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and Others, Mostly in California

BY

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SPIDERS COLLECTED BY L. W. SAYLOR AND OTHERS, MOSTLY IN CALIFORNIA

By RALPH V. CHAMBERLIN AND WILTON IVIE

In the present paper are listed some 150 species of spiders composing a collection submitted to us by Mr. L. W. Saylor, now of the United States Bureau of Biological Survey, who personally took most of the specimens. Of the species represented in the collection, 24 are new, and three of these are made types of new genera. Twenty-two of the new species are herein described, the other two being dealt with in another paper to appear elsewhere. All specimens are retained in the collections of the University of Utah.

The localities are referred to the geographic quadrangle in which they occur. A quadrangle, one degree longitude by one degree latitude, is taken as a geographic unit for purposes of designating records. This quadrangle is defined by the coordinates of the southeast corner, longitude first, followed by the latitude, and separated by a period. Thus, 122·37 refers to the quadrangle between 122 and 123 degrees west longitude, and between 37 and 38 degrees north latitude. Wherever this number is preceded by an asterisk, it indicates a new record.

Family AVICULARIIDAE

Aphonopelma sp.

- 117·34. Imm. Pomona, California; J. W. Saepe and B. J. Hall collectors, July-August 1934.

Family CTENIZIDAE

Antrodiaetus pacificus (Simon).

Brachybothrium pacificum Simon, Bull. Soc. Zool. France, 1884, 9:314.

- *122·41. ♂. Carrville, California; B. J. Hall collector July 1934.

Antrodiaetus sp.

- 122·37. ♀. Ben Lomond, California; L. W. Saylor collector, April 1934.

Aptostichus stanfordianus Ch. P. Smith.

- 123·37. Imm. Farallone Islands, California; L. W. Saylor collector, April 13, 1934.

Family SEGESTRIIDAE

Segestria pacifica Banks.

- 121·36. 2 ♀ s. Big Sur, California; L. W. Saylor collector, April 10, 1934.

Family DICTYNIDAE

Amaurobius severus Simon.

120·38. 5 Imm. Echo Lake, California; L. W. Saylor collector, July 1934.

Amaurobius sp.

Near *severus*, but not that species.

122·37. 2 Imm. Ben Lomond, California; L. W. Saylor collector, May 1934.

Mallos eutypus (Chamberlin and Gertsch).

Dictyna eutypa Chamberlin and Gertsch, 1929, Pomona College Journ. Ent. & Zool., 21:101, Pl. 1, f. 2.

*116·33. ♀. Lake Hemet, California; J. R. Douglas collector, June 16, 1934.

Mallos halli Chamberlin and Ivie, new species.

Pl. 1, f. 1.

FEMALE

Color: Front and top of head, extending back to the median depression, yellowish brown, enclosing a pair of darker longitudinal streaks on top, back of eyes. Sides and base of carapace dark brown; margins on side of thoracic part white. Carapace clothed with white hairs. Chelicerae and endites light brown. Sternum and labium dark dusky brown. Legs and palpi light yellowish brown, slightly darker on patella and at distal ends of tibiae and metatarsi. Abdomen whitish gray, with a broad median band of darker markings above; sides shaded; median area of venter dark gray. Spinnerets partly light yellowish, partly dusky brown.

Structure: Carapace moderately low. Eye area occupying nearly the full width of the head. Anterior eye row straight; median eyes slightly smaller than the side eyes, about a diameter apart, and slightly closer to the side eyes than to each other. Posterior row straight; eyes equal; P.M. eyes $1\frac{3}{5}$ diameters apart, a little more than one diameter from the side eyes. Median ocular area slightly wider behind than in front, slightly wider than long. Height of clypeus about $1\frac{1}{2}$ diameters of an A.S. eye. Chelicerae vertical. Sternum large, nearly ovate. Abdomen large, rounded; longer than wide, wider than high. Posterior spinnerets more slender than the anterior, with a distinct apical segment. Cribellum divided. Calamistrum single; occupying nearly the full length of the metatarsus.

Measurements:	♀ Holotype
Length	3.80 mm.
Carapace:	
Length	1.10
Width95
Tibia-patella:	
I	1.67
IV	1.35

Type locality: W122° 5' N37° 5', Ben Lomond, California; female holotype; L. W. Saylor collector, May 1934.

This species is named for Mr. B. J. Hall, who collected some of the material in the present lot.

Mallos pallidus (Banks).

Dictymina pallida Banks, 1904, Proc. Calif. Acad. Sci., (3) 3:342, Pl. 39. f. 22.

*120·38. ♀. Echo Lake, California; L. W. Saylor collector, July 1934.

Mallos sp.

114·48. Imm. Lake Kintla, Glacier Park, Montana; L. W. Saylor collector, June 1936.

Dictyna vincens Chamberlin.

*114·48. ♀. Lake Kintla, Glacier Park, Montana; L. W. Saylor collector, June 1936.

*120·38. ♂. Echo Lake, California; L. W. Saylor collector, July 1934.

Dictyna abundans Chamberlin and Ivie, new species.

Pl. I, ff. 2-4.

Color: Carapace dark brown, lighter on top of head; top of head clothed with white hairs. Chelicerae dark chestnut. Sternum yellowish brown, darker around margins (varying to dark brown in darker specimens); sometimes with a faint median streak. Endites medium brown. Labium dusky brown. Legs light brownish yellow, with faint annuli, or sometimes merely shaded at the two distal joints. Abdomen whitish, with a typical median basal mark, and three pairs of spots on posterior part; the markings varying from pale grayish brown to black, often diffuse. Sides shaded. Venter with median area dark gray, sides whitish. Spinnerets dusky brown.

Structure: *Male*—Head moderately elevated. Clypeus protrudent; height about three diameters of an A.M. eye. Chelicerae rather long; tips slender and curved forward; lateral condyles protrude as

short beak-like processes; median hollow between chelicerae about as wide as one of the chelicerae. Palpus of medium size; close to that of *D. volucripes*, but distinguishable by the shorter tibial spur. Legs I and II long. Structure otherwise typical.

Female typical. The most distinguishing characters are its moderately small size, light color, and epigynum. The epigynum is of the general *volucripes* type, but differs in minor details.

Measurements:	Male (large)	Female
Length	3.50 mm.	3.20 mm.
Carapace:		
Length	1.60	1.30
Width	1.10	1.00
Tibia-patella:		
I	1.80	1.30
IV	1.15	1.05

Type locality: W114°33':N36°39', 4 miles southeast of Moapa, Nevada; male holotype, female allotype, several male and female paratypes; Wilton Ivie and Herman Rasmussen collectors, June 10, 1934.

Other localities:

*113-37. ♂ s, ♀ s.	Many male and female paratypes. St. George, Utah; Wilton Ivie and Herman Rasmussen collectors, June 12, 1934.
*117-34. ♂ .	Claremont, California.
♀ .	Pomona, California; J. W. Saepe and B. J. Hall collectors, July-August 1934.

This species is closely related to *Dictyna idahoana* Chamberlin and Ivie, but is not so heavily clothed with white hairs.

Dictyna saepei Chamberlin and Ivie, new species.

Pl. I, ff. 5-7.

MALE

Color: Carapace dark brown, with five rows of white hairs on top of head. Chelicerae dark chestnut. Endites dusky brown. Sternum and labium brownish black. Legs brownish, with wide, diffuse, dusky annuli. Abdomen with median area above black, beginning narrow at the base and broadening posteriorly; sides of dorsum light gray. Side blackish. Broad median area of venter blackish; sides of venter pale gray. Spinnerets dusky.

Structure: Similar to that of *D. abundans* n. sp.; except, legs more slender; chelicerae not so strongly developed; palpus with a longer tibial spur; size smaller.

Measurements:	♂ holotype.
Length	2.70 mm.
Carapace:	
Length	1.10
Width85
Tibia-patella:	
I	1.30
IV85

Type locality: W122°5':N37°5', Ben Lomond, California; male holotype; L. W. Saylor collector, March 1934.

***Dictyna olympiana* Chamberlin.**

Pl. I, ff. 9-11.

*122·37. ♂, ♀. Ben Lomond, California; L. W. Saylor collector, May 1934.

***Dictyna hoya* Chamberlin and Ivie, new species.**

Pl. I, f. 8.

FEMALE

Color: Carapace brown on the sides and base; front and top of head light brownish yellow. Chelicerae and endites orange brown. Labium dusky brown. Sternum light brown with dusky margins and a narrow median dusky streak. Legs pale yellowish; faintly annulate. Abdomen light gray, with a typical median basal mark above and two rows of confluent spots on posterior half (these marks rather faint on the type). Venter light gray, bordered with a darker gray line, and with a narrow median patch of gray. Spinnerets light brown.

Structure: Typical. Carapace moderately low. Epigynum characteristic, as shown in the figure. Size small.

Type locality: About W122°5':N37°5', Ben Lomond, California (Redwood Transition, 2000 feet elevation); female holotype; L. W. Saylor collector, April 1934.

This species is related to *D. completa* Chamberlin and Gertsch.

***Dictyna* sp.**

Near *Dictyna completa* Chamberlin and Gertsch.

121·36. 2 Imm. Point Sur, California; L. W. Saylor collector, April 10, 1937.

Dictyna saylori Chamberlin and Ivie, new species.

Pl. II. ff. 12-15.

MALE

Color: Carapace yellowish brown, shaded with dusky; lighter on top of head. Chelicerae light brownish. Endites light yellowish brown. Sternum and labium dusky brown. Legs light dull yellowish brown with faint dusky annuli. Abdomen gray, with a broad light median stripe extending the full length above and occupying more than one-third of the width; the median stripe pale gray on basal half, orange on distal half; the stripe enclosing on basal half a dark gray median mark. Venter slightly paler than sides.

Structure: Carapace typical. Height of clypeus $1\frac{1}{2}$ diameters of an A.M. eye. Anterior eye row straight; A.M. eyes slightly smaller than the A.S. eyes, slightly less than a diameter apart, and less than a radius from the side eyes. Posterior row faintly recurved; eyes equal; P.M. eyes a little less than a diameter apart, a full diameter from the side eyes. Chelicerae typical; median hollow less than the diameter of a chelicera in width; lateral condyle slightly humped, but not sharply protruding. Sternum slightly longer than wide. Abdomen typical. Palpus slightly smaller than average; details as figured. Size small.

Measurements:	♂ holotype.
Length	1.85 mm.
Carapace:	
Length85
Width62
Tibia-patella:	
I85
IV57

Type locality: About W122°5':N37°5', Ben Lomond, California, (1600 feet elevation); Male holotype: L. W. Saylor collector, April 1934.

