets. Spinnerets dusky brown.

Structure: Typical, with differences in the palpus and epigynum. Femur I of the male has the prolateral and ventral spines long, but not a conspicuous patch of these on the prolateral face. Anterior legs of male long.

<i>Measurements:</i>	♂	♀
Length	4.10 mm.	6.00 mm
<i>Carapace:</i>		
Length	2.20	2.67
Width	1.65	1.93
<i>Tibia-patella:</i>		
I	3.60	3.10
IV	2.20	2.40

Type locality: North Carolina and Alabama.

Locality Records:

- 73.41 ♂ Norwalk, Connecticut; July 22, 1933; W. Ivie.
 76.42 ♂ ♀ Ithaca, New York.
 76.39 ♀ North of Baltimore, Md.; August 19, 1933; W. Ivie.
 77.38 ♂ s ♀ s Mount Vernon, Va.; August 20, 1933; W. Ivie.
 82.39 ♂ ♀ Cantwell Cliffs, Ohio; August 8, 1935; W. M. Barrows and W. Ivie.
 82.35 ♂ ♀ Canton, North Carolina.
 84.35 ♂ ♀ Kingston, Tennessee; July 12, 1933; W. Ivie.
 90.38 ♀ 14 miles east of Wright City, Mo.; July 22, 1935; W. Ivie.

This is the common *Metepeira* throughout the eastern United States.

***Metepeira josepha* Chamberlin and Ivie, new species**

Fig. 165

FEMALE. *Color:* Carapace dark dusky brown, with three short light brown longitudinal streaks on the head, one median and one on each side. Mouthparts dark dusky brown, labium and endites with pale tips. Sternum black along the sides, pale along the middle. Legs light yellow, with the usual dark markings. Abdomen light brownish gray, with the usual folium above. Venter black, with the usual white spots and a faint U-shaped line, as in *labyrinthea*. Spinnerets dark dusky brown.

Structure typical, except for minor differences in the epigynum.

<i>Measurements:</i>	♀ Holotype
Length	6.10 mm
<i>Carapace:</i>	
Length	2.80
Width	2.13
<i>Tibia-patella:</i>	
I	(missing)
IV	2.40

Type locality: About W122°10':N37°28', Kings Mt., near Palo Alto, California; ♀ holotype; autumn, 1922; J. C. Chamberlin collector.

Metepeira ensinada Chamberlin and Ivie, new species

Figs. 166-168

MALE. *Color:* Carapace dark dusky brown, with front of head light yellow, the yellow extending backward along the upper sides of the head. Chelicerae dark brown. Labium and endites blackish, with light tips. Sternum black, with a median white band, which is distinct on the posterior part, but dull and incomplete on the anterior part. *Legs* light yellow, with black rings at the distal end of each segment—the dark end of the femur more extensive, and extending along the dorsal side to near the base; an additional faint dusky ring near the base of the tibia; coxae shaded at proximal end; trochanters blackish. Abdomen with a distinct folium above; venter black, with the typical white spots—a median longitudinal mark and a white spot on each side of the spinnerets.

Structure close to *douglasi* and *chilapae*, but showing minor differences in the palpus. Size large.

<i>Measurements:</i>	♂ Holotype
Length	6.00 mm
Carapace:	
Length	2.90
Width	2.30
Tibia-patella:	
I	5.00
IV	3.27

Type locality: 116°:N31°, Beach near Ensenada, Mexico; ♂ holotype; April 10, 1937.

Metepeira incrassata F. Cambridge

Metepeira incrassata F. Cambridge, 1903, Biol. Centr. Amer., 2:460, *43:11

Localities: Jalapa, Mexico and Guatemala (F. Cambridge).

Metepeira spinipes F. Cambridge

Metepeira spinipes F. Cambridge, 1903, Biol. Centr. Amer., 2:459, *43:9-10

Localities: Patzcuaro, Amula, Amoqueleca, and Mexico City, Mexico.

This species is close to *douglasi*, *ensinada*, and *chilapae*, and one of these species may eventually prove to be the same as *spinipes*. The epigynum of *douglasi* is very similar to Cambridge's figure, but differences in range make identity of the two species doubtful.

Metepeira chilapae Chamberlin and Ivie

Metepeira chilapae Chamberlin and Ivie, 1936, Bull. Univ. Utah, (Biol)3(5):45, *119-121

Type locality: W99°12':N17°32', Chilapa, Guerrero, Mexico.

Metepeira douglasi Chamberlin and Ivie

Figs. 169-170

Metepeira douglasi Chamberlin and Ivie, 1941, Bull. Univ. Utah, (Biol)6(3):18, *21-23*Locality Record:*

119.34 ♂ s ♀ s 10 miles west of Santa Barbara, California; July 12, 1934; W. Ivie and H. Rasmussen.

Metepeira crassipes Chamberlin and Ivie, new species

Figs. 171-173

Color: Carapace dark dusky brown, with the front of the head and extensions on the sides of the head light yellow (the male with a median light streak extending back to the median depression). Chelicerae dark brown. Labium and endites blackish, with whitish tips. Sternum black, with a median white wedge extending the full length. Legs light yellow, with the usual markings (the legs of the male marked as in *labyrinthea*, but the dark color is brown, instead of blackish). Abdomen gray, with a folium above similar to that of *labyrinthea*; the venter is also colored as in *labyrinthea*.

Structure: Similar to *labyrinthea*, with differences in the palpus and epigynum, and in the legs of the male. Legs I and II of the male are shorter than in *labyrinthea*, and femur I is somewhat swollen, and has seven stout spines on the anterior side of the distal half.

<i>Measurements:</i>	♂	♀
Length	2.80 mm.	5.90 mm.
<i>Carapace:</i>		
Length	1.55	2.60
Width	1.20	1.80
<i>Tibia-patella:</i>		
I	1.86	2.85
IV	1.20	2.25

Type locality: W117°50':N33°33', Laguna Beach, California; ♂ holotype, ♀ allotype, ♂ ♀ paratypes; July 24, 1931; R. V. Chamberlin and W. Ivie collectors.

This species is distinguishable from *douglasi* by the smaller epigynum in the female, and by the shorter legs with thickened anterior femora in the male. The size is smaller.

Metepeira gosoga Chamberlin and Ivie*Metepeira gosoga* Chamberlin and Ivie, 1935, Bull. Univ. Utah, (Biol.)2(8):21, *82-83

This is a distinctive species because of its light color. Also, the markings on the venter are not typical.

Metepeira ventura Chamberlin and Ivie, new species

Figs. 175-179

This species is close to *M. arizonica* n. sp. in color, size and general structure. The palpus and epigynum, however, are distinct, as shown by the figures.

Measurements:	♂	♀
Length	3.70 mm.	6.40 mm.
Carapace:		
Length	2.00	3.30
Width	1.50	2.50
Tibia-patella:		
I	2.90	3.90
IV	1.80	2.85

Type locality: W118°50':N34°3', between Oxnard and Santa Monica, California; ♀ holotype, ♂ allotype, ♀s paratypes; July 12, 1934; H. Rasmussen and W. Ivie collectors.

Metepeira minima Gertsch

Fig. 174

Metepeira minima Gertsch, 1936, Amer. Mus. Novitates, No. 852:10, *31

This small species is related to *M. ventura* n. sp., but is much smaller. The epigynum is smaller and more delicate.

Metepeira santa (Chamberlin)

Aranea santa Chamberlin, 1916, Bull. Mus. Comp. Zool., 60:254, *19:10

This species is readily distinguishable from *M. lima* n. sp. by the color of the sternum. In *santa* the sternum is "testaceous, somewhat dusky, with a clear white T-shaped mark of which the cross-piece is at the anterior end".

Metepeira lima Chamberlin and Ivie, new species

Fig. 180

FEMALE. *Color*: Similar to *labyrinthea*, except that the coxae and trochanters are shaded, and the sternum is entirely black, except for a small white wedge at the posterior tip.

Structure similar to that of *labyrinthea*, except for differences in the epigynum.

<i>Measurements:</i>	♀ Holotype
Length	5.50 mm.
<i>Carapace:</i>	
Length	2.40
Width	2.00
<i>Tibia-patella:</i>	
I	3.00
IV	2.30

Type locality: W76°:S12°, Rimoc Valley, 20 km. from Lima, Peru; ♀ holotype; July 27, 1939; K. P. Schmidt collector. (Field Museum).

***Meteteira glomerabilis* (Keyserling)**

Fig. 181

Epeira glomerabilis Keyserling, 1892, Spinnen Amerikas, Epeiridae, p. 154, *8:113

Our specimen is from Santa Catharina, Brazil.

***Meteteira datona* Chamberlin and Ivie, new species**

Fig. 196

FEMALE. *Color:* Carapace dusky brown, with the front of the head and a median band extending back to the median depression light yellowish. Chelicerae light brownish. Labium and endites blackish, with light tips. Sternum black, with a light median spot in front and a short median streak toward the posterior end (these spots may be obscured or absent). Legs pale yellow, with a dark ring at the end of each segment, that on the tibia being widest and darkest; in addition, there is a dusky ring on the tibia, proximad of the middle. Abdomen light gray above (varying to dark gray in some specimens), with a short, median, blackish band on the anterior end; a typical folium on the posterior half, which may be formed from paired gray or black spots, or may vary to completely black; the whole front part of the dorsum is plain gray. Sides of abdomen mottled light gray to blackish, with the lower sides in front whitish; venter blackish, containing a white triangle, and with the usual white spot on each side of the spinnerets. Spinnerets dusky brown.

Structure: This species is distinctive in the form of the abdomen, which is much wider than usual and flattened across the top in front. It is suggestive of *Aranca pagnia* (Walckenaer). The epigynum is of the usual form.

<i>Measurements:</i>	♀
Length	4.80 mm.
<i>Carapace:</i>	
Length	2.10
Width	1.57
Abdomen, width	3.25
<i>Tibia-patella:</i>	
I	2.45
IV	1.72

Type locality: W81°2':N29°14', Daytona Beach, Florida; ♀ holotype, 3 ♀ paratypes; August 24, 1933; W. Ivie collector. These specimens had their webs on a wooden fence.

This is a very handsome little species.

Metepeira arizonica Chamberlin and Ivie, new species

Figs. 182-187

Color much the same as *labyrinthica*, but the markings on the legs are lighter, and on the male less extensive; also lacking the orange wash on the abdomen.

Structure: In general, typical. The palpus and epigynum are distinct. Femur I of the male has a row of four long spines along the mid-line of the prolateral face on the distal half; there are also two rows of long ventral spines. Size moderately large.

<i>Measurements:</i>	♂	♀
Length	4.20 mm.	6.20 mm.
<i>Carapace:</i>		
Length	2.30	2.70
Width	1.83	2.07
<i>Tibia-patella:</i>		
I	3.15	3.00
IV	2.00	2.40

Type locality: About W111°30':N33°30', Canyon Lake, Arizona; ♀ holotype, ♂ allotype, ♀ s ♂ s paratypes; April 9, 1935; W. Ivie collector.

