The Spiders of Texas. I

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# Article VI.—THE SPIDERS OF TEXAS. I

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FIGURES 1 TO 32

During the past eight years the authors have devoted a considerable amount of time to the study of the spider fauna of Texas. A number of papers have been published at intervals in which various new species have been described from the collections in our possession. A very large amount of material has been accumulated with the intention of presenting a catalogue of the species endemic to the state. Collections have been made at approximately two hundred and fifty stations in one hundred or more of the counties of Texas. far the largest number have been made in Hidalgo and Cameron counties in the lower Rio Grande Valley.

Of the forty-three families of spiders known to occur in America north of Mexico, at least thirty-eight are found within the limits of Texas. Two of these families, the Hersiliidae and Aphantochilidae, represented by Tama mexicana (Cambridge) and Majella affinis Cambridge, respectively, have not been recorded from other states. In addition, numerous genera and species known from Mexico and Central America seem to reach their most northern limits of distribution in Texas. In the following pages are listed the Texas representatives of fourteen families of spiders. As other groups of families are completed, reports on them will be published.

Of the one hundred and twenty-three species listed in this paper more than one hundred have actually been recorded from or are at present in our material from Texas. The acceptance of some of the previous records is complicated somewhat by the fact that recent work has shown various names to represent a complex of species or to have been based on erroneously identified or spuriously labelled specimens. It has been possible to assign some of these records only by inference or by a consideration of the hypothetical distribution of the spider in question. Some of the names included represent species for which at the

present time we have no authentic records but which probably will be found ultimately within the area under consideration. It has not been thought desirable to include every species which, at least from a hypothetical point of view, conceivably occurs in We have listed arbitrarily a num-Texas. ber of forms taken near the borders of Texas. These names, especially those from Otero County, New Mexico, are not to be considered as Texas records; but further collecting undoubtedly will show that the species are present in the mountains of the extreme western part of the state. Needless to say, the authors are keenly aware of the incompleteness of the survey. have aimed only at this time to bring up to date the list of endemic spiders on the basis of rich collections of recent years.

Some of the older records will probably prove to be erroneous and some of the names synonymous. This is particularly true of the spiders formerly placed in the genus *Eurypelma*, a name now regarded as not tenable for any of our species. The mygalomorph spiders of the United States are still too imperfectly known to give an adequate picture of their occurrence within the borders of Texas.

The types of the species diagnosed as new are deposited in the collection of The American Museum of Natural History.

We are very much indebted to those individuals who have contributed specimens and data for this paper. The collections made by various students and friends of the junior author have proved of great value. Mrs. Dorothea Mulaik has aided materially while on field trips in various parts of Important material has been re-Texas. ceived from Mr. John H. Robinson and Mr. Ottys Sanders, both of Dallas, Texas, from Dr. W. M. Barrows of the Ohio State University, Mr. Wilton Ivie of the University of Utah, and Dr. H. K. Wallace of the University of Florida. It is an especial pleasure to acknowledge our gratitude

for the enthusiastic coöperation given us by Mr. and Mrs. L. Irby Davis of Harlingen, Texas.

# SUBORDER MYGALOMORPHAE

# Dipluridae

### EUAGRUS AUSSERER

# Euagrus chisoseus Gertsch

Figure 9

Euagrus chisoseus Gertsch, 1939, Contr. Baylor Univ. Mus., No. 24, p. 21.

Texas Records.—Brewster County: The Basin, Chisos Mountains, August 2, 1938, male holotype, female allotype and paratype; July 26, 1938, two female paratypes; July 24, 1938, one immature paratype. Chisos Mountains, July 25, 1933, immature female (S. Mulaik). Hot Springs, June 7 to 10, 1938, two juvenile specimens (D. and S. Mulaik).

### Euagrus ravenus, new species

Figures 8 and 13

FEMALE.—Total length, 9.75 mm., not including the chelicerae. Carapace, 4.50 mm. long, 3.10 mm. wide; abdomen, 5.25 mm. long, 3.65 mm. wide.

Carapace reddish brown, with faint radiating dusky streaks from the median groove, clothed with fine procumbent black hairs and a very few inconspicuous setae. Eyes enclosing a black field. Legs concolorous with the carapace, lightly infuscated, clothed with black hairs and spines. Sternum and coxae paler than the dorsum, evenly set with erect black hairs. Abdomen dark brown above, paler beneath, evenly covered with fine procumbent hairs and set with long setae, the base of the abdomen with a patch of long curved setae.

Carapace suboval in shape, moderately and evenly convex, the median groove a small pit situated back five-ninths of the total length, the cephalic and radial furrows broad and shallow but distinct. Pars cephalica V-shaped, slightly higher than the rest of the carapace. Eyes on a low tubercle near the frontal margin of the carapace, the clypeus low, equal to about two-thirds the diameter of an anterior median eye. First row of eyes strongly procurved, the dark median eyes separated by little more than half the radius, as far from the much larger suboval lateral eyes. Second row of eyes moderately recurved, the broadly oval median eves subcontiguous with the larger oval lateral eyes and separated from each other by one and two-thirds their greatest diameter. Median ocular quadrangle three-fifths as long as broad

(32/55), greatly narrowed in front (55/35), the eyes subequal.

Sternum longer than broad (2.15 mm./1.70 mm.), bluntly rounded behind where the posterior coxae are subcontiguous. Chelicerae broadly rounded above, clothed with long setae, the outer margin with a band of hairs, the inner margin armed with thirteen black teeth of which the third, sixth, eighth, and eleventh are enlarged.

Coxae subequal. Legs relatively short and stout. First tibia with a submedian spine and a distal pair beneath, a submedian prolateral spine and a distal prolateral spine just above the distal pair. First metatarsus with four pairs of ventral spines and three prolateral spines in the apical half of the joint. First tarsus with a row of five or six lateral spines on each side which are subventral in position and two ventral spines on the midline. First two legs unarmed above but the posterior legs with strong dorsal spines. Tibia and patella I, 3.80 mm.; IV, 4.50 mm. long.

Male.—Total length, 6.10 mm., not including the chelicerae. Carapace, 3.20 mm. long, 2.55 mm. wide.

Carapace and appendages paler in color than in the female. Structure in essential agreement with the female except for the eyes and the legs.

Eyes as illustrated in Fig. 13. First row strongly procurved, the dark medians separated by one-half their radius, as far from the much larger, suboval, forwardly directed lateral eyes. Second eye row straight, the broadly oval median eyes separated by their long diameter, subcontiguous with the subequal, oval lateral eyes. Median ocular quadrangle broader than long (55/36), the anterior median eyes three-fourths as large as the posterior median eyes.

First tibia with a ventral and a prolateral series of stout spines in the distal half of the joint and two or three weak spines near the base. First metatarsus with a median ventral row and a sublateral row of spines on each side. Second leg modified as usual in the genus, as illustrated in Fig. 8. Tibia and patella I, 2.80 mm.; IV, 3.50 mm. long. Tarsal claws toothed in a curved series.

Palpus agreeing in most respects with that of chisoseus but with a somewhat shorter apical spine and comparatively thicker median division of the bulb.

Type Locality.—Male holotype, female allotype, and female and immature paratypes from Raven Ranch, Kerr County, Texas, August, 1939 (D. Mulaik). One male and numerous female paratypes from the same station, December, 1939 (D. and S. Mulaik).

This species is closely allied to *Euagrus chisoseus* Gertsch with which it agrees in having the group of eyes relatively closer together and the posterior median eyes

considerably larger than the anterior median eyes. In the males the posterior median eyes are separated by their diameter. The females of ravenus have the posterior median eyes consistently smaller than the posterior lateral eyes, whereas in chisoseus these eyes are subequal in size. The males are best separated by the details of the modified tibiae and metatarsi of the second legs which are illustrated.

# Euagrus comstocki Gertsch

Euagrus comstocki Gertsch, 1935, American Mus. Novitates, No. 792, p. 3, Figs. 2, 7, and 8.

Texas Records.—Hidalgo County: Edinburg, male holotype (S. Mulaik). Three miles west of Edinburg, July 4, 1935, females (S. Mulaik). Starr County: Rio Grande City, July, 1934, female (S. Mulaik). One-half mile east of Rio Grande City, October 26–27, 1935, female (S. Mulaik). Five miles east of Rio Grande City, October 26-27, 1935, females (S. Mulaik); September 20, 1935, female (S. Mulaik); April 10, 1926, females (S. Mulaik). Terrell County: Sanderson, July 4, 1934, female and immature specimens (S. Mulaik). Zapata County: thirty-two miles southwest of Laredo, April 10, 1936, female (Haynes); November 11, 1934, females (S. Mulaik); February 9, 1935, immature specimens (S. Mulaik).

# Euagrus apacheus, new species

Figures 7 and 12

Female.—Total length, 10.00 mm., not including the chelicerae. Carapace, 4.60 mm. tong, 3.60 mm. wide; abdomen 5.70 mm. long, 4.00 mm. wide.

Coloration in close agreement with Euagrus ravenus, new species. Carapace and appendages dull yellowish brown, lightly infuscated. Abdomen purplish brown above, lighter below, clothed evenly with fine procumbent hairs and set with longer, suberect, back setae, the base with the usual patch of stouter curved setae.

Carapace suboval in outline, gently rounded in front, the V-shaped pars cephalica slightly higher than the rest of the carapace. Median groove a deep round pit situated back about three-fifths of the total length. Eye formula essentially as in ravenus. First row of eyes strongly procurved, the small median eyes separated by two-thirds the radius, as far from the much larger lateral eyes. Second eye row

moderately recurved, the suboval median eyes separated by more than their diameter (29/17), subcontiguous with the larger lateral eyes. Median ocular quadrangle broader than long (56/30), narrowed in front (56/35), the anterior median eyes smaller than the posterior median (13/17).

Sternum longer than broad (2.20 mm./1.90 mm.), set with crect black setae, the posterior coxae contiguous or nearly so. Chelicerae robust, broadly rounded above, the outer margin with a band of hairs, the inner margin with fourteen black teeth of which the second, third, fifth, eighth, and eleventh are enlarged. All coxae subequal. Legs relatively short and stout, spined as in ravenus. Tibia and patella I, 3.80 mm.; IV, 4.60 mm. long.

Male.—Total length, 8.10 mm. not including the chelicerae. Carapace, 3.80 mm. long, 3.15 mm. wide. Abdomen 4.50 mm. long, 2.80 mm. wide.

Carapace and appendages somewhat paler than in the female. Carapace suboval, proportionately rounder on the sides and more narrowed in front. Structure in close agreement with the male of ravenus except for the eyes and the details of the second leg.

First eye row strongly procurved, the dark median eyes separated by half their radius, as far from the much larger lateral eyes. Second row of eyes moderately recurved, the suboval medians separated by more than their diameter (24/15), subcontiguous with the larger lateral eyes. Details of the eye relations as illustrated in Fig. 12.

Legs of average length, the first tibia with a continuous ventral series of stout spines, most of them in the distal two-thirds of the joint. Second leg modified as usual, in close agreement with that of ravenus. Paired claws toothed in a single curved series.

Palpus (Fig. 7) much as in *ravenus* but the median division of the bulb is relatively thinner.

Type Locality.—Male holotype, female allotype, and male paratypes from Hays County, Texas, April 15, 1939 (D. and S. Mulaik). Female paratypes from Austin, Texas, September, 1909 (A. Petrunkevitch).

This species is most closely allied to Euagrus comstocki Gertsch. It is distinct in the eyes, the posterior median of which are distinctly larger than the anterior median eyes, whereas in comstocki these eyes are subequal. The palpus is very much longer and thinner, the embolic portion being longer than the median division. The much greater separation of the posterior median eyes distinguishes both apacheus and comstocki from chisoseus and ravenus.