Family AGELENIDAE

Blabomma grandis Chamberlin and Ivie.

*123·37. ♀, Imm. Farallone Islands, California; L. W. Saylor collector, April 13, 1934.

Cybaeus amicus Chamberlin and Ivie.

122·37. ♀. Ben Lomond, California; L. W. Saylor collector, April 1934.

Calymmaria suprema Chamberlin and Ivie.

122·37. ♀. Ben Lomond (town), California; L. W. Saylor, collector, May 10, 1934.

Agelenopsis aperta (Gertsch).

Agelena aperta Gertsch, 1934, Amer. Mus. Novitates, No. 726:25, f. 10.

*117·34. ♂, ♀, Imm. Pomona, California; J. W. Saepe and B. J. Hall collectors, July-August, 1934.

Hololena tentativa (Chamberlin and Gertsch).

Agelena tentativa Chamberlin and Gertsch, 1929, Pomona College Journ. Ent. & Zool., 21:6, figs. 31-33.

*119·34. ♀. Santa Barbara, California; J. R. Douglas collector, August 8, 1934.

Hololena pacifica (Banks).

Agelena pacifica Banks, 1896, Journ. N. Y. Ent. Soc., 4:89.

Agelena (Hololena) perita Chamberlin and Gertsch, 1929, Pomona College Journ. Ent. & Zool., 21:7, figs. 28-30.

122·37. ♀. Ben Lomond, California; L. W. Saylor collector, April 10, 1937.

Novalena* intermedia (Chamberlin and Gertsch).

Agelena intermedia Chamberlin and Gertsch, 1930, Proc. Biol. Soc. Wash., 43:143, fig. 28.

*120·38. 2 ♀ s. Echo Lake, California; L. W. Saylor, collector, July 1934.

Calilena* saylori* Chamberlin and Ivie.

121·36. 2 ♀ s. Point Sur, California (near beach); L. W. Saylor collector, July 1934.

Rualena* surana* Chamberlin and Ivie.

121·36. 2 ♀ s. Point Sur, California (near beach); L. W. Saylor collector, July 1934.

Family OXYOPIDAE

Peucetia viridans (Hentz).

117·34. Im. Pomona, California; J. W. Saepe and B. J. Hall collectors, July-August 1934.

Oxyopes salticus Hentz.

122·37. Imm. Ben Lomond, California; L. W. Saylor collector, March and April 1934.

*Diagnoses of these genera and species will appear soon in a paper dealing with American Ageleninæ.

Oxyopes rufipes Banks.

- 122·41. ♂, Imm. Carrville, California; L. W. Saylor, J. W. Saepe and B. J. Hall collectors, July 1934.
- 122·37. ♂ s, Imm. Ben Lomond, California; L. W. Saylor collector, March and April 1934 and April 10, 1937.
- 121·37. 5 Imm. Mt. Diablo, California; L. W. Saylor collector, April 8, 1934.
- 121·36. 2 Imm. Point Sur, California; L. W. Saylor, collector, April 10, 1937.
- 117·34. ♂, ♀, Im. Pomona, California; J. W. Saepe and B. J. Hall collectors, July-August 1934.
- 116·33. ♂. Lake Hemet, California; J. R. Douglas collector, June 16, 1934.

Family LYCOSIDAE

Pardosa californica Keyserling.

- 122·37. 3 ♂, 1 ♀. Ben Lomond, California; L. W. Saylor, collector, April 10, 1937.
- 121·36. 2 ♂, 6 ♀. Big Sur, California; L. W. Saylor collector, April 10, 1937 and June 1937.

Pardosa sternalis (Thorell).

- 117·34. 2 ♂, ♀. Pomona, California; J. W. Saepe and B. J. Hall collectors, July-August 1934.

Pardosa tuoba Chamberlin.

- 122·37. ♀ s. Ben Lomond, California; L. W. Saylor collector, April 1934.

Pardosa tristis (Thorell).

Lycosa tristis Thorell, Bull. U. S. Geol. Survey, 1877, 3:510.

- *114·48. 2 ♀ s. Lake Kintla, Glacier Park, Montana; L. W. Saylor collector, June 1936.

Pardosa sura Chamberlin and Ivie, new species.

Pl. V, f. 61.

FEMALE

Color: Carapace blackish with brownish yellow markings, consisting of a large spot on the middle of the thoracic part, large marginal spots, and a patch across the clypeus. The entire carapace covered with fine white hairs. Sternum dark brownish black, covered with fine whitish hairs. Chelicerae light reddish brown, shaded with dusky. Endites orange brown with pale tips; labium dusky brown with a pale tip. Legs yellowish brown with dusky to black markings, consisting of wide

annuli—two on femur, one on patella, two on tibia, and two fainter ones on metatarsus—and further shadings on the underside of the femora, and on tops of the coxae and trochanters. Abdomen marked above with blackish and light yellow gray spots and specks; sides shaded or spotted with black; venter, light gray, more or less shaded with darker gray.

Structure: Similar to that of *P. lapidicina*, *mercurialis*, *atromedia* and other related species. The distinctive feature is the epigynum, which in general is closely similar to that of the above mentioned species, but different in details.

Type locality: W121°52':N36°16', Big Sur, California; female holotype, female paratype; L. W. Saylor collector, July 1934.

Schizocosa avida (Walckenaer).

Lycosa avida Walckenaer, 1837, Hist. Nat. Ins. Apt., 1:285.

121·37. Imm. Livermore Hills, California; L. W. Saylor collector, March 14, 1937.

117·34. 2 Imm. Pomona, California; J. W. Saepe and B. J. Hall collectors, July-August 1934.

Tarentula kochi Keyserling.

122·37. ♀. Ben Lomond, California; L. W. Saylor collector, April 1934.

Arctosa spp.

121·36. Imm. Big Sur, California; L. W. Saylor collector, April 10, 1937.

117·33. Imm. Santa Ana, California; J. R. Douglas collector, July 1934.

Family PHOLCIDAE

Pholcophora americana Banks.

*120·38. ♂, ♀. Echo Lake, California; L. W. Saylor collector, July, 1934.

Family MIMETIDAE

Mimetus hesperus Chamberlin.

122·37. ♀, Imm. Ben Lomond, California; L. W. Saylor collector, April 1934.

Family THERIDIIDAE

Lithyphantes fuscus Keyserling.

117·33. 2 ♀ s. Temecula, California; 1934.

Steatoda hespera Chamberlin and Ivie.

- *114·48. ♂. Lake Kintla, Glacier Park, Montana; L. W. Saylor collector, June 1936.
 *120·38. 2 ♀ s. Echo Lake, California; L. W. Saylor collector, July 1934.

Teutana grossa (C. Koch).

- 122·37. ♂. Ben Lomond, California; L. W. Saylor collector, May 1934.

Euryopis californica Banks.

- 120·38. ♂. Echo Lake, California; L. W. Saylor collector, July 1934.
 117·34. Imm. Pomona, California; J. W. Saepe and B. J. Hall collectors, July-August 1934.
 117·33. ♀. Santa Ana, California; J. R. Douglas collector, July 1934.

Latrodectus mactans hesperus Chamberlin and Ivie.

- *121·37. ♀. Mt. Diablo, California; L. W. Saylor collector, April 8, 1934.

Dipoena sp.

- 116·33. ♀. Lake Hemet, California; J. R. Douglas collector, June 16, 1934.

Tidarren fordum (Keyserling).

Theridion fordum Keyserling, 1884, Spinnen Amerikas, 1:23, Pl. 1, f. 9

- *121·36. ♀, Imm. Big Sur, California; L. W. Saylor collector July 1934.

Theridion californicum Banks.

- 122·37. ♂, ♀, Imm. Ben Lomond, California; L. W. Saylor collector, April 1934. Berkeley, California; L. W. Saylor, May 1934.
 121·36. 3 Imm. Big Sur, California; L. W. Saylor collector April 10, 1937.

Theridion berkeleyi Emerton.

- 121·37. ♂, ♀. Mt. Diablo, California; L. W. Saylor collector, April 8, 1934.

Theridion misc. spp. Immature.

Pomona, California; J. W. Saepe and B. J. Hall collectors, July-August 1934. Lake Hemet, California; J. R. Douglas collector, June 16, 1934. Big Sur, California; L. W. Saylor collector, July 1934. Lake Kintla, Glacier Park, Montana; L. W. Saylor collector, June 1936.

Family ERIGONIDAE

***Erigone dentosa* Cambridge.**

121·36.

Big Sur, California; L. W. Saylor collector,
April 10, 1937.***Erigone ephala* Crosby and Bishop.**

*123·37. ♂, ♀ s.

Farallone Islands, California; L. W. Saylor
collector, April 13, 1934.***Erigone* sp.**

120·38. ♀.

Echo Lake, California; L. W. Saylor col-
lector, July 1934.***Grammonota pictilis* Cambridge.**

122·37. ♀.

Ben Lomond, California; L. W. Saylor col-
lector, April 1934.***Pelecopsis dignum* Chamberlin and Ivie.**

*114·48. ♂

Lake Kintla, Glacier Park, Montana; L. W.
Saylor, collector, June 1936.

Family LINYPHIIDAE

***Linyphia marginata* C. Koch.**

114·48. ♀

Lake Kintla, Glacier Park, Montana; L. W.
Saylor collector, June 1936.***Pityohyphantes lomondensis* Chamberlin and Ivie, new species.**

Pl. IV, f. 49.

FEMALE

Color: Carapace pale yellowish, with a dusky median band on the posterior part, which bifurcates just anterior to the median depression, one branch extending to each P.M. eye (there are no branches extending to the P.S. eyes). Chelicerae grading from yellowish to orange in different areas. Endites orange brown, labium dusky brown, both with pale tips. Sternum light brown, with a dusky median streak on anterior part and a submarginal outline of lighter dusky. Legs light yellowish with typical gray annuli. Abdomen grayish white, with the characteristic dark gray, ornate, median band along the full length of the dorsum. Venter pale; darker along the median area. Spinnerets dusky brown.

Structure: Similar to that of the other known American species notably *phrygianus* and *hesperus*. The epigynum shows minor differences.

Type locality: W122°5':N37°5', Ben Lomond, California; female holotype; L. W. Saylor collector, April 10, 1937.

This species may be distinguished from *phrygianus* and *hesperus* most readily by the absence of branches extending toward the P.S. eyes from the median gray band on the carapace.

Frontinella communis (Hentz).

122·37. ♂ s, ♀. Ben Lomond, California; L. W. Saylor collector, April 1934.