Other locality:

113.36 2 ♀ Virgin Narrows, near Littlefield, Arizona; June 11, 1934; H. Rasmussen and W. Ivie.

Metepeira uncata F. Cambridge

Metepeira uncata F. Cambridge, 1903, Biol. Centr. Amer., 2:459, *43:8

Locality: Santa Ana, Guatemala (F. Cambridge).

Metepeira virginensis Chamberlin and Ivie, new species

Figs. 188-190

Araneus (Metepeira) labyrinthicus, Petrunkevitch, 1926, Trans. Conn. Acad. Sci., 28:27*Metepeira labyrinthica*, Bryant, 1942, Bull. Mus. Comp. Zool., 80(7):346

Color: Close to *M. labyrinthica* (Hentz). The coxae are lightly shaded underneath. The venter is blackish, with the posterior part faded, enclosing a median white band and a narrow white band on each side.

Structure similar to that of *labyrinthica*, with distinctive differences in the palpus and epigynum. The size appears to be larger than *labyrinthica*.

Measurements:	♂ Allotype	♀ Holotype
Length	5.15 mm.	7.00 mm.
Carapace:		
Length	2.40	3.00
Width	2.00	2.40
Tibia-patella:		
I	3.95	3.50
IV	2.50	2.70

Type locality: W64°55':N18°24', St. Thomas, Virgin Islands; ♀ holotype, ♂ allotype (University of Utah), ♂s ♀s paratypes (American Museum); February 24, 1925.

Metepeira latigyna Chamberlin and Ivie, new species

Figs. 191, 192

FEMALE. Color: Carapace dark dusky brown, with the front of the head and lateral extensions light yellowish; also with a yellow spot just in front of the median depression. Chelicerae dark brown, lighter at base in front. Labium and endites blackish, with light tips. Sternum black, with a median band of white extending the full length. Legs light yellow, with the coxae and trochanters lightly shaded, and with a dark ring at the distal end of each segment. Abdomen colored above as in *labyrinthica*, but lacking the orange color; lower sides and base whitish; venter black, with a median white band and the usual white spots near the spinnerets. Spinnerets dusky brown.

Structure typical, except the epigynum; the lobe is broad and covers the openings, as in *compsa*.

Measurements:	♀ Holotype
Length	5.60 mm.
Carapace:	
Length	2.10
Width	1.50
Tibia-patella:	
I	2.30
IV	1.70

Type locality: W39°:S19°, Porto Alegre, Brazil; ♀ 1935.

Metepeira compsa (Chamberlin)

Figs. 193-195

Aranea compsa Chamberlin, 1916, Bull. Mus. Comp. Zool., 60:252, *19:6

The male palpus is distinctive in having one of the processes of the median apophysis forked at the tip. (The one shown in the figure is more extreme; the forking may not be this prominent in some specimens, nor is it always in four branches). This species occurs in Peru.

Metepeira rectangulata (Nicolet)*Epeira rectangulata* Nicolet, 1849, Gay's Hist. Chile, 3:500

This and the following species are synonymized under *M. labyrinthica* (Hentz) by Petrunkevitch (Catalogue, 1911), but undoubtedly are not that species. We are not familiar with either one of these South American species, but list them for the sake of completeness.

Metepeira karkii (Tullgren)*Araneus karkii* Tullgren, 1901, Svensk, Exped. Magellansl., 2:219, *3:4**Metepeira foxi** Gertsch and Ivie

Figs. 197, 198

Metepeira foxi Gertsch and Ivie, 1936, Amer. Mus. Novitates, No.858:20, *42-44*Distribution*: Utah and southern Idaho.**Metepeira nanella** Chamberlin and Ivie, new species

Fig. 199

FEMALE. *Color*: Carapace dusky yellow on the thorax, pale yellow on the entire head region. Chelicerae light yellow at the base, dusky brown distally. Labium and endites dusky brown, with light tips. Sternum blackish. Legs and palpi yellow, with faint dusky rings partially present; no markings on femora. Abdomen whitish, with the folium faded on the basal half, but outlined on the distal half; venter black, with the median white mark larger than usual and the posterior spots scarcely enclosed by the black. Spinnerets dusky brown.

Structure similar to that of *foxi*, with minor differences in the epigynum.

Measurements:

	♀
Length	3.85 mm.
Carapace:	
Length	1.80
Width	1.45
Tibia-patella:	
I	2.22
IV	1.70

Type locality: About W112°18':N38°58', Fillmore, Utah; ♀ holotype, ♀ paratype; R. V. Chamberlin collector.

Other locality:

118.36 ♀ West side Owen's Lake, California; August 7, 1931; W. Ivie.

This species is readily separated from *foxi*, which it most resembles, by its small size and pale color.

***Metepeira palomara* Chamberlin and Ivie, new species**

Figs. 200-204

Color: Carapace dusky brown, with the front of the head yellowish, and with a median yellowish streak extending back to the median depression, this streak set off by a pair of dark dusky marks. Chelicerae yellowish brown at base, dusky brown distally. Labium and endites dusky brown, with lighter tips. Sternum entirely black. Under sides of coxae yellowish; trochanters slightly shaded; the rest of the legs yellowish, with faint dusky shading at the distal ends of all segments; femora scarcely shaded at all; the tips of the tarsi blackish. Abdomen light gray above, lightly touched with light brown, with the usual black and white folium, the basal part being largely white; venter black, with a rectangular white median mark and a pair of white spots near the spinnerets. Spinnerets blackish.

Structure: The palpus of the male is similar to that of *foxi*, but differing in details of the embolic division and the median apophysis. Legs normal; femur I with about eight long spines on the prolateral side; tibia II with an unusually large spine on the prolateral side near the base.

<i>Measurements:</i>	♂	♀
Length	3.40 mm.	4.30 mm.
<i>Carapace:</i>		
Length	1.70	2.20
Width	1.37	1.80
<i>Tibia-patella:</i>		
I	2.47	2.70
IV	1.60	2.10

Type locality: W116°53':N33°22', Mt. Palomar, California; ♀ holotype, ♂ allotype, ♂ ♀ paratypes; July 26, 1931; R. V. Chamberlin and W. Ivie collectors.

This species is close to *M. grandiosa* and *M. alpina*, but is slightly different in color and has a slightly different epigynum.

Metepeira dakota Chamberlin and Ivie, new species

Figs. 205-207

Color: Carapace dusky brown, with a large part of the head light yellowish, this light color extending back in a broad band to the median depression. Chelicerae yellowish brown on basal half, blackish on distal half in female (only lightly shaded on distal end in male). Labium and endites blackish, with light tips. Sternum black. Coxae of legs yellowish; trochanters lightly shaded; the rest of the legs light yellowish, with a wide dusky brown ring at the distal end of each segment (markings on legs of male, especially the femora, faded). Abdomen light brownish above, with the usual folium present, but with the black much reduced; venter and spinnerets black, with the usual white marks.

Structure: Similar to that of *palomara*, with slight differences in the epigynum and palpus, and with the spines on the legs of the male more reduced.

<i>Measurements:</i>	♂	♀
Length	3.63 mm.	4.80 mm
<i>Carapace:</i>		
Length	1.90	2.10
Width	1.40	1.70
<i>Tibia-patella:</i>		
I	3.20	2.26
IV	2.00	1.80

Type locality: About W103°1':N48°54', Noonan, North Dakota; ♂ holotype, ♀ allotype; June, 1936; Joe Davis collector.

Metepeira grandiosa Chamberlin and Ivie

Metepeira grandiosa Chamberlin and Ivie, 1941, Bull. Univ. Utah, (Biol.)6(3):17, *24-26

Metepeira palustris Chamberlin and Ivie, new species

Figs. 208-210

Epeira labyrinthea (Bog variety), Emerton, 1915, Trans. Conn. Acad. Sci., 20:138, *1:6-6c

Color: FEMALE. Carapace blackish brown, with the sides of the head above light yellowish, the whole covered with silky white hairs. Mouthparts, sternum, and under parts of coxae and trochanters black, the labium and endites with light tips. Legs light yellowish (the femora whitish), with a wide, distinct ring at the end of each segment. Abdomen whitish above on the basal half; the sides of the folium on the posterior half more blackish than usual; lower sides mottled; venter and spinnerets black, with the usual white marks.

MALE. Color similar to that of female, but distal half of femora I and II blackish; abdomen with a more typical folium.

Structure: A rather large, stout species, with relatively stout legs. Palpus close to that of *foxi*.

<i>Measurements:</i>	♂	♀ Holotype (large)
Length	3.60 mm.	6.50 mm.
<i>Carapace:</i>		
Length	1.90	3.00
Width	1.47	2.27
<i>Tibia-patella:</i>		
I	2.85	3.20
IV	1.77	2.50

Type locality: W103°:N48°, Divide County, North Dakota; ♀ holotype; 1937; Joe Davis collector.

This species also occurs in Maine and Nova Scotia. Our male is from Maine. It is readily distinguished by its black coxae.

Metepeira alpina Chamberlin and Ivie, new species

This species is close to *palustris*, but is smaller in size, has the legs shorter and weaker, and the coxae are yellowish, instead of black. The epigyna are apparently identical. The distinct black markings on the legs will distinguish it from *palomara*. The carapace is dusky brown, with a small light spot on each side of the head in front and a small median light streak just back of the eyes.

<i>Measurements:</i>	♀
Length	5.40 mm
<i>Carapace:</i>	
Length	2.20
Width	1.78
<i>Tibia-patella:</i>	
I	2.30
IV	1.90

Type locality: W111°43':N38°28', Fish Lake, Utah; ♀ holotype ♀ paratype; September 4, 1929; R. V. Chamberlin and W. J. Gertsch collectors.

Metepeira nigriventris (Taczanowski)

Figs. 211-214

Epeira nigriventris Taczanowski, 1878, Horae Soc. Ent. Ross., 14:151, *1-6
Epeira nigriventris, Keyserling, 1893, Spinnen Amerikas, Epeiridae, p. 217, *10:161
Araneus nigriventris, Petrunkevitch, 1911, Catalogue Spid. Amer., p. 306
Aranea nigriventris, Chamberlin, 1916, Bull. Mus. Comp. Zool., 60:248

This is the largest *Metepeira* which we have seen. The color above is typical, except that the light areas of the legs are specked and marked with black. The entire underside is black, except for a small white median streak on the venter; the posterior ventral white spots are ab-

sent. In the male, the long spines on the prolateral side of femur I are reduced in number to about four, and these are directed ventrad, but the ventral spines are also very long. The palpus is distinctive, as figured, but of the usual form. The size of the one male which we have seen is very much smaller than the females.

Measurements:	♂	♀
Length	5.20 mm.	12.30 mm.
Carapace:		
Length	2.80	5.00
Width	2.30	4.00
Tibia-patella:		
I	4.20	5.07
IV	(Missing)	4.30

The specimens which we have seen are in the Field Museum collection, and were collected at Oroya, Peru (W74°:S12°), April 12, 1914, by M. P. Anderson.