### BRACHYTHELE AUSSERER

# Brachythele longitarsis Simon

Brachythele longitarsis Simon, 1891, Ann. Soc. Ent. France, LX, p. 305; 1890, Actes Soc. Linn. Bordeaux, (5) XLIV, p. 319.

Texas Record.—Webb County: Laredo (G. Marx) (Simon, 1890); (Smith, 1908).

### Ctenizidae

### MYRMEKIAPHILA ATKINSON

# Myrmekiaphila comstocki Bishop and Crosby

Myrmekiaphila comstocki Візнор And Сковву, 1926, Journ. Elisha Mitchell Sci. Soc., XLI, р. 168, Figs. 7 and 8.

Texas Record.—Travis County: Austin, March 12–18, 1903, male (J. H. Comstock).

# Myrmekiaphila fluviatilis (Hentz)

Mygale fluviatilis Hentz, 1850, Journ. Boston Soc. Nat. Hist., VI, p. 286, Pl. x, fig. 15.

Myrmekiaphila fluviatilis BISHOP AND CROSBY, 1926, Journ. Elisha Mitchell Sci. Soc., XLI, pp. 166-168, Figs. 1-6.

TEXAS RECORD.—TRAVIS COUNTY: Austin, April 21, 1913, three females (Hartman).

### ASTROSOGA CHAMBERLIN

### Astrosoga rex Chamberlin

Astrosoga rex Chamberlin, 1940, Proc. Biol. Soc. Washington, LIII, p. 5.

Texas Records.—Atascosa County: Jourdantown, November 27, 1935, two females (C. Rutherford). Bexar County: San Antonio, July 8, 1936, female (L. I. Davis). Hidalgo County: Mission, female. Edinburg, 1934 two females (S. Mulaik); March 24, 1936, immature female (S. Mulaik); March, 1936, female (S. Mulaik); April 15, 1936, female (S. Mulaik); June, 1939, male (S. Mulaik); Kleberg County: Kingsville, female (Clyde T. Reed); male holotype (J. C. Cross).

The specimens referred to *Myrmekia-phila comstocki* by Gertsch in 1935 (American Mus. Novitates, No. 792, p. 3, Fig. 3) were misidentified and pertain to the present species.

# Astrosoga stolida, new species

Figures 1, 2, 3, 4, and 26

FEMALE.—Total length, 27.50 mm., including the chelicerae.

	$\mathbf{Length}$	$\mathbf{Width}$
CARAPACE	10.00 mm.	$9.00~\mathrm{mm}$ .
FRONT		7.50
STERNUM	6.50	5.50
LABIUM	2.00	1.80
MAXILLA	4.00	2.30
Abdomen	12.50	10.00

Carapace reddish brown, smooth, clothed very sparsely with inconspicuous hairs, the ocular area with a patch of long ones. Median groove a deep semicircular procurved depression. Carapace very broad in front, rather abruptly narrowed behind between the second and third coxae, the width between the third coxae, 5.60 mm., the caudal end truncated. Pars cephalica elevated, highest at the ocular region, evenly and strongly convex, declining rapidly behind to the low flat pars thoracica.

Eyes on a very low tubercle, the width of the group at the second eye row, 3.65 mm., about one-third as wide as the width of the carapace at that point. Clypeus very narrow, weakly declining, 0.50 mm. long. Eyes of the first row weakly procurved, the medians separated by more than a diameter (3/4), farther from the laterals (3/5). Posterior eye row weakly recurved, the medians separated by seven diameters of the right median eye (the left median is smaller), one and one-half diameters from the lateral eyes. Median ocular quadrangle broader than long (18/7), narrowed in front (18/10), the anterior eyes much larger. Ratio of the eyes: ALE:AME:PLE:PME = 35:35:30:20.

Sternum clothed with erect black hairs, with three pairs of sigilla, the caudal pair large. Labium clothed with erect hairs and set with a patch of twelve weak cuspules at the distal end. Maxilla clothed with strong erect hairs, with a thick brush of softer reddish hairs on the prolateral face, and with numerous cuspules on the prolateral half of the ventral aspect of the joint. Rastellum well developed, the terminal portion a stout apophysis armed with strong black spines. Chelicera, 5.00 mm. long, 3.00 mm. wide, the promargin with a row of eight heavy black teeth, the retromargin with a row of eleven smaller teeth and a row of six weak denticles paralleling it in the caudal half on the inner side.

	I	II
FEMUR	5.50  mm.	$5.00 \mathrm{mm}$
PATELLA	3.80	3.55
Тівіа	3.80	3.50
METATARSUS	3.00	3.00
Tarsus	1.50	1.50
TOTAL	17.60	16.55

	III	IV
FEMUR	4.00 mm.	$5.50~\mathrm{mm}$ .
PATELLA	3.55	4.45
Тівіа	2.00	4.35
Metatarsus	2.50	3.75
Tarsus	2.00	2.00
TOTAL	14.05	20.05

Legs reddish brown, the last two pairs very robust, the third femora especially heavy, 3.40 mm, wide. Third and fourth tibiae with a patch of stout cusps and spines on the prolateral side. First and second tarsi and metatarsi thickly scopulate, with few spines, two basal and a distal ventral on the first metatarsus and a single distal beneath the tarsus. Third metatarsus with eight short stout dorsal spines. Single palpal claw with a bifid basal tooth followed by three denticles. Teeth of tarsal claws in two series but few in number, the first left prolateral paired claw with a large basal tooth and four small teeth on the inner (retrolateral) side, the other paired claw (retrolateral) with two large basal denticles and two smaller teeth on the inner (prolateral) side.

The female paratype agrees rather well in structure with the holotype but differs in having the eyes proportionately larger and particularly in having the anterior laterals larger than the medians, essentially as in the male (Fig. 26).

Male.—Total length, 20.00 mm., including the chelicerae.

	Length	Width
CARAPACE	$8.00 \ \mathrm{mm}$ .	$7.00 \; \mathrm{mm}$ .
Front		5.00
Sternum	5.20	4.00
Labium	1.30	1.30
MAXILLA	3.55	1.70
Abdomen	10.00	6.50

Coloration and structure essentially as in the female. Eyes as shown in Fig. 26, the anterior lateral eyes larger than the anterior median eyes. Legs proportionately longer than in the female.

	I	II
FEMUR	$6.75 \mathrm{\ mm}$ .	$6.15~\mathrm{mm}$
PATELLA	3.65	3.40
Tibia	4.50	4.00
METATARSUS	5.00	4.70
Tarsus	3.00	3.00
TOTAL	22.90	21.25
	III	IV
Femur	III 5.60 mm.	IV 7.00 mm.
FEMUR PATELLA		
	5.60 mm.	7.00 mm.
PATELLA	5.60 mm. 2.80	7.00 mm. 3.50
PATELLA TIBIA	5.60 mm. 2.80 3.20	7.00 mm. 3.50 5.00

Palpus as illustrated in Figs. 1 and 3. First leg modified, the tibia incrassated, with a strong

ventral projection armed with two heavy spines as illustrated. Second leg much as the first but the ventral projection nearer the base of the ioint.

Type Locality.—Female holotype from Austin, Travis County, Texas, July, 1903, in The American Museum of Natural History. Female paratype and male allotype from Austin, Texas, in the collection of the University of Utah.

In Astrosoga rex Chamberlin the terminal spine or embolus of the male palpus is strongly geniculate near the distal end, whereas in stolida this spine is nearly straight. The females of the latter species are somewhat smaller, relatively stouter and with shorter legs, and the eyes of the first row are more widely separated.

### ANTRODIAETUS AUSSERER

### Antrodiaetus robustus (Simon)

Brachybothrium robustum Simon, 1890, Actes Soc. Linn. Bordeaux, XLIV, p. 311.

Texas Record.—Starr County: Rio Grande (G. Marx) (Simon, 1890).

# PACHYLOMERIDES STRAND

### Pachylomerides audouini (Lucas)

Pachyloscelis audouinii Lucas, 1836, Magazin de zoöl., Cl. VIII, p. 5.

Texas Record.—One female, probably this species, from "Texas," presumably from the eastern part of the state.

# Pachylomerides absolutus, new species Figure 10

Female.—Total length, 30.00 mm.

	Length	$\mathbf{W}\mathbf{idth}$
CARAPACE	10.70 mm.	$9.70~\mathrm{mm}$
Front	1.20	6.50
Sternum	7.50	5.80
Labium	1.70	2.05
$\mathbf{M}_{\mathbf{A}\mathbf{X}\mathbf{I}\mathbf{L}\mathbf{L}\Lambda}$	4.50	2.25
ABDOMEN	20.00	15.00

Carapace smooth and shining, dark reddish brown, very sparsely clothed with scattered black hairs, the pars cephalica with a patch of erect black setae on the clypeus in front of the eye group, a patch on each side behind the lateral eyes, and several setae on the midline. Carapace broad in front, broadly rounded on the sides in front, narrowed gradually behind the second coxae, the caudal end truncated. Pars cephalica triangular in form, the sides essentially equal, the cephalic sutures obsolete, the median groove

broadly U-shaped, its width equal to two-ninths the width of the carapace at that point. Pars cephalica elevated, convex, about equal in height from the eyes halfway back to the median groove, and from there evenly rounded and declining caudad.

Eyes on a low tubercle, the width of the group at the second eve row two-sevenths the width of the carapace at that point. Clypeus sloping forward. First row of eyes narrower than the second (11/10), strongly procurved, a line along the caudal edges of the lateral eyes cutting the anterior fourth of the median eyes. Anterior median eyes separated by less than a diameter (26/36), fully a diameter from the lateral eyes (39/36) which are larger than the median eyes (50/36). Second row of eyes slightly procurved, essentially straight, the median separated by two and one-half times their diameter, their radius from the subequal lateral eyes. Median ocular quadrangle broader than long (9/5), narrowed in front (9/6), the anterior median eyes larger (36/30). Eye arrangement as illustrated in Fig. 10.

Under side of carapace clothed evenly with erect black hairs. Sternal sigilla confluent, forming a large bare area in middle of sternum. Labium with seven cusps in an irregular transverse row near the apical end and two cusps behind. Maxillae with a basal patch of forty or fifty short black cusps. Rastellum well developed, a blunt process studded with short stout spines. Chelicerae black, reddish and smooth at the base where few hairs are located, the distal end with numerous black setae. Promargin and retromargin of chelicera with six stout black teeth.

	I	II
FEMUR	5.50  mm.	$5.25~\mathrm{mm}$ .
PATELLA	4.00	3.80
Тівіа	3.70	3.10
METATARSUS	2.50	2.40
Tarsus	1.70	1.70
TOTAL	17.40	16.25
	III	IV
Femur	III 5.00 mm.	IV 6.30 mm.
FEMUR PATELLA		
	$5.00 \; \mathrm{mm}$ .	6.30 mm.
PATELLA	5.00  mm. $3.70$	6.30 mm. 4.35
PATELLA TIBIA	5.00 mm. 3.70 3.00	6.30 mm. 4.35 4.00

Legs dark reddish brown, smooth and shining clothed with black hairs and short spines. All appendages lacking scopular hairs beneath but with a sparse clothing of fine black simple hairs. Tarsi, metatarsi, and tibiae of legs and palpi without ventral spines but with a thick series of short stout spines on each side, some of them being subventral in position. Third leg modified as usual in the genus, the femur greatly incrassated, the tibia with the characteristic groove, and the patella, distal end of tibia, and

the metatarsus set with numerous short spines. Paired claws with single large tooth at base, the unpaired claw untoothed.