Microneta ? sp.

123·37. ♀ Farallone Islands, California; L. W. Saylor collector, April 1934.

Family ARGIOPIDAE

Tetragnatha extensa (Linnaeus), var.

122·37. ♂ s, ♀ s, Imm. Ben Lomond, California; L. W. Saylor collector, April 1934, and May 1937.

121·36. ♂, ♀. Big Sur, California; L. W. Saylor collector, July 1934.

Genus METELLINA Chamberlin and Ivie, new.

Typically medium sized spiders, about 4 to 6 mm. in length. Carapace low, of ordinary shape in outline; median depression basin-shaped. Clypeus low, about one diameter of an A.M. eye in height. Both eye rows slightly recurved; median ocular area slightly longer than wide; A. M. eyes slightly smaller than the others; A.M. and side eyes on low tubercles. Chelicerae slightly geniculate, vertical; fang groove with three teeth on front margin, 2 to 4 on hind margin. Legs 1 2 4 3; moderately spiny; of moderate length in female, long and slender in male. Legs I and II with a row of coarse, uniform hairs along the inner side of tarsus and metatarsus. Abdomen of female a little longer than wide, with a pair of rounded humps in front; abdomen of male smaller, more slender, and with humps poorly or not at all developed. Spinnerets short. Epigynum simple; atrium consisting of a single or double depression. Male palpus small; cymbium bears a flat, typically bifurcate process.

Genotype: *Metellina curtisi* (McCook).

Besides the two following species listed here, *Epeira bucardia* McCook from southern California and *Meta segmentata* from Europe fall in this genus. *Metellina* is related to *Meta*, in which genus some of the species have formerly been placed.

Metellina curtisi (McCook).

Pl. II, f. 20.

Pachygnatha Curtisi McCook, 1893, American Spiders, 3:271, Pl. 26, f. 5.

Meta curtisi, Gertsch and Ivie, 1936, Amer. Mus. Novitates, No. 858:20.

122·37. ♂ s, ♀ Ben Lomond, California; L. W Saylor collector, April and May 1934, April 10, 1937.

121·36. ♂ s, ♀ s Big Sur, California; L. W. Saylor collector, April 10, 1937.

Metellina mimetoides Chamberlin and Ivie, new species.

Pl. 2, f. 19.

FEMALE

Color: Carapace light yellowish, with a narrow blackish border and a large shield-shaped dusky area on the back of the head part, enclosing three light patches. Chelicerae brown, lightly washed with dusky. Sternum dark brownish black. Labium and endites dusky brown with light tips. Legs light yellowish with dusky annuli and spots. Abdomen with dorsum gray, lighter on the sides and base, and with a whitish transverse area between the humps. Lower sides dark gray; venter light gray, with a median dark band, more or less divided along the middle by light gray, and set off by a whitish band along each side. Spinnerets black with brown tips.

Structure: Carapace somewhat longer than wide, moderately narrowed in the head region; low; height of clypeus about one diameter of an A. M. eye. Anterior eye row recurved; A. M. eyes nearly as large as the A.S. eyes, a little less than a diameter apart, same distance from the side eyes. Posterior row slightly recurved; P.M. eyes a little larger than the A.S. eyes, about 2/3 of a diameter apart, and about 3/4 of a diameter from the side eyes. Lateral eyes of each side subcontiguous, on a low tubercle. Chelicerae thick, convex in front at base; fang groove with three large teeth on front margin; hind margin with one large blunt tooth near base of fang, followed by a small sharp one. Abdomen typical, with distinct rounded humps.

Epigynum with a double atrium.

Measurements:

	♀ Holotype.
Length	5.00 mm.
Carapace:	
Length	1.90
Width	1.50
Tibia-patella:	
I	3.00
IV	1.73

Type locality: W121°57':N37°48', Mt. Diablo, California; female holotype; L. W. Saylor collector, April 8, 1934.

Singa sp.

- 121·36. 3 Imm. Big Sur, California; L. W. Saylor collector,
April 10, 1937.

Neoscona neotheis (Petrunkevitch).

- 117·33. ♀, Imm. Santa Ana, California; J. R. Douglas collector,
July 1934.

Araneus pacifica (McCook).

- 122·37. ♂ s, ♀ s, Imm. Ben Lomond, California; L. W. Saylor collector,
April 1934, April 10, 1937.
121·37. ♀. Mt. Diablo, California; L. W. Saylor collector,
April 8, 1937
121·36. ♂, ♀, Imm. Big Sur, California; L. W. Saylor, collector,
April 10, 1937.

Araneus reticulatus (McCook).

- 117·33. ♀. Live Oak Park, California; J. R. Douglas collector,
June 27, 1934.

Araneus gemmoides Chamberlin and Ivie.

- 122·37. ♀. Ben Lomond, California; L. W. Saylor, collector,
August 1934.

Araneus pirus Chamberlin and Ivie.

- 122·37. ♂ Berkeley, California; L. W. Saylor collector,
September 1934.

Araneus gemmus (McCook).

- 117·33. ♂. Mill Creek, California; J. R. Douglas collector,
July 13, 1934.

Araneus solitarius (Emerton).

- 120·38. 2 ♀ s. Echo Lake, California; L. W. Saylor collector,
July 1934.

Araneus angulatus Clerck.

- 122·37. ♀. Berkeley, California; L. W. Saylor collector,
May 1934.

Araneus displicatus (Hentz).

- 122·37. ♀, Imm. Ben Lomond, California; L. W. Saylor collector,
April 1934, April 10, 1937.
121·36. Imm. Point Sur, California; L. W. Saylor collector,
April 10, 1937.

Araneus carbonarius (L. Koch).

- 121·37. 12 Imm. Mt. Diablo, California; L. W. Saylor collector,
April 8, 1934.

Epeira patagiata (Clerck).

- 122·37. ♀. Ben Lomond, California; L. W. Saylor collector, April 1934.
 122·41. ♀. Carrville, California; L. W. Saylor collector July 1934.
 114·48. ♀. Lake Kintla, Glacier Park, Montana; L. W. Saylor collector, June 1936.

Cyclosa conica (Pallas).

- 122·37. ♂ s, ♀ s. Ben Lomond, California; L. W. Saylor collector, April 1934, April 10, 1937.
 121·36. 2 ♀ s. Point Sur, California; L. W. Saylor collector, April 10, 1937.

Cyclosa turbinata (Walckenaer).

- 122·37. ♂, ♀. Ben Lomond, California; L. W. Saylor collector, April 1934.
 117·33. ♀, Imm. Live Oak Park, California; J. R. Douglas collector, June 27, 1934.

Metepeira grandiosa Chamberlin and Ivie, new species.

Pl. III, ff. 24-26.

FEMALE

Color: Carapace dusky brown, except the front of the head which is light yellowish brown; clothed with long, soft, white hairs. Chelicerae, labium, and endites dark brownish black, the two latter with pale tips. Sternum black. Coxae of legs brownish yellow on under side; trochanters blackish; and the rest of the legs yellowish, with black annuli at the distal end of each segment, the annulus of each segment slightly overlapping onto the following segment; also some dark spots at the bases of the spines on femora and tibiae. Abdomen gray, with the typical pattern of black and white above; the sides mottled; venter black with a longitudinal median white band extending from the epigynum for $\frac{3}{4}$ of the distance to the spinnerets, and a white spot on each antero-lateral side of the spinnerets. Spinnerets black with brownish tips.

Structure: Typical, except for the larger size and the shape of the epigynum. Legs stout.

Measurements:

Length	♀ (large) 8.70 mm.
Carapace:	
Length	3.20
Width	2.70
Tibia-patella:	
I	4.00
IV	3.20

Type locality: W122°5':N37°5', Ben Lomond, California; L. W. Saylor collector, April 1934; female holotype.

Other locality:

122·37. ♀. Berkeley, California; L. W. Saylor collector, May 1934.

This species is readily distinguishable from the following by the entirely black sternum, and from *foxi* Gertsch and Ivie, which also has a black sternum, by its larger size and different epigynum.

Metepeira douglasi Chamberlin and Ivie, new species.

Pl. III, ff. 21-23.

FEMALE

Color: Front of head light yellowish; posterior part of head region dusky brown; base and sides of thoracic region lighter brown touched with dusky. Chelicerae brown, paler toward tips. Labium and endites dark dusky brown with whitish tips. Sternum black with a large white median band. Coxae of legs light yellowish, touched with dusky at the base. Trochanters light yellowish, touched with dusky, mainly on the sides. Rest of legs yellowish with dusky annuli and spots, distributed as in *grandiosa*, but not as dark. Abdomen typical, essentially the same as in *grandiosa*, except that the ventral black area also contains a longitudinal gray streak along each side, and a gray transverse band at the distal end of the white median band.

Structure: Typical; the chief distinguishing features are the moderately large size, and the distinctive epigynum.

Measurements:	♀ Holotype
Length	7.00 mm.
Carapace:	
Length	3.00
Tibia-patella:	
I	3.25
IV	2.55

Type locality: W117°53':N33°42', Santa Ana, California; J. R. Douglas collector, July 1934; female holotype.

Zilla x-notata (Clerck).

122·37. Imm. Berkeley, California; L. W. Saylor collector, May 1934.

121·36. 2 ♂ s. Big Sur, California; L. W. Saylor collector, July 1934.

Eustala conchlea (McCook).

121·37. ♀. Big Sur, California; L. W. Saylor collector, April 10, 1937.

122·37. Imm. Ben Lomond, California; L. W. Saylor collector, April 1934.

Family THOMISIDAE

Xysticus gosiutus Gertsch.

- 120·38. 2 ♂, ♀. Echo Lake, California; L. W. Saylor collector, July 1934.
 122·41. ♀. Carrville, California; J. W. Saepe and B. J. Hall collectors, July 1934.

Xysticus cunctator Thorell.

- 121·37. ♂, ♀. Mt. Diablo, California; L. W. Saylor collector, April 8, 1934. ♂, Imm. Livermore Hills; L. W. Saylor collector, March 14, 1937.

Xysticus montanensis Keyserling.

- 121·36. ♂, ♀. Point Sur, California; L. W. Saylor collector, April 10, 1937.

Xysticus pretiosus Gertsch.

- 121·36. ♂, ♀, Imm. Point Sur, California; L. W. Saylor collector, April 10, 1937.

Xysticus gulosus Keyserling.

- 122·37. ♀. Ben Lomond, California; L. W. Saylor collector, March 1934.

Xysticus spp. (Miscellaneous immature).

- 114·48. 3 spp. Kintla Lake, Glacier Park, Montana; L. W. Saylor collector, June 1936.