Genus ACULEPEIRA Chamberlin and Ivie, new

This genus is proposed for those species of *Araneae* related to *carbonaria* C. Koch. It is close to *Metepeira*. The abdomen is rounded, but more elongate than in *Metepeira*. The epigynum is of the same general form, but much larger and longer. The palpus is much larger, and has the structures more strongly developed; the median apophysis has the forked process as in *Metepeira*, but the main part is large and elongate, as shown in the figure. Distal end of tibia II in male is modified and bears coarse spines; coxa I with ventral spur.

Genotype: *Aculepeira aculeata* (Emerton) (from *Epeira*).

Other species belonging to this genus are *A. carbonaria* (C. Koch), *A. packardii* (Thorell), *A. venatrix* (C. Koch), and *A. verae* n. sp.

Aculepeira verae Chamberlin and Ivie, new species

Figs. 215, 216

Epeira carbonaria (in part), Keyserling, 1892, Spinnen Amerikas Epeiridae, p. 204, *9:151

Epeira carbonaria (in part), McCook, 1893, American Spiders, 3:157, *5.1-2

This species has been generally confused with *carbonaria* of Europe. Comparison with specimens from Switzerland reveals distinct, though minor, differences. Aside from minor differences in the palpus, the males are readily separated from *carbonaria* by the color of the legs. These are distinctly ringed with black in *carbonaria*. While in *vera* legs I and II are brownish, without rings, except for some faint ones at the distal end; femora III and IV are without rings. *A. packardii* (Thorell) is described as having distinctly ringed legs; the length was also given as only 5 mm.

There may very well be more than one species in the United States, certainly more than one subspecies. Therefore, we shall base this species on only two males which we have from Idaho.

<i>Measurements:</i>	♂ Holotype
Length	7.00 mm.
<i>Carapace:</i>	
Length	3.70
Width	3.00
<i>Tibia-patella:</i>	
I	6.60
IV	4.25

Type locality: W116°50':N43°45', near Notus, Idaho; ♂ holotype; Summer, 1933; Vera and Eileen Ivie collectors.

Other locality:

115.44 ♂ Bear Valley, Idaho; July 12, 1935; W. Ivie.

Genus ARANIELLA Chamberlin and Ivie, new

This genus is proposed for those species of *Araneae* near *cucurbitinus* Clerck. The abdomen is rounded, and typically bears a series of spots along each side of the dorsum. The male has a small spur at the distal end of coxa I, and a spur on the anterio-ectal margin of the endite. The median apophysis of the palpus is a simple, single-pointed process.

Genotype: *Araniella displicata* (Hentz) (from *Epeira*).

This genus is evidently close to *Neoscona*. It also contains *A. cucurbitina* (Clerck) and the new subspecies below.

Araniella displicata octopunctata Chamberlin and Ivie, new subspecies

The specimens of *displicata* from the Rocky Mountains are different from those of the eastern states. The abdomen is always pale in the adults, and there are four black spots on each side, visible from above, instead of only three; in both subspecies, there is an additional pair of dots on the posterior end. The palpi and epigyna are apparently indistinguishable.

Type locality: W111°46':N40°48', Emigration Canyon, Wasatch Mts., Utah; ♀ holotype, ♂ allotype.

Other localities:

112.37 ♂ Zion Park, Utah; 1927; A. M. Woodbury.

113.37 ♂ Pine Valley, Utah; June 20, 1936; Univ. of Utah field expedition.

Genus NEOSCONA Simon, 1864

Neoscona arkansa Chamberlin and Ivie, new species

Figs. 217, 218

FEMALE. *Color:* Resembles a light-colored *benjamina*. Darker specimens may be similar to typical examples of *benjamina*. Carapace, chelicerae, and legs brownish orange, without distinct markings. Labium, endites, and sternum orange, lightly shaded with dusky, the sternum with a median white band, and the labium and endites with white tips. Abdomen pale gray, darker on each side at the base; brown lines extending down sides and along the median area on posterior part. Venter darker, marked with white spots—a pair of transverse spots just back of the genital furrow, a pair of longitudinal spots further back, and two small spots on each side of the spinnerets.

Structure: Similar to that of *benjamina*; size smaller. Abdomen ovoid, broad at the base. Legs I and IV without spines on the underside of the femur. Epigynum somewhat resembling that of *benjamina*, but the scape is shorter and less constricted at the base.

<i>Measurements:</i>	♀ Holotype
Length	10.65 mm.
<i>Carapace:</i>	
Length	4.00
Width	3.45
<i>Tibia-patella:</i>	
I	5.40
IV	4.40

Type locality: W91°12':N36°12', Imboden Arkansas; ♀ holotype; 1935; B. C. Marshall collector.

Neoscona nebraskensis Chamberlin and Ivie, new species

Figs. 219, 220

FEMALE. *Color:* Carapace light yellow, with a faint dusky median band. Chelicerae light orange. Labium and endites light orange, with whitish tips. Sternum orange, lightly shaded with dusky, and with a white median band. Legs light brownish yellow, with light dusky rings. Abdomen light yellowish gray, finely specked with brown above; vertical brown lines on the sides. Middle of venter blackish, with white markings as in *arkansa*.

Structure: Abdomen ovoid, not as broad in front as in *benjamina* and *arkansa*. No conspicuous spines on the underside of femora I and IV. Epigynum not so far protruded as in *benjamina* and *arkansa*; geniculate, with a constriction near the base, when seen from the anterior-ventral view.

Measurements:	♀ Holotype
Length	7.75 mm
Carapace:	
Length	3.50
Width	3.00
Tibia-patella:	
I	4.60
IV	3.80

Type locality: W96°30':N41°28', Fremont, Nebraska; ♀ holotype; September 17, 1936; R. V. Chamberlin collector.

Neoscona lativulva Chamberlin and Ivie, new species

Figs. 221, 222

FEMALE. *Color*: Carapace dusky brown, darker on the head, clothed with white hairs. Chelicerae blackish, except the distal mesal part which is orange. Sternum black, with a white median band. Labium and endites black, with large white tips. Coxae and trochanters of legs dusky brown; rest of legs dusky black, with light brown rings—two on each femur, tibia, and metatarsus, and one on the base of the tarsus. Abdomen blackish above, with white spots and mottlings, somewhat as in darker specimens of *vertebrata*. Venter black, with a single pair of large white spots in front of the spinnerets. Spinnerets dusky.

Structure similar to that of *vertebrata*, except for differences in the epigynum. All femora with spines on the ventral side.

Measurements:	♀ Holotype
Length	9.00 mm.
Carapace:	
Length	4.10
Width	3.20
Tibia-patella:	
I	5.50
IV	4.60

Type locality: W117°50':N33°33', Laguna Beach, California; ♀ holotype; July 22, 1931; W. Ivie collector.

One pair of white spots on the venter, instead of two pairs, readily distinguishes this species from *vertebrata*.

Genus NEOSCONELLA F. Cambridge, 1903

Neosconella bella Chamberlin and Ivie, new species

Figs. 223, 224

MALE. *Color*: Carapace light brown, paler over the eyes; eyes margined with black. Chelicerae orange. Endites light orange, paler at the tips. Sternum light along the middle, shaded at the sides. Legs yellowish, with brown shadings and markings; the distal half or more

of the femora brownish; patella brownish, the hind ones crossed with a light band over the middle; tibiae darkened on distal part; metatarsus and tarsus pale, with the joint between them darkened. Abdomen light brownish, with a bright folium of black and white above, the pattern similar to that of a *Metepeira*. Venter paler, without distinct markings.

Structure: Carapace low, with the thoracic part broadly rounded, nearly circular, and the head much narrowed. Median depression a narrow groove. Eyes protruding far over the chelicerae. Eyes in order of size are, A.M., P.M., A.S., and P.S. Anterior row straight from in front, strongly recurved from above; A.M. eyes one and one-half diameters apart, nearly as far from the side eyes. Posterior row recurved; P.M. eyes about a radius apart, nearly two diameters from the side eyes. Median ocular area wider than long, wider in front than behind. Chelicerae slender, narrowing toward the tip. Endites with a sharp spur on the antero-ectal margin. Coxa of leg I with a recurved spur at the distal end; femur I with two rows of spines below. Tibia of legs II slightly curved, bearing heavy spines, as shown in the figure. Abdomen broad and somewhat flattened.

<i>Measurements</i> :	♂ Holotype
Length	3.33 mm.
Carapace:	
Length	2.00
Width	1.60
Tibia-patella:	
I	2.60
IV	1.60

Type locality: W117°50':N33°33', Laguna Beach, California; ♂ holotype; July 24, 1931; R. V. Chamberlin collector.

Family THOMISIDAE

Subfamily THOMISINAE

Genus XYSTICUS C. Koch, 1835

Xysticus mysticus Chamberlin and Ivie, new species

Fig. 225

FEMALE. *Color*: Carapace with brownish gray background; sides reticulate with black; base white in middle, with black patches at the sides; broad median area light brownish gray. Chelicerae brownish gray, speckled with blackish. Labium and endites dark dusky brown, with lighter tips. Sternum brownish gray, thickly specked and mottled with dusky brown. Legs brownish gray, thickly specked with blackish. Abdomen gray, mottled and specked, but without distinct marks.

Structure: Head wide and rounded; median ocular quadrangle wider than long. Epigynum a sunken depression, with a distinct rim in front and on the sides, and containing a pair of small low lobes in the posterior part; the depression is situated about a diameter from the genital furrow.

<i>Measurements:</i>	♀ Holotype
Length	7.00 mm.
Carapace:	
Length	3.10
Width	2.90
Tibia-patella:	
I	3.05
II	3.15
III	2.10
IV	2.45

Type locality: W111°45':N40°42', Mill Creek Canyon, Wasatch Mts., Utah, 8000 feet elevation; ♀ holotype; October 1, 1939; Stanley Mulaik collector.

This species resembles *X. gulosus* Keyserling, and is evidently related to it.

Subfamily PHILODROMINAE

Genus TITANEBO Gertsch, 1933

Titanebo tridentatus Chamberlin and Ivie, new species

Figs. 226, 227

The male holotype is in poor condition, being faded, with most of the legs missing. Carapace light yellowish, with the top of the head reticulated with white, and the sides of the thorax mottled with brown. Mouthparts, sternum, legs, and palpi light yellowish, the legs with a few specks, but apparently with no distinct rings; the tarsus of the palpus darker. Abdomen whitish, with a few gray specks and a lanceolate mark over the heart. The structure is typical, the distinguishing feature being the palpus. The cetal process on the distal end of the tibia is tridentate.

<i>Measurements:</i>	♂ Holotype
Length	3.10 mm.
Carapace:	
Length	1.50
Width	1.53
Tibia-patella II	4.27

Type locality: Probably W103°:N48°, Divide County, North Dakota; ♂ holotype; 1937; Joe Davis collector.