Type Locality.—Female holotype from Bandera, Bandera County, Texas, July–August, 1937 (Bee Hale).

This interesting species is easily separated from *beatulus* by reference to the eye arrangement. The anterior lateral eyes are more widely separated, by two full diameters, and the eyes of the posterior row are in an essentially straight line.

# Pachylomerides funereus (Gertsch)

Pachylomerus funereus Gertsch, 1936, American Mus. Novitates, No. 852, p. 1, Figs. 1 and 2.

Texas Records.—Hidalgo County: Edinburg, June 1, 1935, male holotype (S. Mulaik); September, 1936, two males (S. Mulaik); April 29, 1936, male (Lyons and Beane); May 5, 1938, male (S. Mulaik). Webb County: Laredo, one male (Ruth Baird).

# Pachylomerides beatulus, new species

Figure 11

FEMALE.—Total length, 23.00 mm., not in cluding the chelicerae.

	Length	$\mathbf{Width}$
CARAPACE	$10.00 \; \mathrm{mm}$ .	8.60 mm.
Front	1.00	5.50
STERNUM	6.00	6.50
Labium	2.00	2.40
MAXILLA	4.00	2.10
ABDOMEN	13.50	9.50

Carapace reddish brown, paler in front, smooth and shining, very sparsely clothed with a few scattered inconsticuous hairs and with a denser marginal fringe, the pars cephalica with a patch of stout erect setae in front of the eyes and a patch on each side behind the lateral eyes Carapace broad in front, broadly rounded on the sides in front, and gradually narrowed behind the second coxae. Pars cephalica convex, elevated, highest in the ocular region, gradually declining caudally to the U-shaped median groove which is one-fourth as broad as the width of the carapace at that point. Cephalic sutures obsolete.

Eyes (Fig. 11) on a low tubercle, the width of the group at the second eye row one-third the width of the carapace at that point. Clypeus sloping, very narrow, equal in height to about one-third the diameter of an anterior lateral eye. First row of eyes strongly procurved, a line along the caudal edges of the lateral eyes cutting the anterior third of the median eyes.

Anterior median eyes separated by scarcely their radius, four-fifths of their diameter from the lateral eyes which are larger (60/45). Second row of eyes moderately procurved, the oval median eyes separated by two diameters, subcontiguous with the subequal oval lateral eyes. Median ocular quadrangle broader than long (25/18), narrower in front (25/20), the anterior median eyes much larger (45/37).

Sternum broader than long, clothed on the margins with black hairs, bluntly pointed behind where the posterior coxae are separated by about one-third their width. Labium clothed sparsely with black hairs and with five nearly contiguous cusps in a row near the apical end and two smaller cusps behind. Maxillae clothed evenly with long reddish hairs and with a group of about twenty cusps in the basal half of the joint and about as many very small ones in the apical half. Rastellum well developed, a heavy spur set with stout spines. Chelicera dark reddish brown to black, paler at the base, set above at the apical end with black setae. Promargin with six stout black teeth and four denticles near the base of the row; retromargin with six stout teeth.

	I	II
FEMUR	6.10 mm.	5.60  mm.
PATELLA	4.00	3.70
Тівіа	3.80	3.15
METATARSUS	3.00	2.60
Tarsus	1.40	1.50
TOTAL	18.30	16.55
	III	$\mathbf{IV}$
Femur	III 4.70 mm.	IV 6.15 mm.
FEMUR PATELLA		
	4.70 mm.	6.15 mm.
PATELLA	4.70 mm. 3.30	6.15 mm. 3.70
PATELLA TIBIA	4.70 mm. 3.30 3.10	6.15 mm. 3.70 3.70

Legs dark reddish brown, smooth and shining, clothed with rows of black hairs. All legs and the palpi lacking ventral scopulae but set sparsely with long simple hairs. Tarsi, metatarsi, and tibiae of first and second legs and distal joints of palpus lacking ventral spines but with a heavy series on each side of short stout spines, some of which are subventral in position. Posterior legs with a few weak ventral spines on the distal joints. Third tibia modified as usual, with a series of short spines or cusps at distal end. Third metatarsus with a dorsal series of short spines in the distal half. Third and fourth patellae with a prolateral patch and a dorsal patch of cusps and cuspules. Paired claws of all tarsi with a single large tooth at base, the unpaired claw smooth.

Type Locality.—Female holotype from five or six miles south of Dallas, Texas, December, 1937 (J. C. Sanders).

This fine spider is distinguished from all

known species except funereus and celsus in the very strong procurvature of the anterior row of eyes. In those species the anterior lateral eyes are separated from each other by considerably less than their diameter, whereas in beatulus these eyes are wider apart, separated by one and one-fourth times their diameter. Only the female of beatulus is known, so there is some possibility that the disparity in eye formulae may be a sexual difference and that beatulus may ultimately be recognized as the female of one of these species.

# Pachylomerides celsus, new species

Figures 14 and 15

MALE.—Total length, 18.70 mm., not including the chelicerae.

	Length	$\mathbf{Width}$
CARAPACE	$9.50 \; \mathrm{mm}$ .	8.10 mm.
FRONT	1.30	5.00
STERNUM	5.40	4.50
LABIUM	1.75	1.30
MAXILLA	3.50	2.00
ABDOMEN	8.75	6.70

Carapace dark reddish brown, evenly pitted and roughened, with a few erect setae in the ocular area and behind the group but otherwise without hairs. Median groove a deep semicircular procurved depression which is only one-fifth as wide as the carapace at that point. Carapace suborbicular, very broad in front, broadly rounded on the sides, narrowed somewhat behind at a point between the second and third coxae. Pars cephalica V-shaped, elevated, the cephalic sutures obsolete.

Eyes on an elevated tubercle which is placed far forward, the width of the group at the second eve row equal to one-fourth the width of the carapace at that point. Clypeus very narrow, strongly declining, equal to two-thirds the diameter of an anterior lateral eye. Eyes of the first row very strongly procurved, so curved that the median eyes are behind a line along the posterior edges of the lateral, and form a second row. Anterior median eyes separated by twothirds their diameter, a full diameter from the much larger lateral eyes. Second row of eyes moderately procurved, the suborbicular medians separated by two diameters, subcontiguous with the subequal lateral eyes. Median ocular quadrangle broader than long (5/3), narrowed in front in the same ratio, the anterior median eyes somewhat larger. Eye arrangement as illustrated in Fig. 15.

Labium clothed sparsely with erect black hairs and with a patch of seven weak cuspules just in front of the middle. Sternum clothed with erect black hairs. Posterior coxae slightly separated. Maxillae subquadrangular, clothed

with erect black hairs and with a few weak cuspules in the basal half. Rastellum a stout process which is set with short heavy spines. Chelicerae nearly black, prominent, rugose, set with short hairs for most of the length above, with a few longer ones at the distal end. Outer margin (retromargin) with six black teeth, the basal one reduced in size; inner margin (promargin) with nine teeth, the second, fifth, seventh, and ninth small denticles.

	I	II
FEMUR	$7.25 \mathrm{\ mm}$ .	$6.80  \mathrm{mm}$ .
PATELLA	3.75	3.60
Тівіа	5.00	4.10
METATARSUS	3.50	3.25
Tarsus	1.50	1.60
TOTAL	21.00	19.35
	III	IV
Femur	III 5.60 mm.	IV 7.00 mm.
Femur Patella		
	5.60 mm.	7.00 mm.
PATELLA	5.60 mm. 3.00	7.00 mm. 3.60
PATELLA TIBIA	5.60 mm. 3.00 3.00	7.00 mm. 3.60 4.25

Legs dark reddish brown, shining, lightly roughened, clothed with inconspicuous black hairs. First legs slender, unmodified, the distal joints spined as follows: tarsus with two prolateral spines near the distal end and thirteen prolateral spines; metatarsus with two prolateral spines in the distal half and ten prolateral spines; tibia with six prolateral spines and seventeen retrolateral spines, and with two ventral spines at the base; patella with three ventral spines at the apical end.

Male palpus as illustrated in Fig. 14.

Type Locality.—Male holotype from thirty-two miles southwest of Laredo, Zapata County, Texas, August 4, 1935 (S. Mulaik).

This species differs from funereus in its larger size, in the details of the eye formula and in the palpus. The posterior eye row is more procurved and the median eyes are only slightly smaller than the anterior median eyes. The large anterior lateral eyes are separated by their radius, whereas in funereus these eyes are somewhat farther apart, separated by two-thirds of their diameter. The embolus of the palpus is proportionately shorter as shown in the figure.

### Aviculariidae

### TAPINAUCHENIUS AUSSERER

### Tapinauchenius texensis Simon

Tapinauchenius texensis SIMON, 1890, Actes Soc. Linn. Bordeaux, (5) XLIV, p. 326.

Texas Record.—Maverick County: Eagle Pass (Marx) (Simon, 1890), young female type.

### RHECHOSTICA SIMON

### Rhechostica texense (Simon)

Homoeomma texense Simon, 1890, Actes Soc. Linn. Bordeaux, (5) XLIV, p. 320.

TEXAS RECORD.—STARR COUNTY: Rio Grande (Marx) (Simon, 1890), male type.

### APHONOPELMA POCOCK

# Aphonopelma simulatum (Chamberlin and Ivie)

Eurypelma marxi Gertsch, 1935, American Mus. Novitates, No. 792, p. 4.

Delopelma simulatum Chamberlin and Ivie, 1939, Bull. Univ. Utah, XXIX, p. 8.

Aphonopelma simulatum Chamberlin, 1940, Bull. Univ. Utah, XXX, p. 26.

Texas Record.—Hidalgo County: Edinburg, June, 1934, female (S. Mulaik), probably this species recorded by Gertsch as maxxi.

# Aphonopelma moderatum (Chamberlin and Ivie)

Delopelma moderatum Chamberlin and Ivie, 1939, Bull. Univ. Utah, XXIX, p. 9, Pl. III, fig. 5.

Texas Records.—Starr County: five miles east of Rio Grande City, May 1, 1937, male holotype (S. Mulaik). Zapata County: thirty-two miles southwest of Laredo, March 10, 1936, male paratype (S. Mulaik).

### Aphonopelma heterops Chamberlin

Aphonopelma heterops Chamberlin, 1940, Bull. Univ. Utah, XXX, p. 29.

Texas Records.—Hidalgo County: Edinburg, September-December, 1933, females (S. Mulaik).

# Aphonopelma steindachneri (Ausserer)

Eurypelma steindachneri Ausserer, 1897, Verh. Zool.-Bot. Gesell. Wien, XXI, p. 199, Pl. vii, figs. 43 and 44.

TEXAS RECORDS.—PECOS COUNTY: Pecos River, two males (Ausserer, 1875).

# Aphonopelma pseudoroseum (Strand)

Eurypelma pseudoroseum Strand, 1907, Jahreshefte Ver. Nat. Wurttemberg, LXI, p. 41.—Banks, 1910, Bull. U. S. Nat. Mus., LXXII, p. 4.

Texas Record.—Texas, two females (Strand, 1907).

#### DUGESIELLA POCOCK

# Dugesiella hentzi (Girard)

Mygale hentzi Girard, 1854, Marcy's Rep. Red River Louisiana, p. 262, Pl. xvi, figs. 1-3. Eurypelma mordax Ausserer, 1871, Verh. Zool.-Bot. Gesell. Wien, XXI, p. 95, Pl. I, fig. 14

Texas Records.—(Ausserer, 1871, male type of mordax). Dallas County: (Jones, 1936). Dallas, May, 1938, two females (Ottys Sanders). Potter County: near Amarillo, September, 1939, two males (Wm. Behr). Starr County: Rio Grande (Marx) (Simon, 1890). Taylor County: no specific locality, September 3, 1934, female (J. H. Robinson).