Coriarachne brunneipes Banks.

- 122·37. ♂, ♀. Ben Lomond, California; L. W. Saylor, collector, May 1934.

Coriarachne utahensis (Gertsch).

- 122·41. ♀. Carrville, California; J. W. Saepe and B. J. Hall collectors, July 1934.

Tmarus angulatus (Walkenaer).

- 122·37. ♂, Imm. Ben Lomond, California; L. W. Saylor collector, April 1934, April 10, 1937.
 117·33. Imm. Live Oak Park, California; J. R. Douglas collector, June 27, 1934.

Misumenoides aleatorius (Hentz)

- 119·34. Imm. Santa Barbara, California; J. R. Douglas collector, August 8, 1934.
 117·34. Imm. Pomona, California; J. W. Saepe and B. J. collectors, July-August 1934.
 117·33. Imm. Santa Ana, California; J. R. Douglas collector, July 1934.

Misumena vatia (Clerck).

- 121·36. ♂, ♀. Big Sur, California; L. W. Saylor collector, July 1934; April 10, 1937.
 114·48. 2 ♂ s. Kintla Lake, Glacier Park, Montana; L. W. Saylor collector, June 1936.

Diaea pictilis (Banks)

- 121·36. ♂, Imm Big Sur, California; L. W. Saylor collector April 10, 1937

Misumenops celer (Hentz).

- 122·41. ♀ Carrville, California; J. W. Saepe and B. J. Hall collectors, July 1934.
 122·37. ♂, ♀ s, Imm. Ben Lomond, California; L. W. Saylor collector, March, April, May 1934. Berkeley, California; L. W. Saylor collector, May 1934.
 121·37. ♀. Mt. Diablo, California; L. W. Saylor collector, April 8, 1934.
 121·36. ♂, ♀ s Big Sur, California; L. W. Saylor collector April 10, 1937
 114·48. ♂ Lake Kintla, Glacier Park, Montana; L. W. Saylor collector, June 1936.

Misumenops oblongus (Keyserling).

- 116·33. ♀ Lake Hemet, California; J. R. Douglas collector, June 16, 1934.
 117·33? ♀. Massacre Canyon, California; J. R. Douglas collector, June 28, 1934.

Thanatus altimontis Gertsch.

- 120·38. ♂. Echo Lake, California; L. W. Saylor collector, July 1934.

Philodromus californicus Keyserling.

- 122·37. ♀, Imm. Ben Lomond, California; L. W. Saylor collector, April 1934.
 121·36. ♀. Big Sur, California; L. W. Saylor collector, July 1934.
 120·38. ♂, ♀. Echo Lake, California; L. W. Saylor collector, July, 1934.

Philodromus satullus Keyserling.

- 122·37. ♂. Ben Lomond, California; L. W. Saylor collector, March 1934.
 121·36. ♀, Imm. Big Sur, California; L. W. Saylor collector, April 10, 1937.

Philodromus moestus Banks.

- 120·38. ♂. Echo Lake, California; L. W. Saylor collector, July 1934.

Philodromus speciosus Gertsch.

- 122·37. ♀. Ben Lomond, California; L. W. Saylor collector, April 1934.
 121·36. ♀. Mt. Diablo, California; L. W. Saylor collector, April 8, 1934.
 120·38. ♂, ♀. Echo Lake, California; L. W. Saylor collector, July 1934.

Family GNAPHOSIDAE

Gnaphosa gigantea Keyserling

- 120·38. ♀. Echo Lake, California; L. W. Saylor collector, July 1934.
 121·37. Imm. Livermore Hills, California; L. W. Saylor collector, March 14, 1937.

Haplodrassus signifer (C. Koch).

- 114·48. ♀. Lake Kintla, Glacier Park, Montana; L. W. Saylor collector, June 1936.

Sergiolus sp.

- 122·37. Imm. Ben Lomond, California; L. W. Saylor collector, April 1934.

Poecilochroa montana Emerton.

- 122·41. 3 ♀ s. Carrville, California; J. W. Saepe, B. J. Hall, and L. W. Saylor collectors, July 1934.
 122·37. ♂. Ben Lomond, California; L. W. Saylor collector, May 1934.
 121·36. Imm. Point Sur, California; L. W. Saylor collector, April 10, 1937.
 120·38. ♀. Echo Lake, California; L. W. Saylor collector, July 1934.

Liodrassus carrvillus Chamberlin and Ivie, new species.

Pl. III, ff. 27-29.

MALE

Color: Carapace brownish orange. Chelicerae reddish brown. Endites yellowish at base, orange distally, with white tips. Labium orange brown. Sternum yellow, becoming orange on the margins. Legs yellowish orange, the anterior legs becoming darker on distal segments. Abdomen dark gray above, except for the scutellum which is reddish brown; venter paler.

Structure: Carapace ovoid. Anterior eye row procurved; A.M. eyes larger than the laterals, $2/3$ of a diameter apart, contiguous with the side eyes. Posterior row straight; P.M. eyes a short diameter apart, much closer to the side eyes. Side eyes of the two rows a little more than $1/2$ diameter apart; median eyes of the two rows more than a diameter apart. Median ocular area longer than wide, wider in front than behind. Chelicerae slender; without teeth on margins of fang groove. Endites three times as long as greatest width, slightly S-shaped; widened at distal end. Labium much longer than wide. Sternum oval, length nearly twice the width. Legs 4 1 2 3. Leg I with a pair of small spines at distal end of tibia and a pair near base of metatarsus, on under side; five spines above on femur, 3 median, 2 anterior. Leg II same as leg I, except for an additional spine near middle on the under side of tibia. Leg III with 7 spines above on femur, 3 median, 2 posterior, 2 anterior; one dorso-posterior spine near middle of patella; 3 pairs below on tibia, 4 spines on anterior face, 3 on posterior face; metatarsus with 7 spines around distal end, a pair near middle and a pair near base below, two on anterior face, and one on posterior face. Leg IV with five spines above on femur, 3 median, and one on each side near distal end; patella without spines; tibia with 3 pairs below, and three on each lateral face; metatarsus with 7 spines around distal end, two other pairs below, one near base and one near middle, 3 spines on each lateral face. Palpus as figured.

Measurements:

Length	♂ Holotype.
	6.50 mm.
Carapace:	
Length	3.00
Width	2.20
Tibia-patella:	
I	2.66
IV	2.80

Type locality: W122°42':N41°4', Carrville, California; L. W. Saylor collector, July 1934; male holotype.

This species is most closely related to *L. florissantus* Chamberlin.

Nodocion barbaranus Chamberlin.

122·37. ♂. Berkeley, California; L. W. Saylor collector, May 1934.

Drassyllus apachus Chamberlin.

122·37. ♀. Ben Lomond, California; L. W. Saylor collector, May 1934.

Zelotes discens Chamberlin.

121·36. ♀. Point Sur, California; L. W. Saylor collector, April 10, 1937.

Zelotes subterraneus (C. Koch).

120·38. ♀. Echo Lake, California; L. W. Saylor collector, July 1934.

Family ANYPHAENIDAE

Anyphaena californica Banks.

Pl. II, f. 17.

121·36. ♂ s, ♀ s, Imm. Big Sur, California; L. W. Saylor collector, April 10, 1937.

Anyphaena pomona Chamberlin and Ivie, new species.

Pl. II, f. 16.

FEMALE

Color: Carapace yellowish, with light dusky reticulations on head, and radial streaks on upper sides of the thoracic part. Chelicerae yellowish with basal half in front dusky, which area encloses a longitudinal yellow spot. Endites yellowish. Labium dusky yellow. Sternum light yellow with a dark spot on the margin opposite each coxa. Legs pale yellow, with a dusky spot at the base of each spine. Abdomen pale gray with darker mottlings and specks above; sides with many small dark specks and dashes; venter pale with darker specks on sides.

Structure: Anterior eye row straight; median eyes smaller than the laterals, less than a radius apart, closer to the side eyes. Posterior row straight, eyes equal, about equidistant, a little less than a diameter apart. Legs spiny. Epigynum as figured. Spiracle opening about midway between spinnerets and genital furrow, being slightly closer to the furrow.

Measurements:

	♀ Holotype
Length	5.80 mm.
Carapace:	
Length	2.30
Width	1.75
Tibia-patella:	
I	2.20
IV	2.75

Type locality: 117·33 ?, Mill Creek, California; J. R. Douglas collector, July 13, 1934; female holotype.

Anyphaena spp.

122·37. Imm.

Ben Lomond, California; L. W. Saylor collector, April 1934.

Family CLUBIONIDAE

Trachelas pacificus Chamberlin and Ivie.

- *117·34. 2 ♀ s. Pomona, California; J. W. Saepe and B. J. Hall collectors, July-August 1934.

Meriola californica (Banks).

- Trachelas californicus* Banks, 1904, Proc. Calif. Acad. Sci., 3:339, Pl. 40, f. 47.
121·36. ♀. Point Sur, California; L. W. Saylor collector, April 10, 1937.

Chiracanthium inclusum (Hentz).

- 122·37. ♀. Berkeley, California; L. W. Saylor collector, May 1934.
121·36. ♂. Point Sur, California; L. W. Saylor collector, April 10, 1937.
117·33. ♂. Live Oak Park, California; J. R. Douglas collector, June 27, 1934.

Clubiona canadensis Emerton.

- 120·38. ♀, Imm. Echo Lake, California; L. W. Saylor collector, April 10, 1937.
122·37. 2 ♀ s. Ben Lomond, California; L. W. Saylor collector, April 1934.

Liocranoides sp.

- 121·36. Imm. Point Sur, California; L. W. Saylor collector, April 10, 1937.

Liocranoides flavescens Chamberlin and Ivie, new species.

Pl. II, f. 18.

FEMALE

Color: Carapace orange. Chelicerae chestnut. Endites and labium orange brown with white tips, the labium slightly dusky. Sternum orange at margins, yellowish at center. Legs light orange brown. Abdomen pale gray.

Structure: Carapace typical; height of clypeus a little more than one eye diameter. Anterior eye row slightly recurved; A.M. eyes smaller than the laterals, about $\frac{2}{3}$ of a diameter apart, closer to the side eyes. Posterior row recurved; eyes equal; P.M. eyes slightly more than a radius apart, more than a diameter from the side eyes. Lateral eyes of the two rows about a radius apart. Median eyes of the two rows less than a diameter apart. Median ocular quadrangle slightly longer than wide, about as wide in front as behind. Three teeth on each margin of the fang groove. Sternum nearly circular, with undulating margins. Tibiae I and II each with six pairs of spines on under side. Epigynum as figured.