Titanebo magnificus Chamberlin and Ivie, new species

Figs. 228, 229

MALE. *Color:* Carapace pale yellowish, with white reticulations on the top of the head, white median area on front, and a white V on the back of the head; also with the sides brownish gray, which does not extend downward to the margin, but extends forward onto the clypeus; this dark area contains three light spot on each side. Mouthparts light yellowish, with some fine specks of gray. Sternum yellowish white, finely specked with blackish. Legs light yellowish, finely specked with blackish, the specks more concentrated at the distal end of the femora, but no rings present. Abdomen light gray above, with a dark gray fusiform mark over the heart; this mark outlined with white, which extends posteriorly along the mid-line; the dorsal area outlined with darker gray; lower sides and venter whitish, specked and lightly shaded with gray; a median buff spot just in front of the genital furrow.

Structure: Typical; the size is larger than any other species of our acquaintance; the palpus is distinct as figured.

<i>Measurements:</i>	♂ Holotype
Length	5.00 mm.
<i>Carapace:</i>	
Length	2.15
Width	2.08
<i>Tibia-patella:</i>	
I	4.60
II	6.90
III	3.66
IV	4.50

Type locality: W111°52':N40°48', Salt Lake City, Utah; ♂ holotype; September, 1936; W. Ivie collector.

This species is larger and more brightly colored than *T. cockerelli* (Bryant), which occurs in the same region. Also, this species matures in the autumn, while *cockerelli* matures in the spring.

Genus TIBELLUS Simon, 1875

Tibellus gertschi Chamberlin and Ivie, new species

Figs. 230, 231

Color: General color light yellowish (darker in male), with dusky shadings and markings. The lower sides and the median area of the carapace reticulated and shaded with dusky. Chelicerae heavily shaded with dusky in front. Endites, labium, and sternum specked with dusky, especially heavy on the side margins of the sternum. Legs specked and shaded, with three more or less diffused and coalesced dusky stripes

along the dorsal side (legs of the male with several black longitudinal spots in addition). Abdomen with a median dusky band above, and a pair of blackish dots near distal end; sides shaded; venter specked, with a dusky median streak.

Structure: Essentially typical. Eyes in order of size, P.S., A.S., P.M., and A.M., the latter two equal. A.M. eyes about two diameters apart, scarcely a diameter from the side eyes. P.M. eyes more than two diameters apart, nearly three diameters from the side eyes. Embolus of palpus very short, sharp.

<i>Measurements:</i>	♂ Holotype	♀ Allotype
Length	5.60 mm.	5.30 mm.
<i>Carapace:</i>		
Length	2.50	2.30
Width	2.15	2.10
<i>Tibia-patella:</i>		
I	3.25	3.00
II	3.70	3.50
III	3.00	2.65
IV	3.50	3.15

Type locality: W111°2':N40°43', Smith and Morehouse Canyon, Uintah Mts., Utah; June 3, 1934; ♂ holotype, ♀ allotype, ♂ paratype; W. Ivie collector.

Figures and Explanations

Plate 1*Loxosceles yura* n. sp.

1. Left palpus, ectal view.
2. Epigynum.
3. Same as fig. 2, another form.

Orchestina obscura n. sp.

4. Left palpus, ectal view.

Dysderina xyphinoides n. sp.

5. Left palpus, ectal view.
6. Carapace of male, dorsal view.
7. Male, lateral view.

Usofila oregona n. sp.

8. Left palpus, ectal view.

Leptoneta coeca n. sp.

9. Left palpus, ectal view.

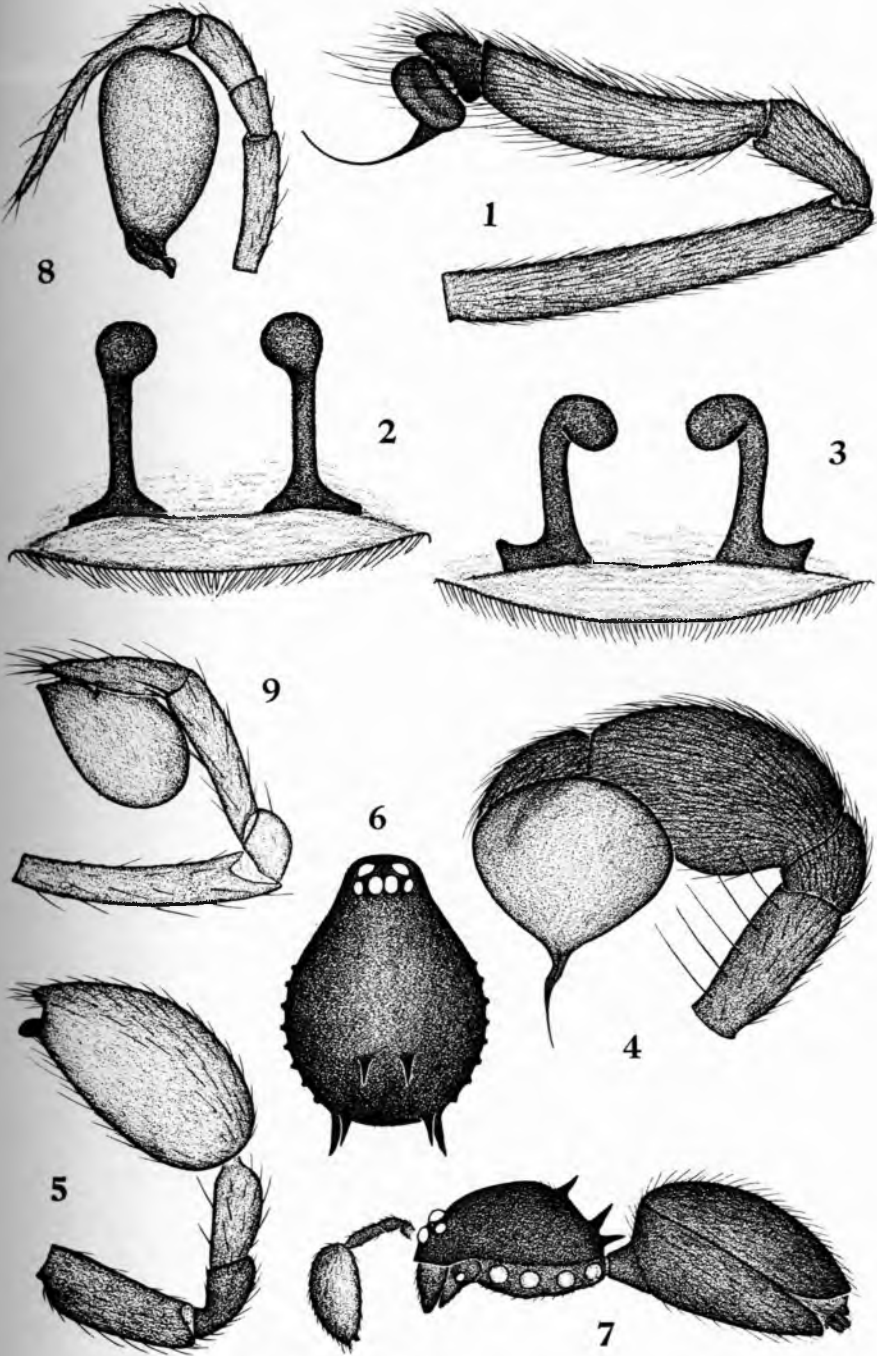


Plate 2

Psilochorus bantus n. sp.

10. Epigynum, anterior view.
11. Epigynum, lateral view.
12. Left palpus, ectal view.
13. Chelicera of male, ectal view.

Psilochorus topanga n. sp.

14. Epigynum, anterior view.
15. Epigynum, lateral view.
16. Left palpus, ectal view.
17. Chelicera of male, ectal view.

Psilochorus acanthus n. sp.

18. Epigynum, anterior view.
19. Epigynum, lateral view.
20. Left palpus, ectal view.
21. Chelicera of male, ectal view.

Psilochorus simplicior n. sp.

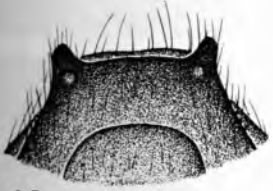
22. Epigynum, anterior view.
23. Epigynum, lateral view.

Saltonia imperialis n. sp.

24. Left palpus, ventral view.
25. Left palpus, ectal view.

Yorima subflava n. sp.

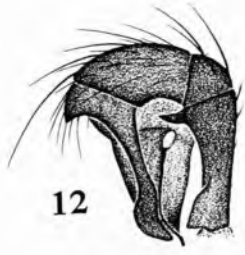
26. Epigynum.



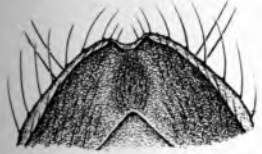
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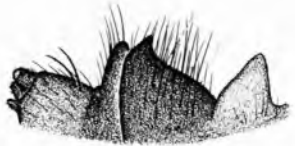
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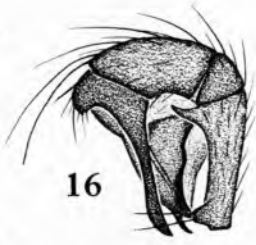
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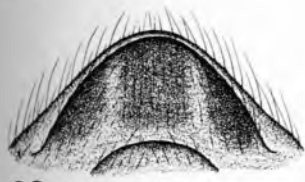
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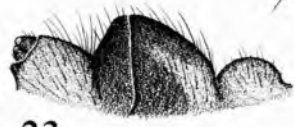
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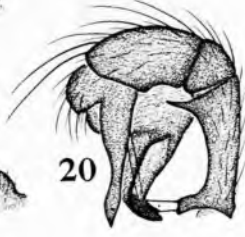
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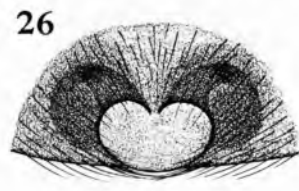
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Plate 3*Tegenaria castro* n. sp.

- 27. Left palpus, ventral view.
- 28. Left palpus, ectal view.
- 29. Epigynum.

Calymmaria lora n. sp.

- 30. Epigynum, ventral view.
- 31. Epigynum, internal structure, antero-dorsal view.

Calymmaria aspenola n. sp.

- 32. Tibia of left palpus, dorso-ectal view.
- 33. Epigynum, ventral view.
- 34. Epigynum, internal structure, antero-dorsal view.

Ethobuella (Dirksia) anyphacnoïdes n. sp.

- 35. Left palpus, ventral view.
- 36. Left palpus, ectal view.
- 37. Epigynum.

Cybacina confusa n. sp.

- 38. Epigynum.