# Dugesiella armada Chamberlin

Dugesiella armada Chamberlin, 1940, Bull. Univ. Utah, XXX, p. 32.

Texas Record.—Travis County: Austin, September, 1909, female holotype (A. Petrunkevitch).

# Dugesiella anax Chamberlin

Dugesiella anax Chamberlin, 1940, Bull. Univ. Utah, XXX, p. 34.

Texas Records.—Cameron County: Harlingen, three female paratypes (Bryce Brown). Kleberg County: Kingsville, male holotype, female allotype (J. C. Cross).

### Dugesiella harlingena Chamberlin

Dugesiella harlingena Chamberlin, 1940, Bull. Univ. Utah, XXX, p. 37.

Texas Record.—Cameron County: Harlingen, female holotype (Bryce Brown).

### Dugesiella wacona Chamberlin

Dugesiella wacona Chamberlin, 1940, Bull. Univ. Utah, XXX, p. 38.

Texas Record.—McLennan County: Waco, seven males (Baylor University Museum collection).

# SUBORDER ARANEOMORPHAE Filistatidae

# FILISTATINELLA GERTSCH AND IVIE Filistatinella crassipalpus (Gertsch)

Filistata crassipalpus Gertsch, 1935, American Mus. Novitates, No. 792, p. 5, Figs. 4, 5, and 6

Texas Records.—Sutton County: Sonora, May 3, 1926, two females (F. C. Bishopp). Zapata County: thirty-two miles southeast of Laredo, November 11, 1934, male holotype, female allotype and paratype (S. Mulaik).

### FILISTATA LATREILLE

Filistata arizonica Chamberlin and Ivie Filistata arizonica Chamberlin and Ivie, 1935, Bull. Univ. Utah, XXVI, p. 4, Pl. IV, figs. 24 and 25.—Gertsch and Ivie, 1936, American Mus. Novitates, No. 858, p. 1.

Texas Records.—Brewster County: twenty-five miles south of Alpine, June, 1938 (S. Mulaik). Hidalgo County: ten miles southeast of Edinburg, October 20, 1934, male, immature female (S. Mulaik). Edinburg, December, 1934, female (S. Mulaik). Terrell County: Sanderson, July 4, 1934, male (S. Mulaik).

# Filistata hibernalis Hentz

Filistata hibernalis Hentz, 1842, Journ. Boston Soc. Nat. Hist., IV, p. 227, Pl. VIII, fig. 6.—Comstock, 1913, "The Spider Book," pp. 291–298, Figs. 276–280.

Texas Records.—Atascosa County: Jourdantown, June 29, 1935, male and female (C. Rutherford). Brazos County: no specific locality, January 28, 1935, male (J. H. Robinson). Cameron County: Brownsville, May 25, 1934, female (J. N. Knull). Rangerville, September 12, 1935, female (Welch). HIDALGO COUNTY: Edinburg, October 15, 1935, female (Schulle); October 4, 1935, immature females (S. Mulaik); April 29, 1936, male, females (Lyon and Beane); April 3, 1936, male December, 1934, females (S. (Lyon); Mulaik); February 14, 1935, male (J. Rutherford); June 6, 1935, female (S. Mulaik); May 12, 1935, females (S. Mulaik); October, 1934, females (S. Mulaik); September 15, 1935, female (S. Mulaik); September to December, 1933, males (S. Mulaik); March 10-15, 1934, male (S. Mulaik). Thirty miles west of Edinburg, November 24, 1934, female (S. Mulaik); November 22, 1934, immature females (S. Mulaik); December 27, 1933, female (S. Mulaik). Seven miles east of Edinburg, February 8, 1935, female (S. Mulaik); February 17, 1935, female (S. Mulaik); July 1, 1935, females (S. Mulaik). Five miles south of McCook, June 28, 1935, females (S. Mulaik). Five miles southeast of Weslaco, July 21, 1935, females (S. Mulaik). Llano County: Llano. December, 1934, female (Davis). TRAVIS County: Austin, September, 1909, females (A. Petrunkevitch); August, 1936, females (L. I. Davis). Nueces County: Alice, June 20-28, 1935, male (H. C. Sibley, Jr.). Corpus Cristi, July 1-20, 1935, males and females (H. C. Sibley, Jr.). Bishop, March 22, 1936, female (S. Mulaik) ZAPATA COUNTY: thirty-two miles southeast of Laredo, August 4, 1935, female (S. Mulaik).

### FILISTATOIDES F. CAMBRIDGE

Filistatoides insignis (O. P. Cambridge)

Filistata insignis O. P. Cambridge, 1896, Biol. Centr. Amer., Arach., I, p. 211, Pl. xxvi, fig. 12, Pl. xxviii, Fig. 8.—Simon, 1903, "Hist. Nat. Araign.," II, p. 951.

Filistatoides insignis F. Cambridge, 1899, Biol. Centr. Amer., Arach., II, p. 47, Pl. III, fig. 10.

TEXAS Records.—Hidalgo County: thirty miles west of Edinburg, July 4, 1935, two immature females (S. Mulaik). South of Pharr, March 28, 1936, immature female (S. Mulaik). STARR COUNTY: five miles west of Rio Grande City, April 10, 1936, two immature females (S. Mulaik). ZAPATA COUNTY: four miles west of Arroyo Tigre, November 11, 1934, two females (S. Mulaik). Thirty-two miles east of Laredo, February 9, 1935, female (S. Mulaik). Brewster COUNTY: Springs, June 7-10, 1938, females (D. and S. Mulaik).

# Scytodidae Loxosceles Lowe

Two species of this genus have been recorded from Texas by various workers, Loxosceles rufipes (Lucas) and L. rufescens (Dufour). The name rufipes has been associated consistently with a species from Arizona and neighboring states described as Loxosceles unicolor by Keyserling. Needless to say, this synonymy is erroneous for the true rufipes, which was based on a female from Guatemala, is quite a

distinct species and probably does not even occur in Mexico. Keyserling's unicolor is, therefore, reinstated as a valid species. The second name, rufescens, has been used to designate species from widely different regions in the New World. After comparing authentic European specimens of that species with abundant material from the New World, it has been concluded that Loxosceles rufescens (Dufour) is not represented in the Americas. Three or four species are found in Texas as indicated below. Preliminary descriptions are given for several new species in the family. More comprehensive diagnoses will appear at a later date in a separate paper.

# Loxosceles devius, new species

Total length of female, 6.00 mm., of male, 5.60 mm.

Coloration as usual in the genus, specimens preserved in alcohol being dull to bright yellowish or reddish brown. Distinct from Loxosceles unicolor Keyserling in the following respects: Seminal receptacle of female an expanded pouch on which is appended a finger-like elongation, the two receptacles widely separated by nearly twice their width at the base. First leg of female 4.7 times as long as the carapace. First leg of the male 5.3 times as long as the carapace. The first leg in unicolor is 5.5 times as long as the carapace in the females, 7.5 times as long in the male.

Type Locality.—Male holotype and female allotype from Edinburg, Hidalgo Country, December, 1933 (S. Mulaik).

Texas Records.—The specimens enumerated below are all marked as paratypes. Brewster County: twenty miles south of Alpine, August 17, 1936, female (S. Mulaik). Cameron County: northeast part of county, May 19, 1934, female (S. Mulaik). East of Harlingen, January to March, 1936, female (L. I. Davis). Harlingen, November 17, 1934, males, females (S. Mulaik). Green Island Bird Sanctuary, May 11, 1935, male (S. Mulaik). FRIO COUNTY: Pearsall, July 8, 1936, female (L. I. Davis). HIDALGO COUNTY: Edinburg, March-April, 1934, male, female (S. Mulaik); September to December, 1933, males, females (S. Mulaik); March, 1936, females (S. Mulaik); May 12, 1935, male, female (S. Mulaik); June 2, 1935, females (S. Mulaik); January 1020, 1935, female (S. Mulaik). Thirty miles west of Edinburg, December 27, 1933, males, females (S. Mulaik); July 4, 1935, females (S. Mulaik); November 24, 1934, males, females (S. Mulaik). Ten miles southeast of Edinburg, November 20, 1934, males, females (S. Mulaik). Southwest of Progresso, March, 1936, immature females (L. I. Davis). Two miles south of McCook, June 26, 1935, female (S. Mulaik) SAN AUGUSTINE COUNTY: San Augustine. June, 1936, immature male (S. Mulaik). Rio Grande City, July, STARR COUNTY: 1934, females (S. Mulaik). Five miles east of Rio Grande City, October 26-27, 1935, male, females (C. Rutherford, M. Welch, and S. Mulaik). Webb County: Laredo, February 9, 1935, female (S. Mulaik). Twelve miles east of Laredo, February 9, 1935, female (S. Mulaik). ZAPATA COUNTY: thirty-two miles southeast of Laredo, February 9, 1935, males, females (S. Mulaik). Four miles west of Arroyo Tigre, November 11, 1934, male, females (S. Mulaik).

# Loxosceles arizonicus, new species

Total length of female, 8.00 mm., of male, 7.00 mm.

This species is most closely related to devius. new species, but differs in the following respects: Seminal receptacles of the female subcontiguous at their bases, not widely separated. First leg of the female 4 times as long as the carapace. of the male, 5.7 times as long.

Type Locality.—Male holotype, female allotype and paratypes from Tucson, Arizona, July and August, 1935 (Peter Steckler).

Arizona Records.—Pima County: Rincon Ranch, April, 1938, male and female paratypes (C. M. Bogert). Eight miles north of Roosevelt Dam, April 11, 1935, male and female paratypes (W. Ivie).

TEXAS RECORD.—HIDALGO south of Pharr, March 28, 1936, female paratype (S. Mulaik).

# Loxosceles reclusus, new species

Total length of female, 9.00 mm., of male, 8.00 mm.

Coloration and structure essentially as in devius but distinct in the following respects: Seminal receptacles of the female separated by about one-half their width at the base. First leg of female 4.42 times as long as the carapace; of the male 5.9 times as long.

Type Locality.—Male holotype and female allotype from Austin, Travis County, Texas, September, 1909, males and females. Female paratype from Llano, Llano County, Texas, December, 1934 (L. I. Davis).

# Loxosceles unicolor Keyserling

Loxosceles unicolor Keyserling, 1887, Verh. Zool.-Bot. Gesell., Wien, XXXVII, p. 474. Pl. vi, fig. 46.

Loxosceles rufipes Petrunkevitch, Bull. American Mus. Nat. Hist., XXIX, p. 118 (part, not rufipes Lucas).

This species, which is common in Utah, Arizona, and California, should occur sparingly in the extreme western part of Texas.

#### DIGUETIA SIMON

# Diguetia caudata Gertsch

Diguetia caudata Gertsch, 1935, American Mus. Novitates, No. 792, p. 6, Fig. 9.

Texas Record.—Brewster County: Chisos Mountains, July, 1935, male and females (L. I. Davis).

# Diguetia imperiosa, new species

Total length of female, 9.25 mm., of male, 10.10 mm.

This is a larger species than canities and differs in the following respects: Abdomen completely covered with a mat of procumbent white scales and completely lacking the sinuous longitudinal stripes of contrasting hairs present in canities. First leg three times as long as the carapace, slightly exceeded in length by the fourth leg. First metatarsus shorter than the fourth. First two pairs of legs of the male black. Fourth metatarsus distinctly longer than the first in the male.

Type Locality.—Male holotype, female allotype and paratypes from Langtry, Val Verde County, Texas, August 18, 1935 (S. Mulaik). Two female paratypes from five miles east of Dryden, Terrell County, Texas, August, 1934 (S. Mulaik).