Measurements:	♀ Holotype.
Length	13.70 mm.
Carapace:	
Length	5.25
Width	4.00
Tibia-patella:	
I	7.45
IV	7.25

Type locality: W122°5':N37°5', Ben Lomond, California; female holotype; L. W. Saylor collector, May 1934.

Family SALTICIDAE

Phidippus formosus (Peckham).

- 122·37. ♂ s, s ♀, Imm. Ben Lomond, California, March and April 1934; Berkeley, April and May 1934; L. W. Saylor collector.
- 122·41. ♂ s, ♀ s, Imm. Carrville, California; L. W. Saylor, J. W. Saepe, and B. J. Hall collectors, July 1934.
- 121·36. ♀, Imm. Big Sur, California; L. W. Saylor collector, July 1934, April 10, 1937.
- 121·37. ♂. Mt. Diablo, California; L. W. Saylor collector, April 8, 1934.
- 120·38. ♂ s, ♀ s. Echo Lake, California; L. W. Saylor collector, July 1934.
- 119·34. ♂ Imm. Santa Barbara, California; J. R. Douglas collector, August 8, 1934.
- 117·34. ♀, ♂, Imm. Pomona, California; J. W. Saepe and B. J. Hall collectors, July-August, 1934.
- 117·33. Imm. Live Oak Park, Santa Ana, Mill Creek, and Massacre Canyon, California; J. R. Douglas collector, June and July 1934.
- 116·33. Imm. Lake Hemet, California; J. R. Douglas collector, June 16, 1934.
- 114·48. ♂ s, ♀. Kintla Lake, Glacier Park, Montana; L. W. Saylor collector, June 1936.

Paraphidippus marginatus (Walckenaer).

- 122·41. ♂ s, ♀ s. Carrville, California; J. W. Saepe, B. J. Hall, and L. W. Saylor collectors, July 1934.

Metaphidippus aeneolus (Curtis).

- 122·41. ♂ s, ♀ s. Carrville, California; L. W. Saylor, J. W. Saepe, and B. J. Hall collectors, July 1934.
- 122·37. ♂ s, ♀ s. Ben Lomond, California; L. W. Saylor collector, March, April, May 1934, April 10, 1937; Berkeley, California, L. W. Saylor, April 1, 1934.
- 121·37. ♂, ♀. Mt. Diablo, California; L. W. Saylor collector, April 8, 1934.
- 121·36. ♂, Imm. Big Sur, California; L. W. Saylor collector, April 10, 1934.
- 120·38. ♀ s. Echo Lake, California; L. W. Saylor collector, July, 1934.
- 117·34. ♂ s, ♀ s. Pomona, California; J. W. Saepe and B. J. Hall collectors, July-August 1934.

Metaphidippus imperialis (Peckham).

- 122·41. ♂ s, ♀ s. Carrville, California; J. W. Saepe and B. J. Hall collectors, July 1934.
- 122·37. ♂ s, ♀ s. Ben Lomond, California; L. W. Saylor collector, March, April 1934; Imm., Berkeley, California; L. W. Saylor collector, April 1, 1934.

Metaphidippus harfordi (Peckham).

- 121·36. 3 ♂ s, ♀. Point Sur, California; L. W. Saylor collector, April 10, 1937.
- 114·48. ♂, Imm. Lake Kintla, Glacier Park, Montana; L. W. Saylor collector, June 1936.

Metaphidippus versicolor (Peckham).

- 122·41. ♀ s. Carrville, California; L. W. Saylor, J. W. Saepe, and B. J. Hall collectors, July 1934.

Metaphidippus dominatus Chamberlin and Ivie, new species.

Pl. III, ff. 34-36.

MALE

Color: Integument of carapace dark brown, blackish in eye region, with a median pale spot just back of the A.M. eyes. Carapace covered with white and reddish brown scale-hairs; the white hairs form a narrow margin along sides and across clypeus, a dense transverse patch above anterior eyes, which extends narrowly thru the middle and posterior eyes, and more broadly back across the top of the carapace to the base; the rest of the carapace more sparsely clothed with red-

dish brown hairs. Chelicerae dark brown, with white hairs at the base. Labium and endites dark brown with pale tips. Sternum dark brown, paler in the center. Palpus brown. Leg I with femur and tibia dark brown, the other segments light yellowish brown; coxa and trochanter brown, except on the under side, where they are more yellowish. The other legs light yellowish with a broad dusky brown annulus around each femur near distal end, and another around base of the tibia. Abdomen with a broad median brown area above, which may or may not contain light spots; sides above whitish with brown specks; lower sides brown; venter with a broad gray or brownish median area, sides white. The dark areas above covered with reddish brown hairs, the light areas with white hairs; the venter more sparsely covered with short white hairs. Spinnerets dark brown.

Structure: Chelicerae vertical, short and stout. Leg I long and stout. Palpus with embolus split, as shown in the figure.

Measurements:	♂ Holotype
Length	5.75 mm.
Carapace:	
Length	2.90
Width	2.10
Tibia-patella:	
I	3.50
IV	2.15

Type locality: W121°52'N36°16', Big Sur, California; male holotype and paratype; L. W. Saylor collector, July 1934.

Metaphidippus albeolus Chamberlin and Ivie, new species.

PL. III, f. 33; PL. IV, ff. 40-41.

MALE

Color: Carapace dark brownish red, lighter on top of head; eyes surrounded with black. A broad band of short white hairs extending thru posterior eye to near the base of the carapace. A small white spot above and between the A.M. eyes. Clypeus thickly covered with long white hairs. Chelicerae dark reddish brown, with white hairs on basal half. Labium, endites, sternum, palpi, and leg I reddish brown. Other legs reddish brown with more or less pale yellow on basal and distal segments. Abdomen brown with a white band along each side above.

Structure: Typical, except for the palpus, which can be readily distinguished by the form of the embolic division, as illustrated.

FEMALE

Color: Carapace brownish red; eyes surrounded with black; clothed above with coarse black setae and fine white hairs; a white spot above and between A.M. eyes. Clypeus covered with long white hairs. Chelicerae dark brownish red, basal half covered with white hairs. Labium and endites dark brown with pale tips. Sternum brownish red. Palpi light yellowish, with long white hairs. Leg I brownish red, except distal part of tarsus, which is yellowish. Other legs light yellowish, with brownish red on distal part of femora, patellae, and tibiae. Abdomen brownish red, with sides above and a broad median area largely whitish; lower sides brownish; venter reddish brown along median area, sides whitish and containing brownish specks. Spinnerets brown.

Structure: Essentially typical; robust; legs stout, especially leg I. Distinguishable by the form of the epigynum.

Measurements:

	♂	♀
Length	5.10 mm.	7.00 mm.
Carapace:		
Length	2.40	3.20
Width	1.87	2.40
Tibia-patella:		
I	2.10	2.73
IV	1.52	2.15

Type locality: W121°54':N36°19', Point Sur, California; male holotype, female allotype, male and female paratypes; L. W. Saylor collector, April 10, 1937.

Metaphidippus watonus Chamberlin and Ivie, new species.

Pl. IV, ff. 37-39.

MALE

Color: Integument of carapace reddish brown, paler on top of head, and along area extending back from each posterior eye; a pair of dark spots on center of head; eyes surrounded with black. A band of white hairs extends thru the lateral eyes on each side to base of carapace. Clypeus bordered with white hairs. Chelicerae reddish brown, with a few white hairs on front. Labium and endites reddish brown with pale tips. Sternum, palpi, and legs pale yellowish; leg I with the patella, tibia, and metatarsus light reddish brown. Abdomen pale whitish, with a broadly fusiform area of reddish brown on dorsum; this area paler in the center, with darker specks.

Structure: Essentially typical, except for the embolic division of the palpal organ, which is distinct, as shown in the figure.

FEMALE

Color: Integument of carapace pale, except for the top of the head and a median band extending to base; this area is for the most part reddish; it contains a median Y-shaped whitish mark on the front of the head, with the stem directed anteriorly between the A.M. eyes; also a short whitish streak on each side on front, of head, just inside of the lateral eyes. Clypeus covered with white hairs. Chelicerae yellowish brown, paler in front, with white hairs near base. Labium and endites brownish yellow. Sternum, legs, and palpi pale yellowish; leg I more orange beyond femur. Abdomen whitish, with more or less of a reddish lanceolate area above.

Pale specimens with reddish colors of carapace and abdomen partially or completely faded.

Epigynum distinctive, as figured.

Measurements:

	♂	♀
Length	5.40 mm.	7.00 mm.

Carapace:

Length	2.50	2.60
Width	1.87	1.87

Tibia-patella:

I	2.50	1.90
IV	1.80	1.65

Type locality: W121°42' :N41°4', Carrville, California; male holotype, female allotype, female paratypes; J. W. Saepe and B. J. Hall collectors, July 1934.

Metaphidippus tricolor Chamberlin and Ivie, new species.

Pl. III, ff. 30-32.

MALE

Color: Integument of carapace black in eye area, dark brown elsewhere, with a narrow margin of white scales on each side; a wider band of white scales along each side, just below the lateral eyes, and extending back to near the base; more white scales on top of head near front; the clypeus and the rest of the carapace covered with rufous brown scales. Chelicerae, labium, endites, and sternum dark brown, the sternum nearly black. Palpus brown, with white scales above. Legs varying shades of brown; the femora dusky; three broad dusky annuli distributed thus: on distal end of patella and overlapping onto base of tibia; on distal part of tibia, and on distal end of metatarsus; the lighter areas further emphasized with white scales; coxa of leg I light brownish, the others yellowish. Abdomen with a median rufous band above, with a blackish band on each side of this, followed on each side by a white band; these followed on the sides by a wide blackish band

(all bands even and smooth). Venter dusky in middle, with a white band along each side, and containing a pair of short white streaks just back of genital furrow. Spinnerets brown.

Structure: Carapace typical. Chelicerae stout, oblique, and divergent at the tips. Tibia I with the usual six spines below, but they are crowded toward distal end, all but the posterior basal spine beyond the middle; this spine is set a considerable distance back of its mate. Embolic division of palpus simple.

Measurements:	♂ Holotype
Length	4.50 mm.
Carapace:	
Length	2.20
Width	1.80
Tibia-patella:	
I	2.53
IV	1.60

Type locality: W122°5':N37°5', Ben Lomond, California; male holotype, immature paratypes, April 10, 1937; immature paratype, April 1934, L. W. Saylor collector.

Metaphidippus vitis (Cockerell).