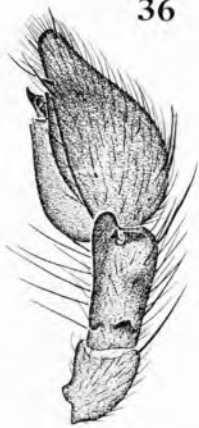
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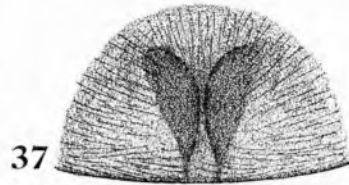
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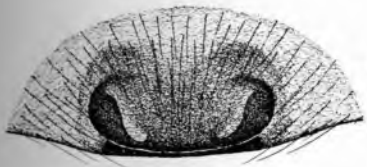
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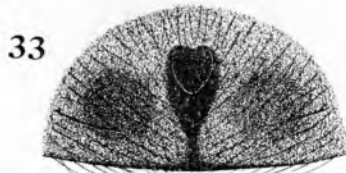
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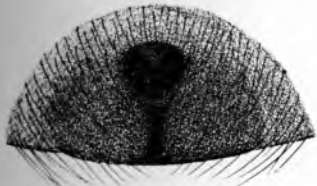
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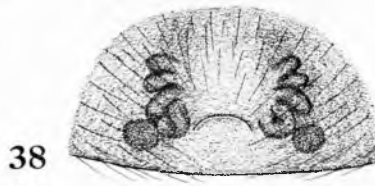
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38

Plate 4*Cybaeus scopulatus* n. sp.

39. Left palpus, ventral view.

40. Left palpus, ectal view.

Cybaeus septatus n. sp.

41. Left palpus, ventral view.

42. Epigynum.

Cybaeus multnoma n. sp.

43. Epigynum.

Cybaeus janus n. sp.

44. Epigynum.

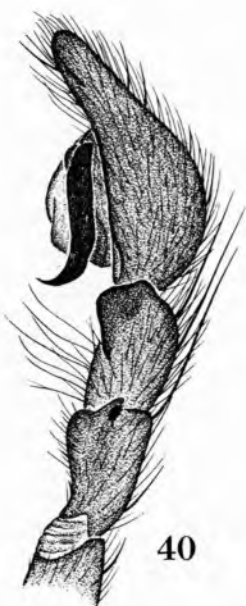
Cybaeus cribelloides Chamberlin and Ivic

45. Left palpus, ventral view.

46. Left palpus, ectal view.



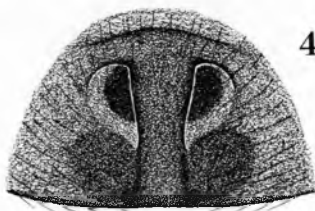
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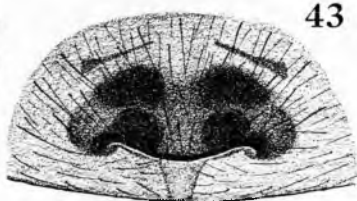
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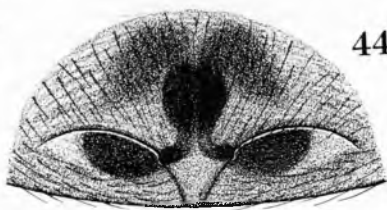
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Plate 5

Cybaeus hystrix n. sp.

47. Epigynum.

Cybaeus devius n. sp.

48. Epigynum.

Cybaeus constrictus n. sp.

49. Epigynum.

Cybaeus angelus n. sp.

50. Epigynum.

Hahnia cinerea seminola Gertsch

51. Left palpus, ectal view.

52. Left palpus, ventral view.

53. Epigynum.

Hahnia arizonica n. sp.

54. Left palpus, ectal view.

55. Epigynum.

Hahnia inornata n. sp.

56. Left palpus, ectal view.

57. Epigynum.

Hahnistea longipes n. sp.

58. Epigynum.

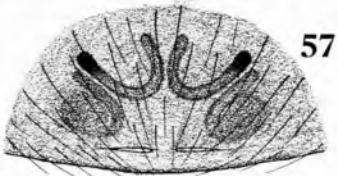
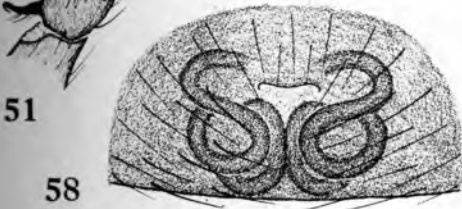
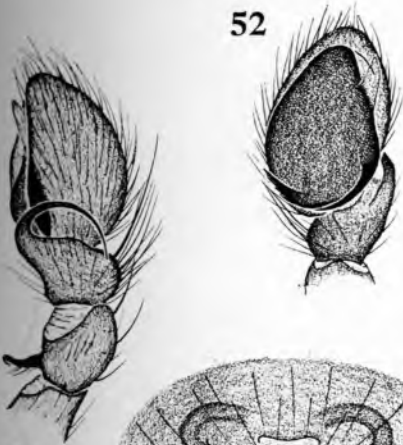
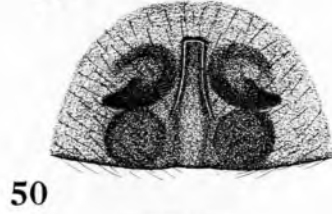
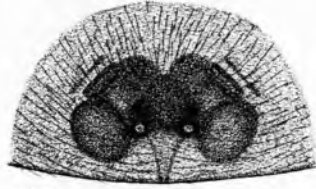
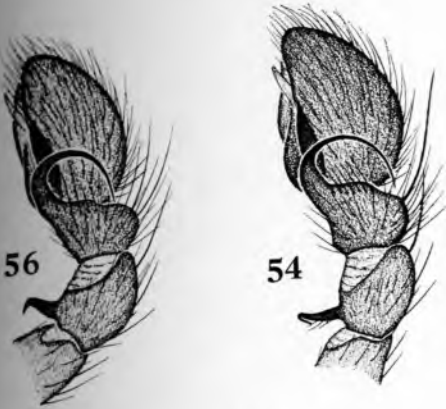
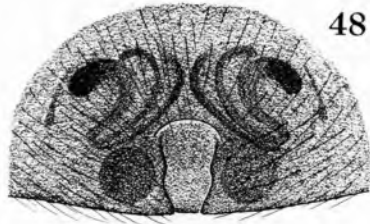
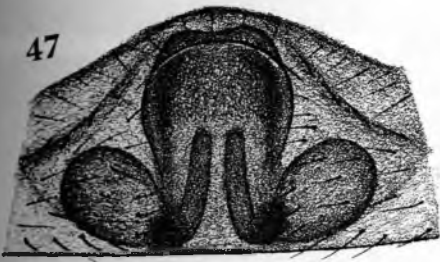


Plate 6

Neoantistea coconino n. sp.

59. Left palpus, meso-ventral view.

60. Endites and labium of male.

Neoantistea santana n. sp.

61. Left palpus, meso-ventral view.

62. Endites and labium of male.

63. Epigynum.

Pardosa costricta n. sp.

64. Epigynum.

Pardosa zionis n. sp.

65. Epigynum.

Pardosa hopi n. sp.

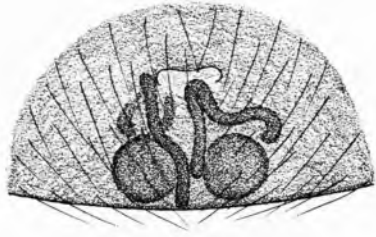
66. Epigynum.

Pardosa falcifera F. Cambridge

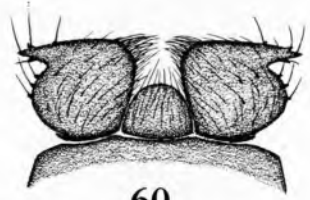
67. Epigynum.



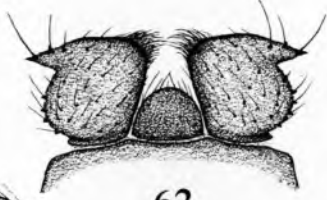
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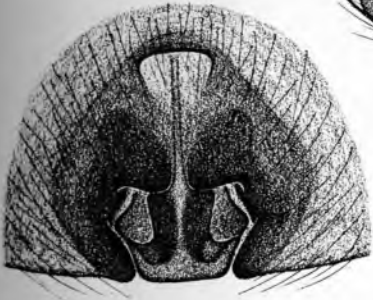
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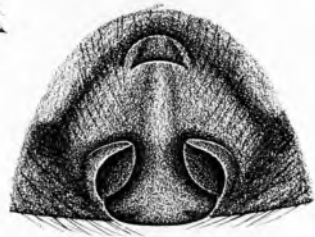
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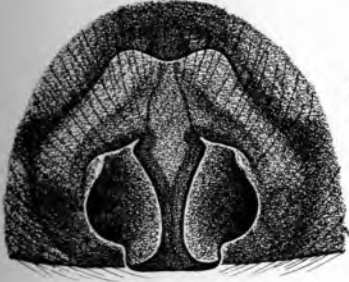
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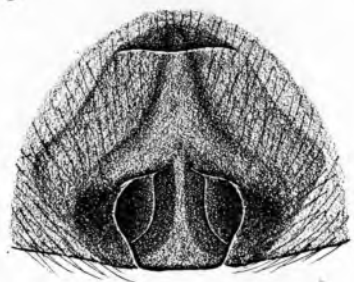
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67

Plate 7

Pardosa falcifera F. Cambridge

68. Left palpus, ventral view.

Pardosa nebraska n. sp.

69. Epigynum.

70. Left palpus, ectal view.

Pardosa subra n. sp.

71. Epigynum.

Pardosa platta n. sp.

72. Epigynum.

Pardosa izabella n. sp.

73. Epigynum.

Pardosa medialis Banks

74. Epigynum.

Pardosa hetchi n. sp.

75. Epigynum.

Trochosa cherokee n. sp.

76. Epigynum.

Trochosa guatemala n. sp.

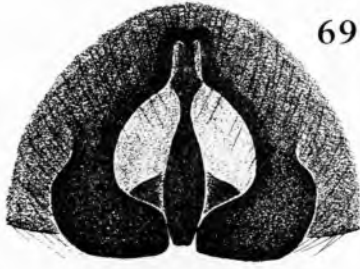
77. Epigynum.

Trochosa (Varacosa) shenandoa n. sp.

78. Epigynum.



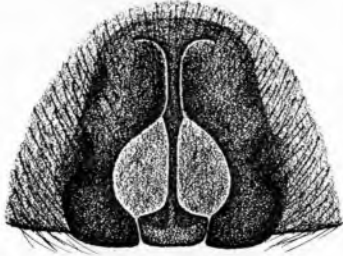
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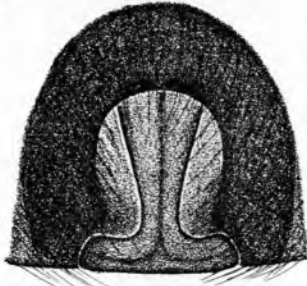
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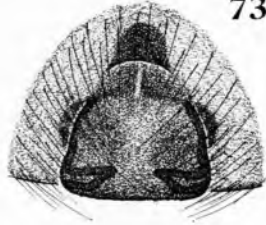
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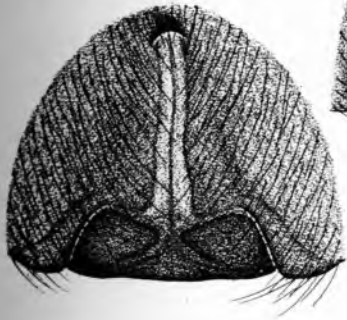
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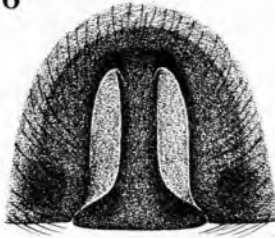
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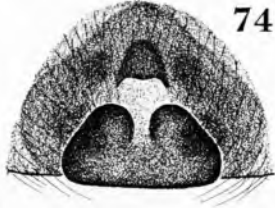
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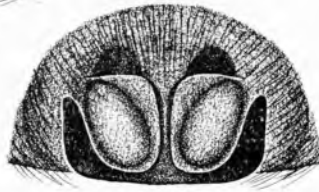


Plate 8

Lycosa labrea n. sp.