# Diguetia canities (McCook)

Segestria canities McCook, 1889, "American Spiders, etc.," II, p. 136, Figs. 165-166; idem, 1893, III, Pl. xxix, fig. 7.
Diguetia canities Simon, 1895, Hist. Nat.

Araign., I, p. 1068.—Petrunkevitch, 1911,

Bull. American Mus. Nat. Hist., XXIX, p. 117.—Comstock, 1913, "The Spider Book," p. 304.—Gertsch, 1935, American Mus. Novitates, No. 792, p. 6 (part).

Texas Records.—Brewster County: Hot Springs, June 7-10, 1938, females (D. and S. Mulaik). Twenty miles south of Alpine, August 17, 1935, male, females (S. Mulaik). Cameron County: Harlingen, November 17, 1934, two females (S. Mulaik). HIDALGO COUNTY: Edinburg, 1933. females (S. Mulaik). HUDSPETH County: no specific locality, August 16, 1935, females (S. Mulaik). Terrell County: Sanderson, July 4, 1934, two females (S. Mulaik). Five miles east of Dryden, August, 1934, females (S. Mulaik). ZAPATA COUNTY: southeast of Laredo, August, 1935, two females (S. Mulaik).

### SCYTODES LATREILLE

# Scytodes zapatana, new species

FEMALE.—Total length, 5.10 mm.

Color pattern in close agreement with Scytodes itzana Chamberlin and Ivie and S. championi Cambridge but the black lines on the carapace are sharper, the sides are not at all mottled, each side with sharp black lines. It may be further distinguished by having the first tibia and patella at most only slightly longer, not considerably longer than the carapace. Sternum completely unmarked, lacking the marginal row of spots of the above species. Openings of the epigynum less widely separated.

Type Locality.—Female holotype from thirty-two miles southeast of Laredo, Zapata County, Texas, November 11, 1934 (S. Mulaik).

# Scytodes fusca Walckenaer

Scytodes fusca Walckenaer, 1837, "Insectes Apteres," I, p. 272.—Gertsch, 1935, American Mus. Novitates, No. 792, p. 9 (discussion under S. intricata Banks).

The record of this species from "southern Texas" by Gertsch in 1935 belongs with the following species. Authentic examples of fusca have been taken rather frequently in Florida so its occurrence in eastern Texas along the coast is to be expected. There is a female of fusca in the Marx collection from California.

### Scytodes dorothea Gertsch

Scytodes dorothea Gertsch, 1935, American Mus. Novitates, No. 792, p. 9, Figs. 10 and 13.

Texas Records.—Cameron County: Arroyo Colorado, September, 1934, female paratype (S. Mulaik). East of Harlingen, January to March, 1936, two females (L. I. Davis). HIDALGO COUNTY: Edinburg, September to December, 1933, females (S. Mulaik): March-April, 1933, females (S. Mulaik): June. 1934, three females (S. Mulaik); October, 1934, two females (S. Mulaik); February 13-15, 1934, immature male (S. Mulaik); March-April, 1934, female allotype and paratype (S. Mulaik); October 22–25, 1934, male holotype (S. Mulaik); January 10-20, 1935, female (S. Mulaik); May 12, 1935, female (S. Mulaik); September 18, 1935, male (S. Mulaik); April 6, 1936, immature male (S. Mulaik); September, 1936, female (S. Mulaik); October 11, 1936, female (Rutherford); March-April, 1934, two immature females (S. Mulaik). KLEBERG County: Kingsville, October, 1934, female (S. Mulaik). Nueces County: Alice, June 20-28, 1935, female (H. C. Sibley, Jr.).

# Scytodes thoracica (Latreille)

Aranea thoracica Latreille, 1804, Nouv. Dict. Hist. Nat., XXIV, p. 134.

Scytodes cameratus Hentz, 1850, Journ. Boston Soc. Nat. Hist., VI, p. 35, Pl. IV, fig. 17.
Scytodes thoracica Emerton, 1882, Trans.
Connecticut Acad. Arts and Sci., VI, p. 31, Pl. VI, fig. 4.—Petrunkevitch, 1911, Bull.
American Mus. Nat. Hist., XXIX, p. 121.

TEXAS RECORD.—HIDALGO COUNTY: Edinburg, March-April, 1934, female (S. Mulaik).

### Scytodes perfecta Banks

Scytodes perfecta Banks, 1898, Proc. California Acad. Sci., (3) I, p. 210, Pl. XIII, fig. 2.—Gertsch, 1935, American Mus. Novitates, No. 792, p. 7, Figs. 12 and 17.

Texas Records.—Hidalgo County: Edinburg, May 6, 1935, two females (S. Mulaik); October 12, 1935, female (S. Mulaik); March-April, female (S. Mulaik). Webb County: Dolores, Coal mine, 4000 feet down, immature females, April 11, 1936 (S. Mulaik).

### Scytodes longipes Lucas

Scytodes longipes Lucas, 1845, Ann. Soc. Ent. France, (3) II, p. 71, Pl. 1, fig. 2.

The species recorded by Comstock from Texas under this name is *S. intricata* Banks. Inasmuch as the true *longipes* has been taken in Florida the possibility that it will be found in Texas along the coast is good.

# Scytodes intricata Banks

Scytodes intricata Banks, 1909, Proc. Acad. Nat. Sci. Philadelphia, VI, p. 196, Pl. vi, fig. 24.—Gertsch, 1935, American Mus. Novitates, No. 792, p. 9, Figs. 15 and 16.

Scytodes longipes Comstock, 1913, "The Spider Book," p. 306 (not S. longipes Lucas).

Texas Records.—Bexar County: San Antonio, August, 1935, female (L. I. Davis); July 25, 1936, female (L. I. Davis). CAMERON COUNTY: no specific locality, January to March, 1936, male (L. I. Davis). East of Harlingen, January to March, 1936, male (Davis). Northeast Cameron County, May 19, 1934, female (S. Mulaik). DALLAS COUNTY: Crosby, December 14, 1935, female (John Swanson). HIDALGO County: Edinburg, February 14, 1935, female (Rutherford); March-April, 1934, females (S. Mulaik); September to December, 1933, females (S. Mulaik); May 12, 1935, male, female (S. Mulaik); May 6, 1935, male (S. Mulaik); September 14, 1935, male (S. Mulaik); April 6, 1936, female (S. Mulaik). Thirty miles west of Edinburg, November 24, 1934, females (S. Mulaik); February 24, 1935, males (S. Mulaik); July 4, 1935, females (S. Mulaik). Five miles south of San Juan, February 22, females (S. Mulaik). County: Jasper, June 6, 1936, female (S. KENDALL COUNTY: Comfort, Mulaik). July 8, 1936, two females (L. I. Davis). Kingsville, female KLEBERG COUNTY: T. Reed). Nueces County: Bishop, March 22, 1936, male, female (S. Mulaik). Driscoll, March 23, 1936, female (S. Mulaik). STARR COUNTY: five miles east of Rio Grande City, September 10, 1935, female (S. Mulaik). Five miles west of Rio Grande City, April 10, 1936, female (S. Mulaik). WEBB COUNTY: Laredo, February 9, 1935, males, females (S. Mulaik). Twelve miles east of Laredo, February 9, 1935, female (S. Mulaik). ZAPATA COUNTY: thirty-two miles southeast of Laredo, March 10, 1936, females (S. Mulaik); November 11, 1934, females (S.

Mulaik). Arroyo Salado, February 9, 1935, two females, one with an egg sac (S. Mulaik). Four miles west of Arroyo Tigre, November 11, 1934, females (S. Mulaik). Travis County: Austin (Comstock, 1913). Austin, 1909, males and females (A. Petrunkevitch).

# Pholcidae

### PHOLCUS WALCKENAER

# Pholcus unicolor Petrunkevitch

Pholcus unicolor Petrunkevitch, 1929, Trans. Connecticut Acad. Arts and Sci., XXX, pp. 147-150, Figs. 139-143.

Texas Records.—Cameron County: no specific locality, January to March, 1936, female (L. I. Davis); May 1-2, 1936, immature male (L. I. Davis); September, 1936, male (L. I. Davis). Hidalgo County: Edinburg, High School Building, November 22, 1934, immature specimens (S. Mulaik); Edinburg, March 20, 1936, female (S. Mulaik); February 13-15, 1935, male, females (S. Mulaik); January, 1935, male, immature females (S. Mulaik).

## Pholcus phalangioides (Fuesslin)

Aranea phalangioides Fuesslin, 1775, Verz. Schweiz. Ins., p. 61.

Pholeus atlanticus Hentz, 1950, Journ. Boston Soc. Nat. Hist., VI, p. 284, Pl. x, fig. 7.

Texas Record.—Travis County: Austin, one female. This cosmopolitan species will probably be found to be common in eastern Texas.

### SPERMOPHORA HENTZ

### Spermophora meridionalis Hentz

Spermophora meridionalis Hentz, 1832, Silliman's Journ. Sci., XLI, p. 116.—Emerton, 1882, Trans. Connecticut Acad. Arts and Sci., VI, p. 31, Pl. vi, fig. 3.—Petrunkevitch, 1910, Ann. New York Acad. Sci., XIX, p. 208, Pl. xxi, fig. 5.—Jones, 1936, Field and Laboratory, p. 69.

Texas Records.—Dallas County: no specific locality (Jones, 1936). Travis County: Austin, August, 1935, female (L. I. Davis).

# PHOLCOPHORA BANKS Pholcophora texana Gertsch

Pholoophora texana Gertsch, 1935, American Mus. Novitates, No. 792, p. 11, Figs. 22, 23, and 24.

Texas Records.—Hidalgo County: Edinburg, April, 1935, immature female (S. Mulaik). Star County: five miles east of Rio Grande City, November 11, 1934, male holotype and immature female allotype (S. Mulaik).

# Pholcophora americana Banks

Pholoophora americana Banks, 1896, Trans. American Ent. Soc., XXIII, p. 57.—Gertsch, 1935, American Mus. Novitates, No. 792, p. 11, Figs. 19, 20, and 21.

No examples of this species have been taken in Texas so far in our collecting but it will almost certainly be found at low to moderate elevations in the mountains of the extreme western part of the state. We have two females from Otero County, New Mexico, taken August 9–12, 1935 (S. Mulaik).

Pholcophora diluta, new species
Figures 27 and 28
FEMALE.—Total length, 1.60 mm.

	Length	$\mathbf{W}\mathbf{idth}$
CARAPACE	$0.70 \; \mathrm{mm}$ .	$0.60 \mathrm{\ mm}$ .
FRONT	0.28	0.28
STERNUM	0.44	0.44
LABIUM	0.10	0.16
MAXILLA	0.16	0.07
ABDOMEN	1.00	0.75

Whole spider pale yellow except for the eyes which are narrowly ringed with black and enclose a black field. Carapace smooth, the sparse covering of hairs rubbed off. Carapace ovate in shape as seen from above, the front considerably narrowed, the width at the second row of eyes two-thirds of the greatest width. Clypeus protruding, 0.13 mm. high, equal in height to about twice the diameter of an anterior lateral eye. Carapace as seen from the side moderately high, about equal in height from the eyes to the position of the obsolete median groove. First row of eyes gently procurved, the medians subcontiguous with each other and with the much larger lateral eyes. Second row of eyes moderately recurved, the medians separated by their diameter, subcontiguous with the subequal Median ocular quadrangle broader laterals. than long (25/15), narrowed in front in the same ratio, the anterior median eyes much smaller. Eye arrangement as illustrated in Fig. 28. Sternum as broad as long, broadly truncated behind between the fourth coxae which are separated by their length. Labium much broader than long. Chelicera with a black spur on the margin. Coxae subequal in length. Legs for the most part missing. Second leg: femur, 1.00 mm., patella, 0.23 mm., tibia, 0.93

mm., metatarsus, 1.06 mm., and tarsus, 0.45 mm. long. Fourth femur, 1.25 mm. long.