122·41. ♂ s.	Carrville, California; J. W. Saepe and B. J. Hall collectors, July 1934.
122·37. ♀ s, Imm.	Ben Lomond, California; L. W. Saylor collector, April 1934.
117·34. ♂ .	Pomona, California; J. W. Saepe and B. J. Hall collectors, July-August 1934.

Icius similis Banks.

122·41. 2 ♂ s, 2 ♀ s.	Carrville, California; L. W. Saylor collector, July 1934.
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Pseudicius monticolus (Banks)

120·38. ♂ .	Echo Lake, California; L. W. Saylor collector, July 1934.
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Marchena sissonii Peckham.

122·41. ♂ , ♀ s.	Carrville, California; L. W. Saylor, J. W. Saepe, and B. J. Hall collectors, July 1934.
121·37. 2 ♂ s.	Mt. Diablo, California; L. W. Saylor collector, April 8, 1934.
114·48. ♂ .	Lake Kintla, Glacier Park, Montana; L. W. Saylor collector, June 1936.

Euophrys monadnock Emerton.

122·37. Imm. Ben Lomond, California; L. W. Saylor collector, March 1934.

Sitticus ranieri Peckham.

114·48. 2 ♂ s. Lake Kintla, Glacier Park, Montana; L. W. Saylor collector, June 1936.

Salticus peckhamae Cockerell.

122·41. 3 ♀ s. Carrville, California; J. W. Saepe and B. J. Hall collectors, July 1934.

Hycia robusta Banks.

122·37. ♀. Berkeley, California; L. W. Saylor collector, October 8, 1936.

Thiodina sylvana (Hentz).

121·37. ♀, Imm. Mt. Diablo, California; L. W. Saylor collector, April 8, 1934.

117·34. Imm. Pomona, California; J. W. Saepe and B. J. Hall collectors, July-August 1934.

117·33. ♂, Imm. Santa Ana, California, July 1934; Massacre Canyon, male, June 28, 1934; J. R. Douglas collector.

116·33. ♀. Lake Hemet, California; J. R. Douglas collector, June 16, 1934.

114·48. ♂, ♀. Lake Kintla, Glacier Park, Montana; L. W. Saylor collector, June 1936.

Marpissa californica (Peckham).

122·41. ♀. Carrville, California; J. W. Saepe and B. J. Hall collectors, July 1934.

122·37. ♂, ♀. Ben Lomond, California; L. W. Saylor collector, May 1934.

117·33. ♀. Massacre Canyon, California; J. R. Douglas collector, June 28, 1934.

117·34. ♂, ♀. Pomona, California; J. W. Saepe and B. J. Hall collectors, July-August 1934.

Neon nellii Peckham.

122·37. ♂, ♀. Ben Lomond, California; L. W. Saylor collector, March 1934.

Sassacus papenhoei Peckham.

122·41. ♂, ♀. Carrville, California; L. W. Saylor, J. W. Saepe and B. J. Hall collectors, July 1934.

122·37. Imm. Ben Lomond, California; L. W. Saylor collector, March 1934.

Habrocestum morosum (Peckham).

- 122·37. ♂, ♀, Imm. Ben Lomond, California; May 1934, April 10, 1934; Berkeley, immature, May 1934; L. W. Saylor collector.
- 121·36. Imm. Point Sur, California; L. W. Saylor collector, April 10, 1937.
- 117·34. Imm. Pomona, California; J. W. Saepe and B. J. Hall collectors, July-August 1934.

Evarcha hoyi (Peckham).

- 122·41. ♂ s, ♀ s. Carrville, California; J. W. Saepe and B. J. Hall collectors, July 1934.
- 122·37. ♂ s, ♀ s. Ben Lomond, California; L. W. Saylor collector, March, April 1934, April 10, 1937.

Pellenes hirsutus (Peckham).

- 122·41. ♂ s, ♀ s. Carrville, California; L. W. Saylor, J. W. Saepe and B. J. Hall collectors, July 1934.
- 122·37. ♂, ♀. Ben Lomond, California; L. W. Saylor collector, March April 1934.
- 121·36. ♂, ♀. Point Sur, California; L. W. Saylor collector, April 10, 1937.
- 120·38. ♂ s, ♀ s. Echo Lake, California; L. W. Saylor collector, July 1934.

Pellenes oregonensis (Peckham).

- 122·41. ♂. Carrville, California; J. W. Saepe and B. J. Hall collectors, July 1934.
- 122·37. ♂. Ben Lomond (town), California; L. W. Saylor collector, May 10, 1934.
- 121·36. ♂. Big Sur, California; L. W. Saylor collector, July 1934.

Pellenes californicus Banks.

- 122·37. ♂ Ben Lomond, California; L. W. Saylor collector April 1934.
- 117·34. ♀. (?) Pomona, California; J. W. Saepe and B. J. Hall collectors, July-August 1934.

Pellenes philipi Gertsch and Jellison.

- 114·48. ♂, ♀. Lake Kintla, Glacier Park, Montana; L. W. Saylor collector. June 1936.

Pellenes eleganoides Chamberlin and Ivie, new species.

Pl. IV, ff. 42-45.

MALE

Color: Integument of carapace black or very dark brown, covered with small appressed gold brown and blackish scales; except for the margin, a small patch in front of each posterior eye and extending thru the middle eye, and a narrow border around each anterior eye, which are white. Carapace also bearing a number of large erect black hairs, more numerous over the anterior eyes. Clypeus dark, covered with silvery spatulate scales. Chelicerae dark brown, bearing a few whitish hairs and a good number of silvery spatulate scales, as on the clypeus. Labium and endites brown with pale tips. Sternum dark brown; coxae pale brown; both clothed with white hairs. Palpus brown, clothed with sparse white and black hairs, and a moderate number of white scales; the tip of the cymbium more thickly clothed with short white hairs. Leg I: Femur, patella and tibia dark brown; metatarsus and tarsus yellowish; the femur covered on the anterior face with white scales, has a dorsal fringe of long hairs, which are dark basally and white distally, and a thick ventral fringe of white hairs; patella with a dorsal fringe of whitish and black hairs, and a brush of mixed dark and light hairs below; both faces covered with white scales; tibia with fringe of black hairs above, except distally, where they become white, a fringe of mixed dark and light hairs below; metatarsus and tarsus bearing sparse hairs, and a thin covering of white scales, except for a dorsal line of black hairs. Other legs brown, more or less covered with white scales and scattered hairs. Abdomen with the integument dark; sides and a median dorsal band white, the median band not reaching to the spinnerets; rest of dorsum dark brown; venter pale gray.

Structure: Palpus similar to that of *elegans*. Leg I short, especially the tarsus and metatarsus, with a fringe of long hairs above and below on femur, patella and tibia. Leg III large, but not modified.

FEMALE

Color: Integument of carapace dark brown, covered with white scales and short black hairs; the white scales fill in the spaces between the anterior eyes, and cover the clypeus, except for a dark patch extending downward from each A. M. eye; sides more thickly covered with white scales near margin, more sparsely above; a stripe of white scales extends over the top of the carapace on each side, beginning at the base and extending thru the posterior, the median, and the A.S. eyes; a median patch of white scales back of the A.M. eyes, which forks posteriorly, sending a branch to each posterior eye; a white spot midway between the posterior eyes. The top of the carapace otherwise black. (The pattern of white scales less sharply defined on some specimens). Chelicerae dark brown. Labium and endites dark brown with pale tips. Sternum dark brown; coxae yellowish brown; both

covered with white scales. Legs dark brown, mottled with white scales. Integument of abdomen dark, except for median area of venter; with the hairs and scales, it appears gray above, with a median white spot about $1/3$ of the length above the spinnerets and with a small white chevron attached to it; a white patch on each side. Upper spinnerets and tips of lower pair covered with brown hairs, with a median brown patch extending onto top of abdomen from the spinnerets for a short distance. Venter pale gray. Epigynum dark.

Structure of epigynum as figured.

Measurements:	♂	♀
Length	4.80 mm.	6.70 mm.
Carapace:		
Length	2.50	3.00
Width	1.90	2.30
Tibia-patella:		
I	1.50	1.70
II	1.37	1.53
III	1.95	2.40
IV	1.45	1.65

Type locality: W122°5':N37°5', Ben Lomond, California; male holotype, female allotype, several male and female paratypes; L. W. Saylor collector, March and April 1934.

This species is closely related to *P. elegans* Peckham, but is readily distinguishable in the male by the absence of the white bands on the sides of the carapace above.

Pellenes eleganoides suranus Chamberlin and Ivie, new variety.

This variety is very close to *eleganoides*. The principle difference is in the coloring on leg I of the male. In this variety, the anterior face of tibia I, with the dorsal and ventral fringes, are deep black, except for the distal half above, which is whitish. In *eleganoides*, this area, with the fringes, is hoary, not a deep black.

Type locality: W121°54':N36°19', Point Sur, California; male holotype, female allotype; L. W. Saylor collector, April 10, 1937.

Pellenes bulbipes Chamberlin and Ivie, new species.

Pl. IV, ff. 46-48.

MALE

Color: (Dry) Integument of eye area black, the rest of the carapace dark brown. Eye area covered with golden scales (the thoracic part of the carapace rubbed smooth, but apparently covered with dark scales). A thick fringe of light brown hairs over anterior eyes. Clypeus completely covered with snow white scales. A very narrow border of white along lower edge of carapace. Chelicerae com-

pletely covered in front with long white hairs. Palpus pale yellowish; the femur with black hairs on the ectal side, but otherwise covered with white hairs; patella covered with short white hairs; tibia and tarsus covered with long white hairs, with some dark hairs at distal end of tarsus. Sternum and coxae pale yellowish, covered with light hairs. Leg I with integument of femur and patella dark brown, the rest pale yellowish; the femur with a dense brush of black hairs below at distal end on posterior side (this duplicated in a lesser degree on leg II), followed proximally on under side with long white hairs; anterior side of femur, and sides and under side of patella covered with white scale-hairs; tibia, metatarsus, and tarsus clothed with long white hairs, the tarsus also bearing fine appressed black hairs on the under side. Other legs dark brown, clothed with black hairs and white scales. Abdomen with integument blackish above, with a small runcinate pale mark on posterior half; sides with light diagonal streaks; venter pale with dark markings; (dorsum of abdomen rubbed bare) middle at base above bearing some white scales.

Structure: Posterior eye row barely wider than the anterior row. Anterior row recurved; the median eyes fully twice the diameter of the side eyes, less than half a radius apart, slightly farther from the side eyes. Eyes green. Height of clypeus about $1\frac{1}{2}$ diameter of an A.M. eye. Chelicerae only slightly longer than height of clypeus. Palpus and leg I as figured; leg I heavy with tarsus and metatarsus swollen. Third leg not modified.