79. Left palpus, ventral view.

80. Epigynum.

Lycosa santrita n. sp.

81. Left palpus, ventral view.

82. Epigynum.

Steatoda atascadera n. sp.

83. Epigynum.

84. Tip of process on left palpus.

Enoplognatha (Marmatha) marmorata (Hentz)

85. Left chelicera of male, posterior view.

Enoplognatha (Marmatha) marmorata parvior n. subsp.

86. Left chelicera of male, posterior view.

Enoplognatha (Marmatha) puritana n. sp.

87. Left chelicera of male, postero-ectal view.

88. Epigynum.

Enoplognatha (Rugatha) pikes n. sp.

89. Left palpus, ventral view.

90. Epigynum.

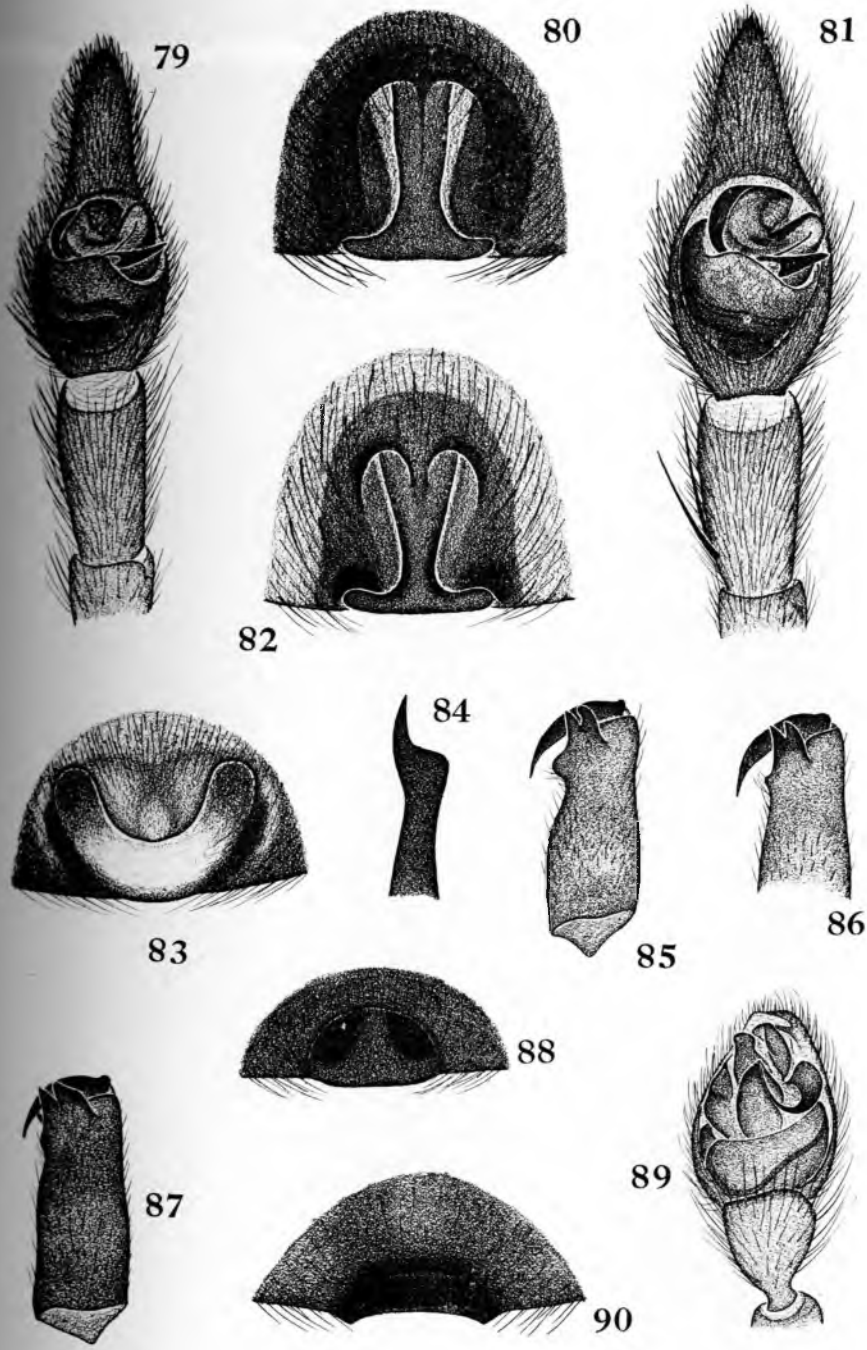


Plate 9

Enoplognatha (Rugatha) pikes n. sp.

91. Left chelicera of male, posterior view.

Enoplognatha (Rugatha) rugosa Emerton

92. Spur of chelicera of male, posterior view.

Enoplognatha (Rugatha) wyuta n. sp.

93. Left palpus of male, ventral view.

94. Spur of left chelicera of male, posterior view.

95. Epigynum.

Enoplognatha (Rugatha) joshua n. sp.

96. Left palpus, ventral view.

97. Spur of left palpus of male, posterior view.

Enoplognatha (Rugatha) joshua pintura n. subsp.

98. Left palpus, ectal view.

99. Left chelicera of male, posterior view.

100. Spur of left chelicera of male, posterior view.

101. Epigynum.

Enoplognatha (Rugatha) piuta n. sp.

102. Left palpus, ventral view.

103. Spur of left chelicera of male, posterior view.



91



92



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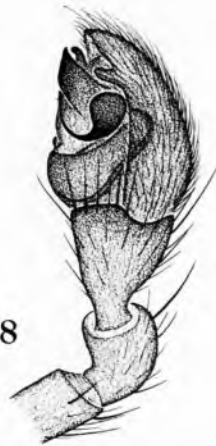
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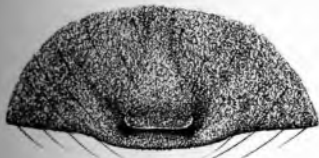


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Plate 10*Linyphantes ephedrus* (Chamberlin and Ivie)

- 104. Left palpus, distal end.
- 105. Median apophysis of left palpus.
- 106. Chelicera of male, ectal view.
- 107. Epigynum.

Linyphantes nigrescens n. sp.

- 108. Left palpus, distal end.
- 109. Median apophysis of left palpus.
- 110. Dorsal view of moderately light colored female.
- 111. Epigynum.

Linyphantes natchez n. sp.

- 112. Left palpus, distal end.
- 113. Epigynum.

Linyphantes nchalem n. sp.

- 114. Left palpus, distal end.
- 115. Epigynum.

Linyphantes pacificus n. sp.

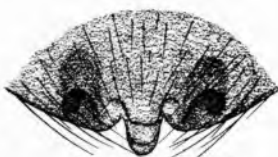
- 116. Left palpus, distal end.
- 117. Epigynum.



104



105



107



110



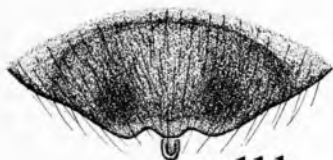
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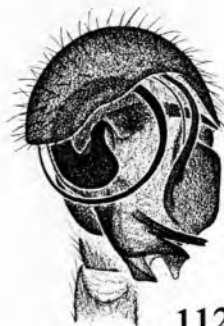
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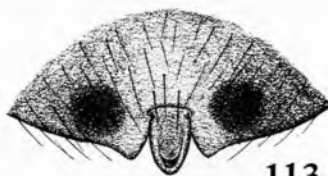
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114



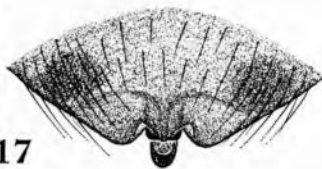
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117

Plate 11

Linyphantes pualla n. sp.

- 118. Left palpus, distal end.
- 119. Median apophysis of left palpus.
- 120. Left chelicera of male, anterior view.
- 121. Epigynum.

Linyphantes victoria n. sp.

- 122. Left palpus, distal end.
- 123. Epigynum.

Linyphantes cureka n. sp.

- 124. Left palpus, distal end.

Linyphantes delmurus n. sp.

- 125. Epigynum.

Linyphantes santinez n. sp.

- 126. Left palpus, distal end.

Linyphantes santinez verdugo n. subsp.

- 127. Process on palpus, corresponding to that of fig. 126 indicated by dotted line.

Linyphantes aliso n. sp.

- 128. Epigynum.

Linyphantes microps n. sp.

- 129. Left palpus, ecto-distal view.

Linyphantes obscurus n. sp.

- 130. Epigynum.

Linyphantes distinctus n. sp.

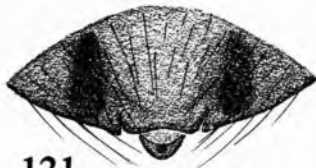
- 131. Left palpus, distal end.
- 132. Epigynum.

Linyphantes laguna n. sp.

- 133. Left palpus, distal end.
- 134. Epigynum.



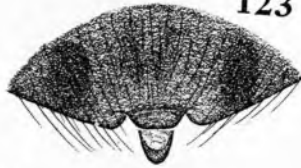
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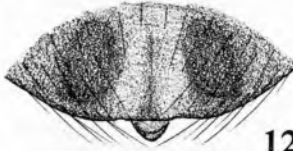
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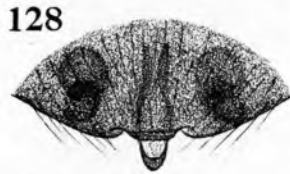
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128



126



130



129



133



132



134



131

Plate 12

Linyphantes anacortes n. sp.

135. Left palpus, distal end.

136. Epigynum.

Linyphantes longivulva n. sp.

137. Left palpus, distal end.

138. Median apophysis of left palpus.

139. Epigynum.

Pityohyphantes brachygynus n. sp.

140. Epigynum.

Pityohyphantes cristatus n. sp.

141. Terminal division of left palpus, ventral view.

142. Tibia and patella of left palpus, dorsal view.

143. Epigynum.

Pitychyphantes cristatus coloradensis n. subsp.

144. Patella and tibia of left palpus, dorsal view.

145. Terminal division of left palpus, ventral view.

Pityohyphantes vancouveranus n. sp.