Abdomen subglobóse, evenly set with hairs. Epigynum as illustrated in Fig. 27.

Type Locality.—Female holotype and five paratypes from Hot Springs, Brewster County, Texas, June 7–10, 1938 (D. and S. Mulaik).

This tiny spider is distinct from *P. texana* Gertsch in its smaller size, paler color, in having the eyes of the posterior row more strongly recurved, and in the details of the epigynum as figured.

### PHYSOCYCLUS SIMON

# Physocyclus globosus (Taczanowski)

Pholcus globosus Taczanowski, 1873, Horae Soc. Ent. Ross., X, p. 105.

Physocyclus globosus F. Cambridge, 1902, Biol. Centr. Amer., Arach., II, p. 368, Pl. xxxiv, figs. 22 and 23.

We have no authentic records of this species for Texas but its hypothetical range includes the coastal portion of the state. Most of the records of *globosus* from the southwestern United States are referable to *Physocyclus tanneri* Chamberlin and *P. enaulus* Crosby.

# Physocyclus enaulus Crosby

Physocyclus enaulus Crosby, 1926, Proc. Ent. Soc. Washington, XXVIII, p. 1, Pl. 1, fig. 1.—Gertsch, 1935, American Mus. Novitates, No. 792, p. 11.

Physocyclus neomexicanus Chamberlin and Gertsch, 1929, Journ. Ent. Zool., Pomona College, p. 2, Pl. 1, figs. 8, 13, 14, and 15.

Physocyclus globosus Jones, 1936, Field and Laboratory, p. 69. (Not globosus Taczanowski.)

Texas Records.—Atascosa County: Jourdantown, December 27, 1934, male (Rutherford). Hidalgo County: thirty miles west of Edinburg, July 4, 1935, female (S. Mulaik). Edinburg, October, 1933, males, females (S. Mulaik); September to December, 1933, males (S. Mulaik); March 10-15, 1934, male, female (S. Mulaik); November 6, 1934, males, females (S. Mulaik); September 14, 1935, many males and females (S. Mulaik); September 18, 1935, males, females (S. Mulaik); February 14, 1935, males, females (Rutherford); May 10-15, 1935, males, females (S. Mulaik); June 2, 1935, male and female (S. Mulaik); August 25,

1935. male and female (S. Mulaik); October 10, 1935, males, females (J. Rutherford); October 11, 1935, male and female (S. Mulaik); March 25, 1936, males, females (C. Rutherford); January 10, 1935, LLANO females (S. Mulaik). County: Llano, December, 1934, female (L. I. Davis); July 10-12, 1936, male (L. I. Davis). STARR COUNTY: one-half mile east of Rio Grande City, November 11, 1934, males, females (S. Mulaik). Five miles east of Rio Grande City, October, 1935 (Rutherford, Welch, and Mulaik). TERRELL COUNTY: Sanderson, July 4, 1934, female (S. Mulaik). ZAPATA COUNTY: no specific locality, February 9, 1935, males, females (S. Mulaik). Thirty-two miles southeast of Laredo. November 11. 1934, males, females (S. Mulaik).

### MODISIMUS SIMON

### Modisimus texanus Banks

Modisimus texanus Banks, 1905, Proc. Ent. Soc. Washington, VII, p. 94.—Comstock, 1913, "The Spider Book," p. 327, Fig. 319.

Texas Records.—Cameron County: no specific locality, September, 1936, female (L. I. Davis); March, 1936, males, females (L. I. Davis). HIDALGO COUNTY: Edinburg, April, 1935, female (S. Mulaik); September to December, 1934, males (S. Mulaik); May 15-25, 1935, male, female (S. Mulaik); June 10, 1935, male, female (S. Mulaik). Monte Christo, September 10, 1935, males, females (S. Mulaik). KENDALL COUNTY: Comfort, July 8, 1936, female (L. I. Davis). Llano County: no specific locality, July 10-12, 1936, female (L. I. Davis). Mason County: Mason, July, 1935, female (L. I. Davis). Nueces County: Driscoll, March 23, 1936, female (S. Mulaik). STARR COUNTY: one-half mile east of Rio Grande City, November 11, 1934, male and female (S. Mulaik). Five miles west of Rio Grande City, April 10, 1936, two males (S. Mulaik). Rio Grande City, July, 1934, male, females (S. Mulaik). TRAVIS COUNTY: Austin, March, male and female types (J. H. Comstock). Austin, September, 1909, males and females (A. Petrunkevitch). Webb County: Laredo, February 9, 1934, males, females (S. Mulaik). Zapata County:

thirty-two miles southeast of Laredo, November 11, 1934, female (S. Mulaik).

### PSILOCHORUS SIMON

# Psilochorus pallidulus Gertsch

Psilochorus pallidulus Gertsch, 1935, American Museum Novitates, No. 792, p. 13, Figs. 28, 29, and 30.

Texas Record.—Hidalgo County: Edinburg, September to December, 1933, male holotype (S. Mulaik).

# Psilochorus imitatus, new species

Figure 17

Male.—Total length, 2.70 mm. Carapace, 1.20 mm. long, 1.05 mm. wide.

Coloration as usual in the genus. Carapace with the broad clypeus dusky to black and the Y-shaped black maculation on the median groove and cephalic sutures well marked. Structure in close agreement with redemptus, the form of the carapace, length of clypeus, eye arrangement differing in no important respects. Chelicerae armed with stout horns originating near the base, their form shown in Fig. 17. Palpus in close agreement with utahensis but distinct in the details of the bulb which is elongated and ends as a forked process. Legs without spines.

	I	II
FEMUR	4.75 mm.	3.70 mm.
PATELLA	0.40	0.40
Тівіа	5.00	3.40
METATARSUS	6.40	4.50
Tarsus	1.05	1.00
TOTAL	17.60	13.00
	III	IV
FEMUR	III 3.05 mm.	IV 3.70 mm.
FEMUR PATELLA		
	3.05 mm.	3.70 mm.
PATELLA	3.05 mm. 0.30	3.70 mm. 0.40
PATELLA TIBIA	3.05 mm. 0.30 2.70	3.70 mm. 0.40 3.50

Female.—Total length, 3.00 mm. Carapace, 1.20 mm. long, 1.20 mm. wide.

Coloration as in the male. Structure as in pullulus and redemptus from which species imitatus differs chiefly in the comparative leg lengths. The first femur is four times as long as the carapace, whereas in redemptus it is scarcely three times as long.

	I	II
FEMUR	4.20  mm.	3.50  mm.
PATELLA	0.60	0.50
Тівіа	4.70	3.25
METATARSUS	5.40	4.05
Tarsus	1.20	0.85
TOTAL	16.10	12.15

	III	IV
FEMUR	3.10  mm.	3.70 mm.
PATELLA	0.40	0.50
Тівіа	2.70	3.50
METATARSUS	3.30	4.20
TARSUS	0.70	0.95
TOTAL	10.20	12.85

The epigynum appears to differ in no important details from that of *utahensis*.

Type Locality.—Male holotype, female allotype and paratypes from Sanderson, Terrell County, Texas, July 4, 1934 (S. Mulaik).

This species is best differentiated from *utahensis* by reference to the cheliceral spurs of the male. They are moderately curved and truncated at the end, whereas in *utahensis* they are more strongly curved and pointed at the distal end.

Texas Records.—Brewster County: Marathon, male and female paratypes. EL PASO COUNTY: Clint, July 9, 1939, one female (L. I. Davis). HEMPHILL COUNTY: Canadian, July 15, 1939, one female paratype (L. I. Davis). Lipscomb County: Higgins, July 16, 1939, one female (A. M. and L. I. Davis). McCulloch County: five miles south of Brady, December, 1939, females (D. and S. Mulaik). COUNTY: nineteen miles north of Carthage, June 6, 1936, male and female paratypes (S. Mulaik). Tom Green County: Water Valley, December, 1939, males and females (D. and S. Mulaik). San Angelo, females (D and S. Mulaik). WILLBARGER County: Vernon, July 16, 1939, female paratype (A. M. and L. I. Davis).

NEW MEXICO RECORDS.—Bear Creek Canyon, twenty miles southeast of Cloudcroft, July 18, 1934, male and female paratypes (S. Mulaik). Cloudcroft, July, 1934, males and females, paratypes (S. Mulaik). Camp Mary White, Otero County, August 8–12, 1935, males and females, paratypes (S. Mulaik). East of Mt. Park, July 11, 1935, males and females, paratypes (S. Mulaik).

# Psilochorus pullulus (Hentz)

Theridion pullulum Hentz, 1850, Journ. Boston Soc. Nat. Hist., VI, p. 282, Pl. x, fig. 5.

We have no authentic Texas records for this species which may not be so widely distributed as believed by authors. Hentz's material came from Alabama so the distribution of the species will probably include the eastern portion of Texas. The records of pullulus from west of the Rocky Mountains, western Texas, and Mexico almost certainly refer to other species, probably to Psilochorus redemptus, imitatus, and utahensis.

# Psilochorus redemptus, new species

MALE.—Total length, 2.30 mm. Carapace, 1.10 mm. long, 0.90 mm. wide.

Coloration as in utahensis and other species of the genus. Integument of the carapace pale yellow, the median groove and part of the cephalic sutures infuscated, forming a Y-shaped marking, the eye area darkened except between the posterior median eyes. Carapace slightly longer than broad, the pars thoracica moderately convex, the pars cephalica elevated, the sutures deep. Clypeus broad, sloping Eyes of the first row procurved, subcontiguous, the median eves one-half the diameter of the laterals. Second row of eyes straight, the medians separated by their diameter, subcontiguous with the subequal lateral eyes. Median ocular quadrangle much broader than long (25/18), narrowed in front (25/12). Abdomen subglobose, with blue spots above which are surrounded by white ones. Legs without spines. Chelicerae with the characteristic horns which originate near base and are truncated at distal ends. Palpus closely related to that of pullulus but much shorter, more compressed, the tibial spur which parallels the bulb much shorter, the terminal part of the bulb abruptly turned in a right angle and terminating in a small hook.

	I	II
FEMUR	3.00  mm.	2.40  mm.
PATELLA	0.35	0.35
Тівіа	3.15	2.20
METATARSUS	3.80	2.90
Tarsus	0.90	0.70
TOTAL	11.20	8.55
	III	IV
Femur	III 2.15 mm.	IV 3.00 mm.
FEMUR PATELLA		= -
	2.15 mm.	3.00 mm.
PATELLA	2.15 mm. 0.32	3.00 mm. 0.35
Patella Tibia	2.15 mm. 0.32 1.80	3.00 mm. 0.35 2.55

FEMALE.—Total length, 2.80 mm. Carapace, 0.85 mm. long, 0.85 mm. wide. Color as in the male. Structure as usual in females of the genus, the legs considerably shorter than in the male. Pars cephalica less elevated than in the male. Eye arrangement as in the male. Epigynum closely resembling that of *Psilochorus pullulus* (Hentz).

	I	II
FEMUR	2.30  mm.	1.88 mm.
PATELLA	0.35	0.32
Tibia	2.30	1.70
METATARSUS	2.85	2.17
Tarsus	0.73	0.55
TOTAL	8.53	6.62
	III	IV
FEMUR	III 1.70 mm.	IV 2.30 mm.
FEMUR PATELLA		
	1.70 mm.	2.30 mm.
PATELLA	1.70 mm. 0.30	2.30 mm. 0.35
PATELLA TIBIA	1.70 mm. 0.30 1.40	2.30 mm. 0.35 2.10

Type Locality.—Male holotype and female allotype from Edinburg, Texas, November 7, 1934 (S. Mulaik).