Measurements:

	♂ Holotype
Length	5.00 mm.
Carapace:	
Length	2.60
Width	2.00
Tibia-patella:	
I	2.00
II	1.70
III	2.10
IV	1.70

Type locality: W122°42':N41°4', Carrville, California; male holotype; J. W. Saepe and B. J. Hall collectors, July 1934.

Pellenes nigripes Chamberlin and Ivie, new species.

Pl. V, ff. 56-60.

MALE

Color: Integument of carapace black; top of head with golden scales and black hairs; long light rufous hairs over and between the eyes in front. Clypeus with a white transverse line across front just below A.M. eyes, another narrow line across lower margin; the space

between appears blackish green in alcohol but silvery green when dried out. The front of the chelicerae entirely covered with long white hairs, these arranged in seven vertical rows on the two chelicerae. Sternum light brown; coxae light yellowish; both clothed with white hairs. Palpus with integument of femur, ectal side of patella, and tibia dark brown; ectal side of cymbium bare, light brown; anterior side of patella and most of cymbium light yellowish; femur and patella clothed with white hairs; the tibia and cymbium covered with long pink hairs, except on the ectal side of the tibia where the hairs are slender and black. Leg I with integument of femur black above, lighter on lower half, clothed with black hairs on posterior side, white hairs on anterior side, except for a longitudinal black stripe along the center above and a black patch on the ventral side at distal end; patella dusky, with some white scales above; tibia and metatarsus pale below, a broad dusky stripe along each side above, and a median dorsal light stripe; tarsus deep black, with white scales along top. Other legs with femora and patella blackish brown, somewhat lighter distally, clothed with black hairs and whitish scales. Abdomen blackish above, apparently with a longitudinal median stripe of white scales and oblique white streaks down sides. Venter marked with longitudinal dusky and light diffuse bands, more or less obscured when dry by a covering of pale gray scales.

Structure: Similar to *americanus* and *bulbipes*. Tarsus and metatarsus I slender. Palpus almost identical with that of *bulbipes*, although the ectal spur of the tibia is somewhat more slender.

Distinguished by the black tarsus, pink palpus and wide clypeus with transverse white lines below anterior eyes and across margin with space between greenish.

FEMALE

Color: Carapace blackish brown, covered with white scales above and with a narrow margin along sides white, this margin broadened toward base; front of head bearing many long black hairs; clypeus and between eyes in front thickly covered with white hairs, except for a dark space just below each A. M. eye. Chelicerae dark brown with some white scales on front near base. Sternum and coxae yellowish brown, clothed with white hairs. Legs brownish, with white scales and black hairs. Abdomen marked with a pattern of black and pale gray above, as shown in the figure, with scattered patches of reddish hairs, especially on the black areas. Venter pale gray, with some blackish specks in the integument, which are concealed in dry specimens by pale gray scale-hairs.

Epigynum of characteristic form, but distinct in details, as shown in the figure.

Measurements:

	♂	♀
Length	5.6 mm.	6.0 mm.
Carapace:		
Length	2.7	3.0
Width	2.1	2.3
Tibia-Patella:		
I	2.2	1.8
II	1.7	1.7
III	2.2	2.4
IV	2.0	2.1

Type locality: W120°52':N38°8', Echo Lake, California; male holotype, female allotype, male and female paratypes; L. W. Saylor collector, July 1934.

Pellenes mustaciata Chamberlin and Ivie, new species.

Pl. V, ff. 50-55.

MALE

Color: Integument of eye area black; sides and posterior part dark brown, covered with golden scales. Top of head bearing many long black hairs. The soft hairs above and between the front eyes white. Clypeus pale pinkish, with a white transverse line just below the anterior eyes. Chelicerae dark brown, clothed with long white hairs at base, down ectal side, and part way down anterior median side; the rest shiny smooth. Labium and endites brownish with light tips. Sternum and coxae pale yellowish. Palpus with integument of femur, patella, and tibia brown; cymbium yellowish brown; femur, patella and tibia with light hairs, except on distal part of femur above, and patella and tibia above, where they are mostly black; distal end of patella above crossed transversely with a band of bright silvery scales. Cymbium with a dense patch of long white scales across base above, the rest more sparsely clothed with long pale pinkish yellow hairs. Leg I pale, except for a dusky band along top of femur, patella and tibia, and the distal part of the tarsus, which is deep black. The other legs pale, slightly darkened above, especially on tibia; clothed with light hairs, a few scattered black hairs, and white scales. Integument of abdomen blackish above, somewhat paler below. Sides and venter covered with white scales. Dorsum covered with rufous hairs, except for a median band of white scales on posterior part. Spinnerets dark brown.

Structure: Clypeus high, covered with a dense mat of light hairs, these extending outward beyond the margin of the carapace as shown in the figure. Leg I unmodified, except for a longitudinal brush of pale yellowish hairs along inner side of femur, and some long whitish hairs and short scales on the under side. Structure otherwise very similar to that of *tarsalis* and *americanus*.

FEMALE

Color: Integument of carapace dark brown, covered with white scales, except for a small patch of rufous scales behind and below each posterior eye and a longitudinal median patch along the thoracic part; some black hairs on top of head part; a patch of long white hairs below anterior eyes. Chelicerae dark brown; shiny, except for a few white scales near base. Labium and endites light brown with pale tips. Palpi light brownish yellow, clothed with white hairs intermixed with a few black ones. Legs light brownish, clothed with white scales and some white and black hairs. Abdomen gray, clothed with black, white, and light brownish gray hairs in a pattern as shown in the figure. Venter pale. Spinnerets brown.

Structure: Similar to that of *americanus*, except for the epigynum. See figure.

Measurements:

	♂	♀
Length	5.00 mm.	5.00 mm.
Carapace:		
Length	2.40	2.40
Width	1.80	1.80
Tibia-patella:		
I	1.70	1.50
II	1.45	1.30
III	1.90	1.90
IV	1.65	1.75

Type locality: W122°5':N37°5', Ben Lomond, California; male holotype, female allotype, several male paratypes; L. W. Saylor collector, March 1934.

This species is closely related to *P. tarsalis* Banks.

Pellenes spp. (Unplaced females).

Sp. A. 117·33?. ♀.	Massacre Canyon, California; J. R. Douglas collector, June 28, 1934.
Sp. B. 117·33. 2 ♀ s.	Santa Ana, California; J. R. Douglas collector, July 1934.
Sp. C. 121·36. ♀.	Point Sur, California; L. W. Saylor collector, April 10, 1937.
Sp. D. 122·37. ♀ ♀.	Ben Lomond, California, March 1934; Berkeley, April 1, 1934; L. W. Saylor collector.

Peckhamia scorpiona (Hentz).

122·37. ♂.	Ben Lomond, California; L. W. Saylor collector, April 10, 1937.
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Plates and Figure Titles

I.

Mallos halli Chamberlin and Ivie, new species.

1. Epigynum.

Dictyna abundans Chamberlin and Ivie, new species.

2. Epigynum.
3. Left palpus of male, mesal view.
4. Left palpus, sub ventral view.

Dictyna saepei Chamberlin and Ivie, new species.

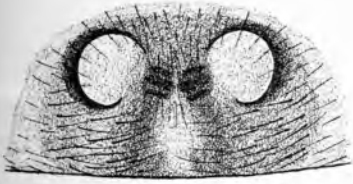
5. Left palpus of male, mesal view.
6. Same, sub-ventral view.
7. Same, ectal view.

Dictyna hoya Chamberlin and Ivie, new species.

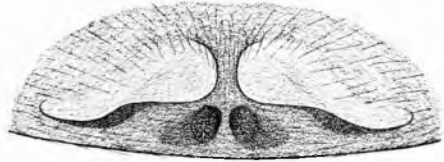
8. Epigynum.

Dictyna olympiana Chamberlin.

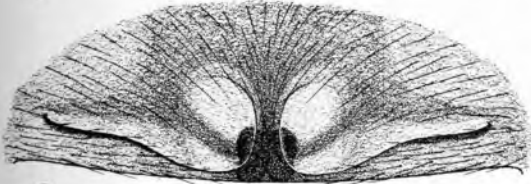
9. Left palpus of male, mesal view.
10. Epigynum.
11. Tip of embolus of male palpus.



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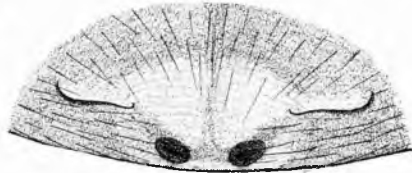
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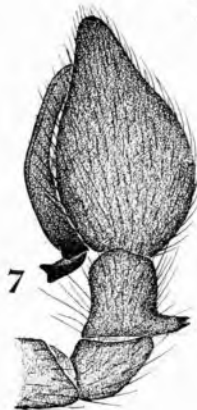
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II.

Dictyna saylora Chamberlin and Ivie, new species.

12. Front of male.
13. Male, dorsal view.
14. Left palpus of male, mesal view.
15. Same, sub-ventral view.

Anyphaena pomona Chamberlin and Ivie, new species.

16. Epigynum.

Anyphaena californica Banks.

17. Left Palpus, ectal view.

Liocranoides flavescens Chamberlin and Ivie, new species.

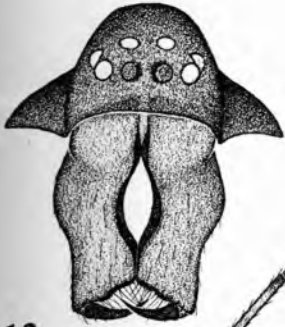
18. Epigynum.

Metellina mimetoides Chamberlin and Ivie, new species.

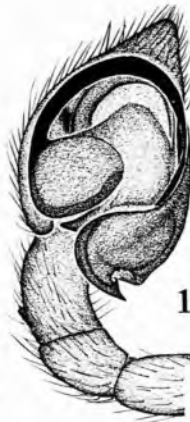
19. Epigynum.

Metellina curtisi (McCook).

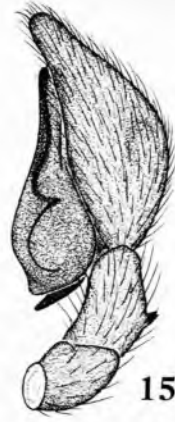
20. Epigynum.