146. Terminal division of left palpus, ventral view.

Pityohyphantes pallidus n. sp.

147. Terminal division of left palpus, ventral view.

148. Patella and tibia of left palpus, dorsal view.

Pityohyphantes tacoma n. sp.

149. Terminal division of left palpus, ventral view.

150. Patella and tibia of left palpus, dorsal view.

Pityohyphantes navajo n. sp.

151. Terminal division of left palpus, ventral view.

152. Patella and tibia of left palpus, dorsal view.

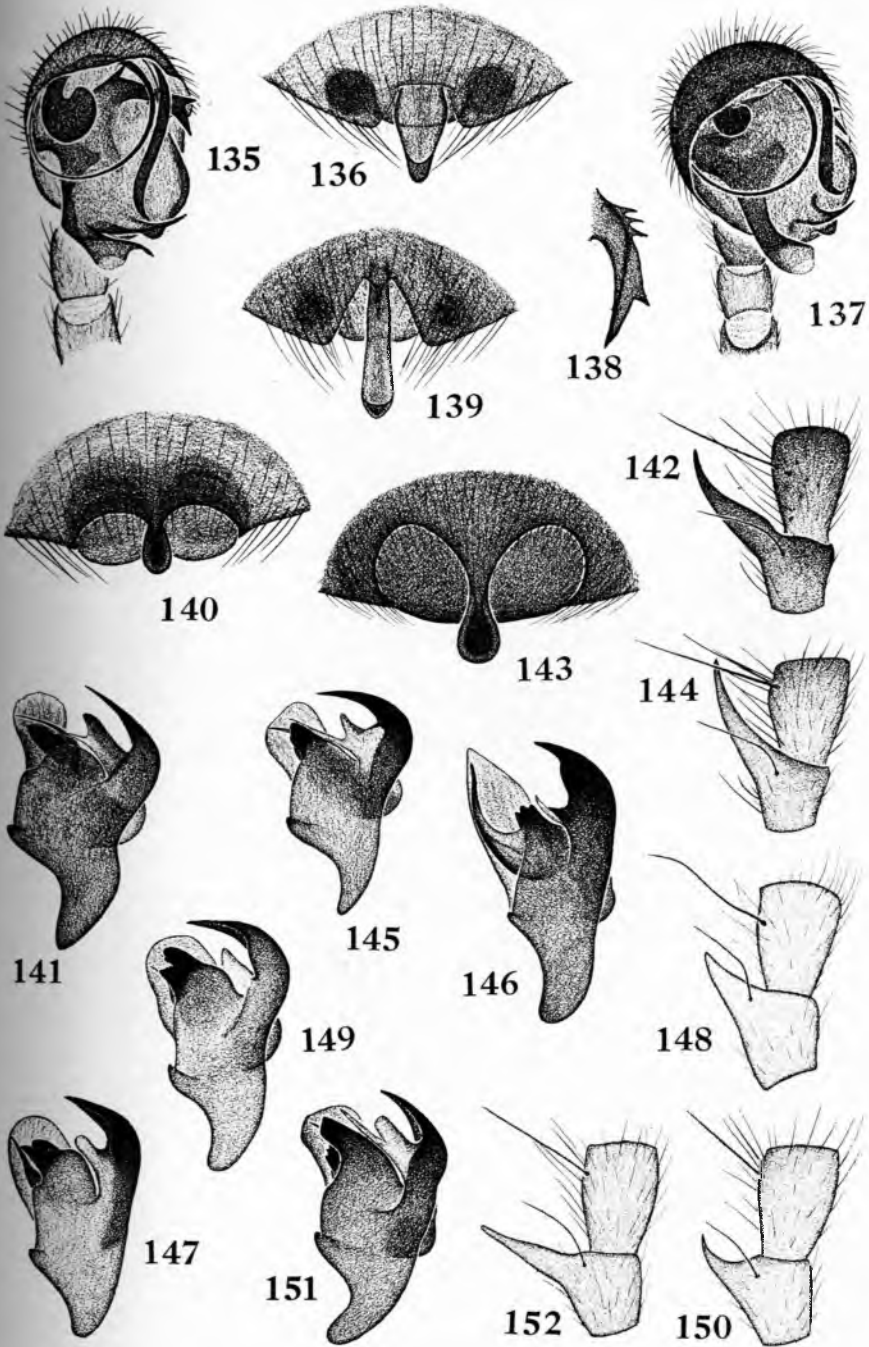


Plate 13*Tetragnatha manitoba* n. sp.

- 153. Left palpus, ectal view.
- 154. Left palpus, mesal view.
- 155. Tip of conductor of left palpus.
- 156. Right chelicera of male, anterior view.
- 157. Right chelicera of male, ectal view of tip.
- 158. Right chelicera of female, anterior view.

Tetragnatha guatemalensis Cambridge

- 159. Right chelicera of male, anterior view.

Tetragnatha elmora n. sp.

- 160. Fang of left chelicera of female, distal view.

Metepeira labyrinthea (Hentz)

- 161. Terminal division of left palpus, posterior view.
- 162. Same, toothed ridge from another view.
- 163. Median apophysis of left palpus.
- 164. Epigynum, antero-ventral view.

Metepeira josepha n. sp.

- 165. Epigynum, antero-ventral view.

Metepeira ensenada n. sp.

- 166. Left palpus, mesal view.
- 167. Terminal division of left palpus, posterior view.
- 168. Median apophysis of left palpus.

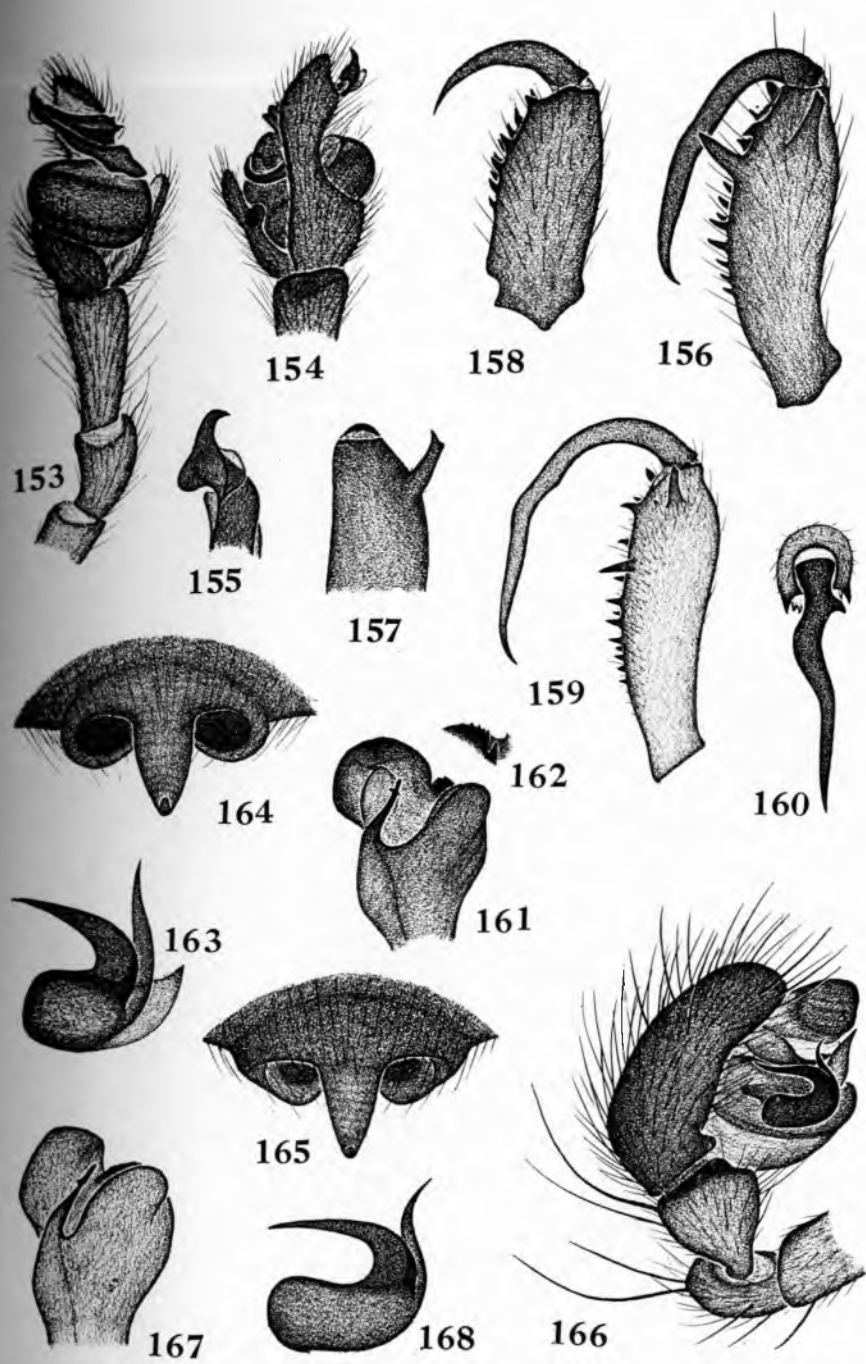


Plate 14

Metepeira douglasi Chamberlin and Ivie

169. Terminal division of left palpus.

170. Median apophysis of left palpus.

Metepeira crassipes n. sp.

171. Terminal division of left palpus.

172. Median apophysis of left palpus.

173. Epigynum, antero-ventral view

Metepeira minima Gertsch

174. Epigynum, antero-ventral view.

Metepeira ventura n. sp.

175. Terminal division of left palpus.

176. Median apophysis of left palpus.

177. Epigynum, antero-ventral view.

178. Epigynum, ectal view.

179. Epigynum, posterior view.

Metepeira lima n. sp.

180. Epigynum, antero-ventral view.

Metepeira glomerabilis (Keyserling)

181. Epigynum, antero-ventral view.

Metepeira arizonica n. sp.