This species can easily be separated from *P. pullulus*, its nearest relative, by reference to the leg measurements. In *pullulus* the first femur is over four times as long as the carapace while in *redemptus* it is scarcely three times as long.

TEXAS RECORDS.—BEXAR COUNTY: San Antonio, August, 1935, females (L. I. Davis); July 25, 1936, male paratype (L. I. Davis). Brewster County: Chisos Mountains, July, 1935, male (L. I. Davis). CAMERON COUNTY: northeast Cameron County, May 19, 1934, female paratype (S. Mulaik). Green Island Bird Sanctuary, May 11, 1935, male, females (S. Mulaik). Harlingen, November 18, 1934, females (S. Mulaik). Fifteen miles southwest of Harlingen, November 18, 1934, female (S. Mulaik). COMANCHE COUNTY: fifteen miles northeast of Comanche, July 14, 1936, male and female paratypes (L. I. HIDALGO COUNTY: Edinburg, September to December, 1933, male and female paratypes (S. Mulaik); November 7, 1934, male holotype, female allotype, and paratypes (S. Mulaik); April 19, 1935, male, female (S. Mulaik); June 2, 1935, male, females (S. Mulaik); February 10, 1935, male and female paratypes (S. Mulaik); November 27, 1935, male paratype (Rutherford and McConnell); October 15, 1935, male, female (Schulle); December 1, 1936, male, female (S. Mulaik). Thirty miles west of Edinburg, November 24, 1934, female (S. Mulaik); November 29, 1935, males, females (S.

Mulaik); July 4, 1935, males, females (S. Mulaik). Northeast of Edinburg, June 10-12, 1935, male (S. Mulaik). JASPER County: five miles north of Jasper, June 6, 1936, male (S. Mulaik). JEFF DAVIS County: McDonald Observatory, July 5, 1934, males, females (S. Mulaik). Fort Davis CCC, July, 1934, male, female (S. Mulaik). LLANO COUNTY: no specific locality, July 9, 1936, female paratype (L. I. Davis); December 24, 1935, female (L. I. Davis); December, 1934, male (L. I. Davis). PANOLA COUNTY: nineteen miles north of Carthage. June 6. 1936, male, female (S. Mulaik). SAN AU-GUSTINE COUNTY: San Augustine, June, 1936, male, female (S. Mulaik). County: Laredo, February 9, 1935, females, male (S. Mulaik). ZAPATA COUNTY: thirty-two miles southeast of Laredo, August 4, 1935, male, females (S. Mulaik).

# Psilochorus coahuilanus Gertsch and Davis

Psilochorus coahuilanus Gertsch and Davis, 1937, American Mus. Novitates, No. 961, p. 10, Fig. 16.

Texas Record.—Brewster County: Hot Springs, June 7–10, 1938, male and female (D. and S. Mulaik).

# Segestriidae ARIADNA AUDOUIN Ariadna bicolor (Hentz)

Pylarus bicolor Hentz, 1842, Journ. Boston Soc. Nat. Hist., IV, p. 225.

Texas Records.—Bastrop County: Bastrop, August 14, 1938, females (A. M. and L. I. Davis). Brewster County: top of Chisos Mountains, July 25, 1933, female (S. Mulaik). Hays County: no specific locality, April 15, 1939, female (D. and S. Mulaik). McLennan County: Waco, July 4, 1939, female (J. Vick). Cameron Park, October 7, 1939, male (Baylor University Museum). Williamson County: Taylor, April 20, 1939, female (C. E. Heard).

# Dysderidae Dysdera Latreille Dysdera crocata C. Koch

Dysdera crocata С. Косн, 1839, Die Arachniden, V, p. 81, Figs. 392-394.

Texas Record.—Dallas County: Dallas, August, 1934, male (J. H. Robinson).

# Caponiidae

### ORTHONOPS CHAMBERLIN

# Orthonops lapanus, new species Figure 16

Orthonops gertschi Gertsch, 1935, American Mus. Novitates, No. 792, p. 31, Figs. 33 and 34. (Not Orthonops gertschi Chamberlin.)

FEMALE.—Total length, 5.50 mm.

Carapace light orange, without contrasting markings except for the black area enclosed by the eyes, clothed sparsely with inconspicuous black hairs. Sternum, labium, and chelicerae concolorous with the carapace or nearly so, evenly but sparsely clothed with suberect black hairs. Maxillae and appendages yellow. Tarsi of palpi with a heavy covering of appressed dark hairs. Legs uniformly clothed with suberect black hairs. Abdomen gray, evenly set with rather short subprocumbent black hairs.

Carapace a long oval, low and depressed, evenly convex, the cephalic sutures and median groove obsolete. Pars cephalica narrowed in front and broadly rounded across the clypeus. The two eyes close together, separated by less than their radius, set back from the clypeal margin by nearly three diameters. Eye group about one-third the width of the carapace at that point. Carapace longer than broad (2.20 mm./1.60 mm.). Sternum longer than broad (1.50 mm./1.20 mm.), suboval in outline, the posterior end rounded and separating the posterior coxae by their width. Labium longer than broad (0.45 mm./0.38 mm.), gradually narrowed and bluntly rounded apically. Maxillae only slightly longer than the labium, converging around the labium and nearly touching in front. Chelicerae relatively weak, the claw slender and strongly curved, the margins with membranous lobes.

First and second pairs of legs stouter than the posterior legs. First femur four times as long as width. First leg: femur, 1.45 mm., patella, 0.78 mm., tibia, 1.05 mm., metatarsus, 0.80 mm., and tarsus, 0.48 mm. long. First metatarsus with a low, transparent keel the whole length beneath. Tarsus thickened distally, with a transparent lobe beneath at the base. Second leg essentially as the first. Third leg shortest. Fourth leg: femur, 1.65 mm., patella, 0.82 mm., tibia, 1.35 mm., metatarsus, 1.43 mm., and tarsus, 0.58 mm. long. Unpaired claw well developed, lacking denticles, present on all the tarsi. Paired claws with six teeth in a single series. All tarsi with a distinct false suture in the distal half.

MALE.—Total length, 4.75 mm.

Coloration and structure in close agreement with the female. Eyes scarcely more than two diameters from the clypeal margin. Carapace

longer than broad (2.10 mm./1.55 mm.). First leg: femur, 1.25 mm., patella, 0.75 mm., tibia, 1.00 mm., metatarsus, 0.77 mm., and tarsus, 0.40 mm. long.

Palpus as illustrated in Fig. 16.

Type Locality.—Male holotype and female allotype from three miles east of Rio Grande City, Texas, Jan. 21, 1939 (S. Mulaik).

Texas Records.—Hidalgo County: Edinburg, January, 1934, female and immature paratypes (S. Mulaik). miles west of Edinburg, November 24, 1934, male paratype (J. Rutherford). Northwest of Edinburg, September 3, 1934, female (S. Mulaik). McCook, January 29, 1939, female paratype (S. Mulaik). North of McCook, November 28, 1937, female paratype (D. Mulaik). COUNTY: Raven Ranch, August, 1939, immature male (D. Mulaik). STARR County: five miles east of Rio Grande City, October 27, 1935, female (S. Mulaik); idem, October 26, 1935, female paratype (C. Rutherford); idem, January 21, 1939, male paratype (S. Mulaik). Three miles east of Rio Grande City, January 21, 1939, male holotype, female allotype (S. Mulaik).

This interesting spider is easily distinguished from Orthonops gertschi Chamberlin with which it has been confused. The whole spider is proportionately stouter and has shorter legs. In the female the first tibia and patella (1.83 mm. long) are very much shorter than the carapace (2.20 mm. long), whereas in gertschi they are subequal (carapace, 2.20 mm. long; first tibia and patella, 2.00 mm. long), the carapace being only slightly longer. In the male the first tibia and patella (1.75 mm. long) is shorter than the carapace (2.10 mm. long), whereas in gertschi the carapace is slightly shorter (1.83 mm./1.90 mm.). The palpi of the two species are similar but in *lapanus* the bulbal portion is heavier and the tube is proportionately shorter as illustrated.

# TARSONOPS CHAMBERLIN

# Tarsonops systematicus Chamberlin

Tarsonops systematicus Chamberlin, 1924, Proc. California Acad. Sci., (4), p. 601, Fig. 37.— Gertsch 1935, American Mus. Novitates, No. 792, p. 31, Fig. 35. Texas Records.—Hidalgo County: Monte Cristo, September 10, 1935, female (S. Mulaik). Edinburg, June 2, 1935, immature specimens (S. Mulaik); January 10, 1938, female (S. Mulaik); January 7, 1939, female (S. Mulaik); February 5, 1939, female (S. Mulaik). Llano County: no specific locality, July 10–12, 1936, female (L. I. Davis). Starr County: five miles east of Rio Grande City, October 26, 1935, female (C. Rutherford); January 21, 1939, female (S. Mulaik). One-half mile east of Rio Grande City, November 11, 1934, female (S. Mulaik). Webb County: east of Laredo, February 9, 1935, two males (S. Mulaik).

# Oonopidae

# OONOPS TEMPLETON

### Oonops stylifer Gertsch

Oonops stylifer Gertsch, 1936, American Mus. Novitates, No. 852, p. 6, Figs. 10, 11, and 12.

Texas Record.—Hidalgo County: Edinburg, June, 1935, male holotype (S. Mulaik).

# Oonops furtivus Gertsch

Oonops furtivus Gertsch, 1936, American Mus. Novitates, No. 852, p. 6, Figs. 19, 20, and 21.

Texas Records.—Cameron County: no specific locality, January to March, 1936, male (L. I. Davis); September, 1936, male and female (L. I. Davis). Hidalgo County: Edinburg, June, 1935, two male paratypes (S. Mulaik); September 24, 1938, male (D. Mulaik); February 5, 1939, male, two females (S. Mulaik). Seven miles east of Edinburg, February 17, 1935, male holotype (S. Mulaik).

### Oonops secretus Gertsch

Oonops secretus Gertsch, 1936, American Mus. Novitates, No. 852, p. 8, Figs. 14, 15, and 16.

Texas Records.—Cameron County: fifteen miles southwest of Harlingen, November 18, 1934, male holotype (S. Mulaik). No specific locality, January, 1938, males, females (L. I. Davis). Hidalgo County: Edinburg, April 29, 1936, male, two females (S. Mulaik); December, 1939, male, two females (D. and S. Mulaik).

### OPOPAEA SIMON

# Opopaea meditata Gertsch and Davis

Opopaea meditata Gertsch and Davis, 1936, American Mus. Novitates, No. 881, p. 20, Figs. 25 and 26.

Texas Record.—Bexar County: San Antonio, December 28, 1935, female holotype (L. I. Davis).

# Opopaea sedata, new species

Female.—Total length, 1.70 mm.

Carapace, 0.70 mm. long, 0.37 mm. wide. Abdomen, 1.07 mm. long, 0.80 mm. wide.

Carapace bright orange-brown, the pars thoracica somewhat darker, clothed sparsely with inconspicuous erect black hairs which are limited for the most part to the pars cephalica. Eyes narrowly ringed with black. Mouth parts, sternum, and appendages somewhat paler than the carapace, the clothing of black hairs sparse. Abdomen concolorous with the carapace, evenly and more thickly covered with subprocumbent black hairs.