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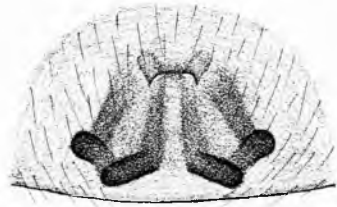
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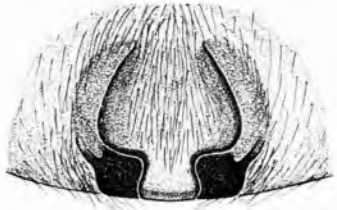
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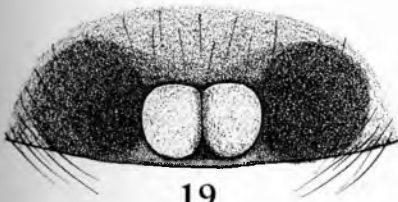
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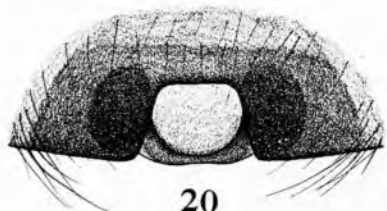
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III.

Metepeira douglasi Chamberlin and Ivie, new species.

21. Epigynum, antero-ventral view.
22. Same, lateral view.
23. Same, posterior view.

Metepeira grandiosa Chamberlin and Ivie, new species.

24. Epigynum, antero-ventral view.
25. Same, lateral view.
26. Same, posterior view.

Liodrassus carrvillus Chamberlin and Ivie, new species.

27. Left palpus, ventral view.
28. Right palpus, ectal view.
29. Tibial apophysis of left palpus, ventro-ectal view.

Metaphidippus tricolor Chamberlin and Ivie, new species.

30. Left palpus, ventral view.
31. Embolic division of left palpus, ectal view.
32. Tibia of left palpus, ectal view.

Metaphidippus albeolus Chamberlin and Ivie, new species.

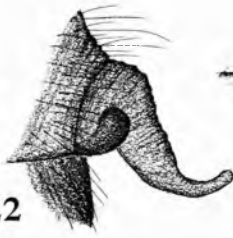
33. Epigynum. (Also see plate IV).

Metaphidippus dominatus Chamberlin and Ivie, new species.

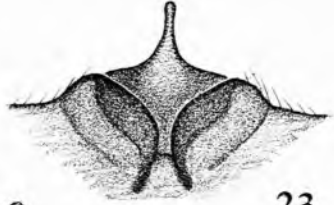
34. Left palpus, ventral view.
35. Embolic division of left palpus, ectal view.
36. Tibia of left palpus, ectal view.



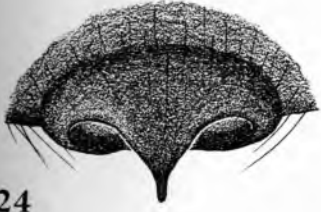
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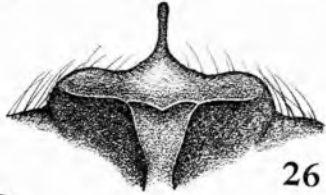
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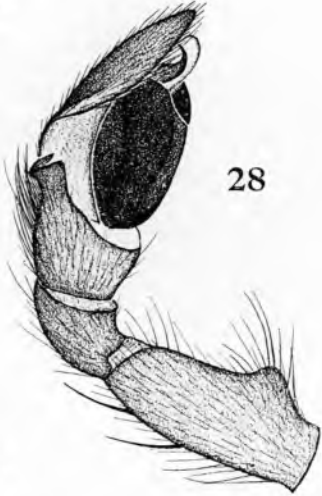
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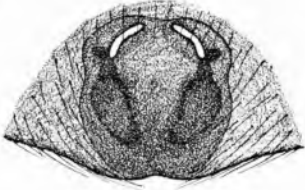
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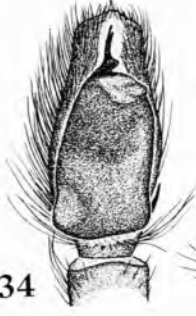
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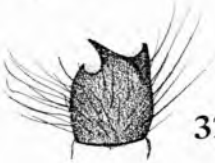
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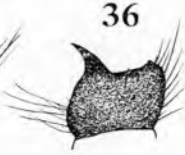
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IV.

Metaphidippus watonus Chamberlin and Ivie, new species.

37. Left palpus, ventral view.
38. Embolic division of left palpus, ectal view.
39. Epigynum.

Metaphidippus albeolus Chamberlin and Ivie, new species.

40. Left palpus, ventral view.
41. Embolic division of left palpus, ectal view.

Pellenes eleganoioides Chamberlin and Ivie, new species.

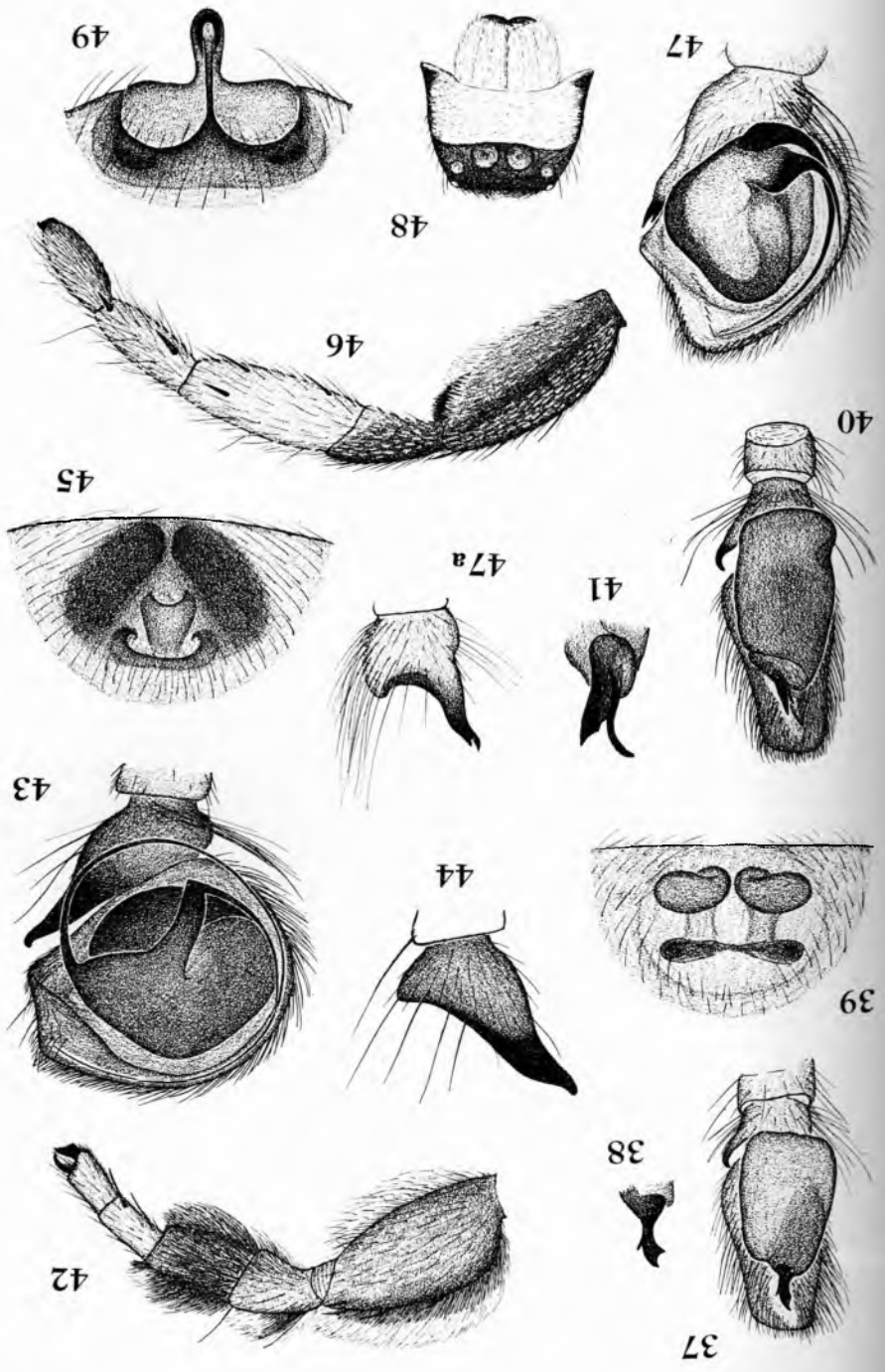
42. Leg I of male, anterior view.
43. Left palpus, ventral view.
44. Tibia of left palpus, ectal view.
45. Epigynum.

Pellenes bulbipes Chamberlin and Ivie, new species.

46. Leg I of male, anterior view.
47. Left palpus, ventral view.
- 47a. Tibia of left palpus, ectal view.
48. Front of male.

Pityohyphantes lomondensis Chamberlin and Ivie, new species.

49. Epigynum.



V.

Pellenes mustaciata Chamberlin and Ivie, new species.

50. Left palpus, ventral view.
51. Tibia of left palpus, ectal view.
52. Front of male.
53. Epigynum.
54. Leg I of male, anterior view.
55. Body of female, dorsal view.

Pellenes nigripes Chamberlin and Ivie, new species.

56. Body of female, dorsal view.
57. Front of male.
58. Tibia of left palpus, ectal view.
59. Leg I of male, anterior view.
60. Epigynum.

Pardosa sura Chamberlin and Ivie, new species.

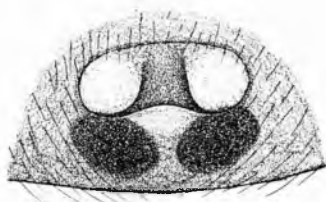
61. Epigynum.



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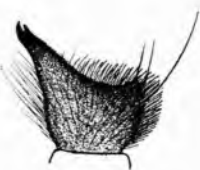


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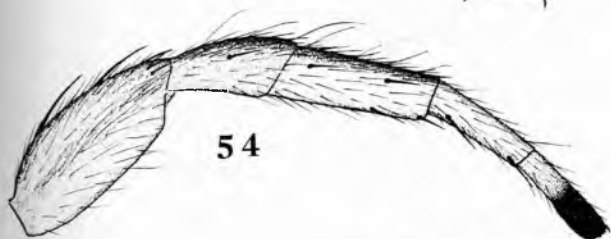
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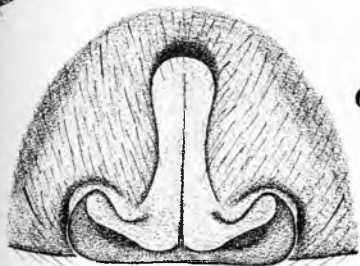
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