182. Left palpus, mesal view.

183. Terminal division of left palpus.

184. Median apophysis of left palpus.

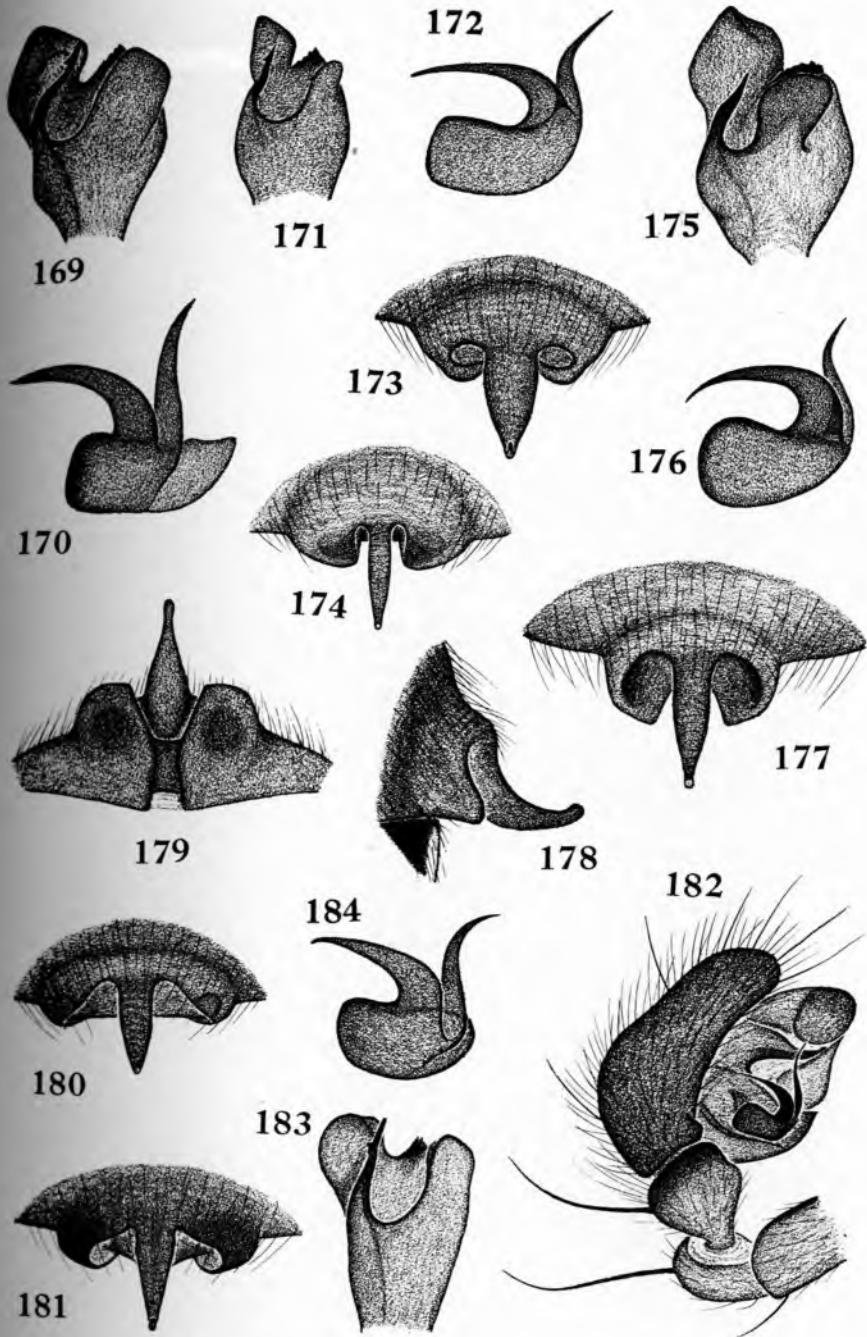


Plate 15

Metepeira arizonica n. sp.

- 185. Epigynum, antero-ventral view.
- 186. Epigynum, ectal view.
- 187. Epigynum, posterior view.

Metepeira virginensis n. sp.

- 188. Terminal division of left palpus.
- 189. Median apophysis of left palpus.
- 190. Epigynum, antero-ventral view.

Metepeira latigyna n. sp.

- 191. Epigynum, antero-ventral view.
- 192. Epigynum, posterior view.

Metepeira compsa (Chamberlin)

- 193. Terminal division of left palpus.
- 193a. Same, toothed ridge from another view.
- 194. Median apophysis of left palpus.
- 195. Epigynum, antero-ventral view.

Metepeira datona n. sp.

- 196. Epigynum, antero-ventral view.

Metepeira foxi Gertsch and Ivie

- 197. Terminal division of left palpus.
- 198. Median apophysis of left palpus.

Metepeira nanella n. sp.

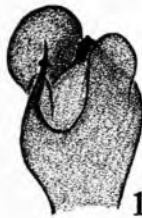
- 199. Epigynum, antero-ventral view

Metepeira palomara n. sp.

- 200. Terminal division of left palpus.
- 201. Median apophysis of left palpus.



185



188



189



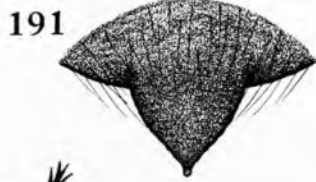
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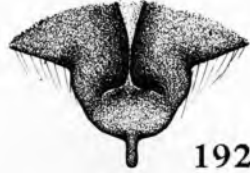
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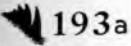
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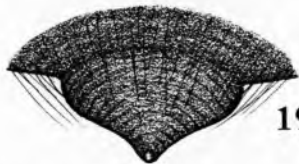
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193a



194



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197



198



200



201



199

Plate 16

Metepeira palomara n. sp.

- 202. Epigynum, antero-ventral view.
- 203. Epigynum, ectal view.
- 204. Epigynum, posterior view.

Metepeira dakota n. sp.

- 205. Terminal division of left palpus.
- 206. Median apophysis of left palpus.
- 207. Epigynum, antero-ventral view

Metepeira palustris n. sp.

- 208. Terminal division of left palpus.
- 209. Median apophysis of left palpus.
- 210. Epigynum, antero-ventral view.

Metepeira nigriventris (Taczanowski)

- 211. Terminal division of left palpus.
- 212. Tooth on terminal division of palpus.
- 213. Median apophysis of left palpus.
- 214. Epigynum, antero-ventral view.

Aculepeira verae n. sp.

- 215. Median apophysis of left palpus.
- 216. Terminal division of left palpus, posterior view.

Neoscona arkansa n. sp.

- 217. Epigynum, antero-ventral view.
- 218. Epigynum, ectal view.

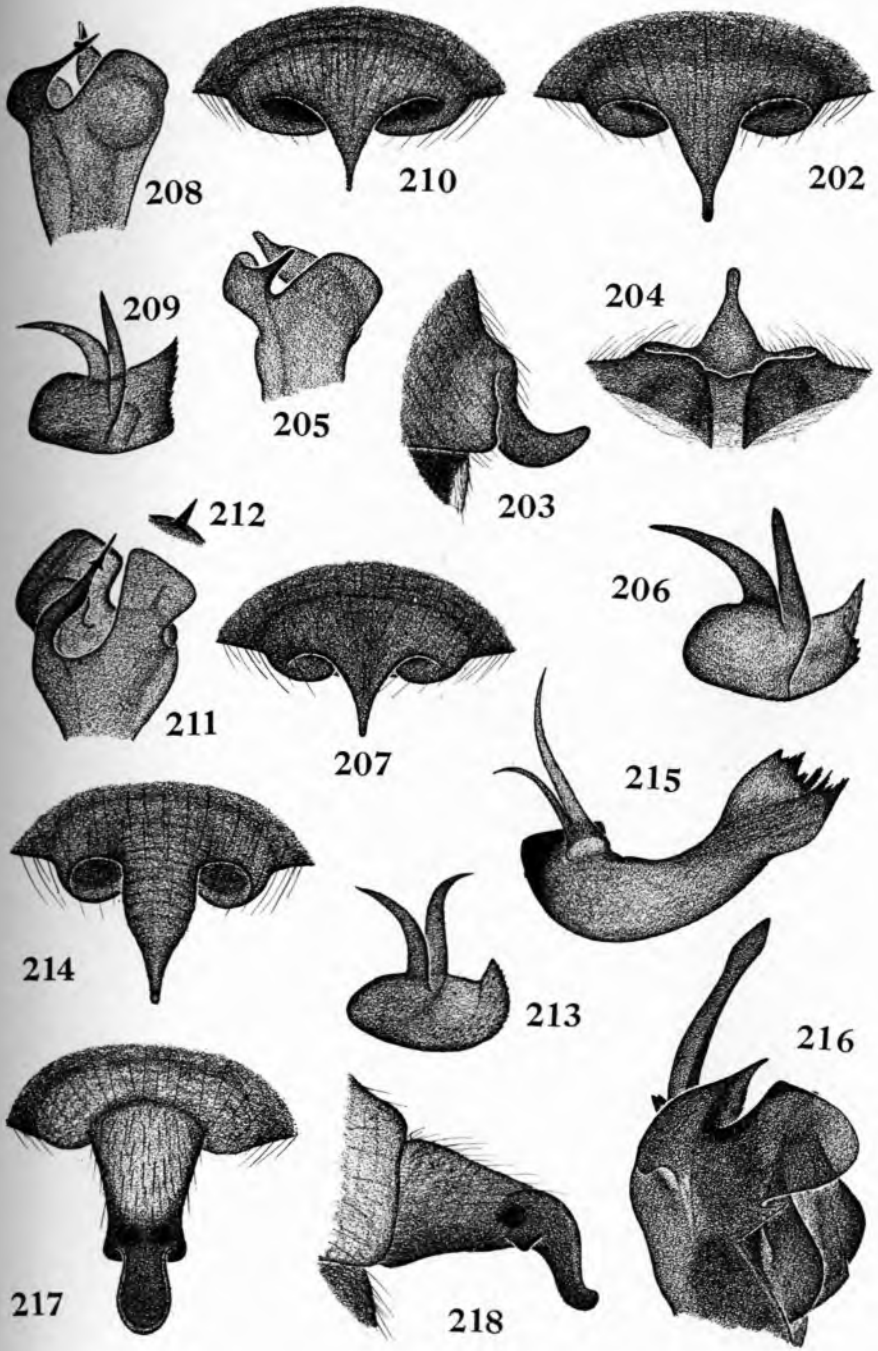


Plate 17

Neoscona nebraskensis n. sp.

219. Epigynum, antero-ventral view.

220. Epigynum, ectal view.

Neoscona lativulva n. sp.

221. Epigynum, antero-ventral view.

222. Epigynum, ectal view.

Neosconella bella n. sp.

223. Median apophysis of left palpus.

224. Right tibia of leg II, anterior view.

Xysticus mysticus n. sp.

225. Epigynum.

Titanebo tridentatus n. sp.

226. Left palpus, ventral view.

227. Tibia of left palpus, ectal view.

Titanebo magnificus n. sp.

228. Left palpus, ventral view.

229. Tibia of left palpus, ectal view.

Tibellus gertschi n. sp.

230. Left palpus, ventral view.

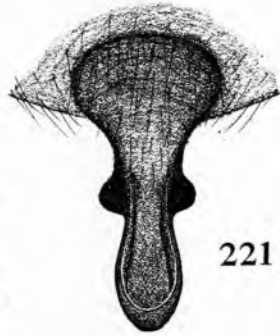
231. Epigynum.



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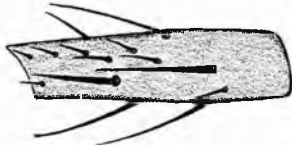
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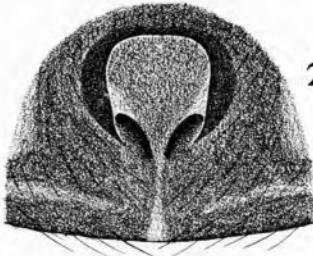
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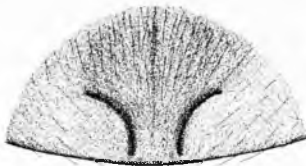
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