Carapace typical, longer than broad, strongly convex, the pars cephalica weakly rounded in front, the cephalic and median sutures obsolete. Width of the head at the posterior lateral eyes about half the greatest width of the carapace (29/57). Carapace as seen from the side highest behind the eyes, sloping gently forward and caudad to the posterior declivity which is abrupt. Clypeus sloping, equal in height to two-thirds the short diameter of an anterior lateral eye. Eyes six, the first row of two narrower than the second row (20/24), the eyes separated by their diameter, forming a strongly procurved line with the posterior median eyes and contiguous with them. The four eves of the second row strongly recurved, a line through the centers of the posterior laterals touching the posterior edges of the median eyes. Posterior median eyes contiguous, slightly separated from the distinctly smaller posterior lateral eyes. Sternum longer than broad (60/53), truncated behind where the posterior coxae are separated by slightly more than their length. Coxae subglobose. Labium subquadrangular, nearly twice as broad as high, and about half as high as the convergent maxillae. Legs without spines.

Dorsal sclerite completely covering the abdomen, suboval in shape, finely but distinctly roughened. Ventral sclerite smaller than the dorsal. Spinnerets with a narrow sclerite around them. Epigynal plate evenly rounded behind.

Type Locality.—Female holotype and paratype from Encino, Brooks County, Texas, June 3, 1936 (S. Mulaik).

This species may be distinguished from *Opopaea meditata* Gertsch and Davis by reference to the two eyes of the first row which are much wider apart, separated by

their full diameter. In *meditata* the carapace and abdomen are smooth and shining, whereas in *sedata* the finely roughened integument is very much duller.

# Opopaea devia Gertsch

Opopaea devia Gertsch, 1936, American Mus. Novitates, No. 852, p. 5, Fig. 13.

Texas Records.—Hidalgo County: Edinburg, May 30, 1935, female holotype (S. Mulaik); December 1–10, 1936, female (S. Mulaik); March, 1939, female (E. L. Atwood). Three miles east of Edinburg, April 12, 1937, female (S. Mulaik). Seven miles south of Pharr, May 30, 1939, male (S. Mulaik).

# SCAPHIELLA SIMON Scaphiella hespera Chamberlin

Scaphiella hespera Chamberlin, 1924, Proc. California Acad. Sci., (4), p. 593, Figs. 21-23.

Texas Records.—Hidalgo County: Edinburg, December, 1934, male (S. Mulaik); April 18, 1936, male (A. M. and L. I. Davis); Feb. 5, 1939, female (S. Mulaik); June 8, 1939, male (S. Mulaik); December, 1939, female (D. and S. Mulaik). McCook, April 18, 1936, male (D. and S. Mulaik). Starr County: five miles east of Rio Grande City, January 21, 1939, male and female (S. Mulaik). Zapata County: thirty-two miles southeast of Laredo, November 11, 1934, male, two females (S. Mulaik).

### STENOONOPS SIMON

Stenoonops juvenilis Gertsch and Davis Stenoonops juvenilis Gertsch and Davis, 1936, American Mus. Novitates, No. 881, p. 21, Fig. 27.

Texas Record.—Cameron County: no specific locality, January to March, 1936, immature male holotype (L. I. Davis).

# Dictynidae

### TRICHOLATHYS CHAMBERLIN AND IVIE

Tricholathys knulli Gertsch and Mulaik

Tricholathys knulli Gertsch and Mulaik, 1936, American Mus. Novitates, No. 851, p. 1, Fig. 1.

Texas Record.—Cameron County: Brownsville, June 1, 1934, female holotype (J. N. Knull).

### ARGENNA THORELL

Argenna monticola Gertsch and Mulaik Argenna monticola Gertsch and Mulaik, 1936, American Mus. Novitates, No. 851, p. 2, Fig. 2.

Type Locality.—Female holotype, Scott Able Canyon, Otero County, New Mexico, July, 1934 (S. Mulaik).

### ARGENNINA GERTSCH AND MULAIK

Argennina unica Gertsch and Mulaik

Argennina unica Gertsch and Mulaik, 1936, American Mus. Novitates, No. 851, p. 2, Fig. 5.

Texas Record.—Hidalgo County: Edinburg, Spring, 1933, female holotype (S. Mulaik).

### SCOTOLATHYS SIMON

# Scotolathys maculatus (Banks)

Dictyolathys maculata Banks, 1900, Proc. Acad. Nat. Sci. Philadelphia, p. 534.

Texas Record.—Harris County: Houston, June 11, 1937, female (S. Mulaik).

# Scotolathys delicatulus Gertsch and Mulaik

Scotolathys delicatulus Gertsch and Mulaik, 1936, American Mus. Novitates, No. 851, p. 4, Fig. 4.

TEXAS RECORDS.—CAMERON COUNTY: no specific locality, September, 1936, male, females (L. I. Davis); January, 1936, females (L. I. Davis). Fifteen miles southwest of Harlingen, November 18, 1934, female holotype (S. Mulaik). HIDALGO County: seven miles east of Edinburg, February 17, 1935, female (S. Mulaik). McCook, April 18, 1936, females (S. Mul-Edinburg, March 31, 1936, female (L. C. Piper). SAN AUGUSTINE COUNTY: San Augustine, June, 1936, female (S. Mulaik). ZAPATA COUNTY: thirty miles southeast of Laredo, February 9, 1935, female (S. Mulaik).

# MALLOS O. CAMBRIDGE

Mallos O. Cambridge, 1902, Biol. Centr. Amer., Arach., I, p. 308. Dictymina Banks, 1904, Proc. California Acad.

Sci., (3) III, p. 342.

GENOTYPES.—Of Mallos, M. niveus O. Cambridge, from Mexico; of Dictynina,

D. pallida Banks, from California. It is interesting to note that the genotypes of these two genera are conspecific.

# Mallos eutypus

(Chamberlin and Gertsch)

Dictyna eutypa Chamberlin and Gertsch, 1929, Journ. Ent. Zool., Pomona College, XXI, p. 101, Pl. 1, fig. 2.

NEW MEXICO RECORD.—Cloudcroft, July 19, 1935, female (S. Mulaik).

# Mallos niveus Cambridge

Mallos niveus O. Cambridge, 1902, Biol. Centr. Amer., Arach., p. 308, Pl. xxxv, fig. 1. Dictynina pallida Banks, 1904, Proc. California Acad. Sci., (3) III, p. 342, Pl. xxxix, fig. 22.

NEW MEXICO RECORD.—OTERO COUNTY: Camp Mary White, August 9–12, 1935, female (S. Mulaik).

# Mallos trivittatus (Banks)

Lethia trivittata Banks, 1901, Proc. Acad. Nat. Sci. Philadelphia, p. 577, Pl. xxxiii, figs. 9 and 10.

NEW MEXICO RECORDS.—OTERO COUNTY: Camp Mary White, August 9–12, 1935, males, females (S. Mulaik). Cloudcroft, July 18, 1935, male (S. Mulaik).

### DICTYNA SUNDEVALL

# Dictyna mulegensis Chamberlin

Dictyna mulegensis Chamberlin, 1924, Proc. California Acad. Sci., (4) XII, p. 582, Figs. 7, 8, and 9.

Texas Records.—Hidalgo County: south of Donna, March 15, 1936, female (S. Mulaik). Edinburg, February 1935, two males (S. Mulaik); November 11, 1934, females (S. Mulaik); November 7, 1934, female (S. Mulaik); January 10-20, 1935, females (S. Mulaik); November 27, 1935, male, female (S. Mulaik); April 27, 1936, four females (S. Mulaik); May 1, 1936, males, females (S. Mulaik). Four miles southeast of Edinburg, October 27, 1934, male, females (S. Mulaik). Seven miles east of Edinburg, October 12, 1934, male, females (S. Mulaik); October 27, 1934, female (S. Mulaik); February 13, 1935, male, female (S. Mulaik). South of Pharr, April 5, 1936, females (S. Mulaik).

NORTH HIDALGO COUNTY: October, 1934, female (S. Mulaik). KLEBERG COUNTY: October, 1934, males and females (S. Mulaik). STARR COUNTY: Rio Grande City, July, 1934, female (S. Mulaik). VAL VERDE COUNTY: Del Rio, August, 1934, female (S. Mulaik).

# Dictyna segregata Gertsch and Mulaik

Dictyna segregata Gertsch and Mulaik, 1936, American Mus. Novitates, No. 851, p. 4, Figs. 13 and 14.

TEXAS RECORDS.—BEXAR COUNTY: San Antonio, July 25, 1936, male (S. Mulaik). Cameron County: no specific locality, May 1-2, 1936, males, females (L. I. Davis); August, 1936, male (L. I. Davis). Brownsville, December 1, 1934, female paratype (S. Mulaik). HIDALGO County: Edinburg, November 27, 1935, male, females (S. Mulaik); June 2, 1935, female paratype (S. Mulaik); February 10, 1935, female paratypes (S. Mulaik); September 15, 1935, male paratype (S. Mulaik). Northwest of Edinburg, June 15, 1935, male holotype, female allotype, and paratypes (S. Mulaik). Two miles south of McCook, June 28, 1935, female paratype (S. Mulaik). South of Pharr. April 5, 1936, male, females (S. Mulaik). LASALLE COUNTY: Cotula, July 8, 1936, female (Anna May and L. Irby Davis).

# Dictyna iviei Gertsch and Mulaik

Dictyna iviei Gertsch and Mulaik, 1936, American Mus. Novitates, No. 851, p. 7, Figs. 6 and 7.

Texas Records.—Hidalgo County: Edinburg, May 2, 1935, male holotype (S. Mulaik); December 5, 1936, female (S. Mulaik). Starr County: five miles east of Rio Grande City, May 1, 1937, female (S. Mulaik).

Mexico Record.—San Pedro, Tamaulipas, May, 1936, female (W. A. Green).

# Dictyna provida Gertsch and Mulaik

Dictyna provida Gertsch and Mulaik, 1936, American Mus. Novitates, No. 851, p. 8, Fig. 10.

Texas Records.—Hidalgo County: Edinburg, May 2, 1935, female holotype and paratypes (S. Mulaik). Monte Christo, September 10, 1935, two female paratypes (S. Mulaik). Llano County: no specific locality, July 10–12, 1936, immature male (L. I. Davis).

# Dictyna stulta Gertsch and Mulaik

Dictyna stulta Gertsch and Mulaik, 1936, American Mus. Novitates, No. 851, p. 7, Fig. 9.

Texas Record.—Jeff Davis County: Fort Davis, July, 1934, male holotype (S. Mulaik).

# Dictyna cruciata Emerton

Dictyna cruciata Emerton, 1888, Trans. Connecticut Acad. Arts and Sci., VII, p. 448, Pl. IX, fig. 6.

Texas Record.—San Augustine County: San Augustine, June, 1936, two females (S. Mulaik).

# Dictyna sublata (Hentz)

Theridion sublatum Hentz, 1850, Journ. Boston Soc. Nat. Hist., VI, p. 276, Pl. 1x, fig. 10. Dictyna muraria Emerton, 1888, Trans. Connecticut Acad. Arts and Sci., VII, p. 445, Pl. xvI, fig. 20.—Jones, 1936, Field and Laboratory, IV, p. 69.

Texas Records.—Dallas County: (Jones, 1936). Jasper County: five miles north of Jasper, June 6, 1936, two females (S. Mulaik). Fort Bend County: Sugar Land, June 10, 1937, female (S. Mulaik).

# Dictyna rubra Emerton

Dictyna rubra Emerton, 1888, Trans. Connecticut Acad. Arts and Sci., VII, p. 448, Pl. 1x, fig. 7.

Texas Record.—Hunt County: seven miles west of Commerce, July, 1938 (L. I. Davis).

# Dictyna florens Ivie and Barrows

Dictyna florens IVIE AND BARROWS, 1935, Bull. Univ. Utah, XXVI, p. 4, Pl. 1, figs. 1 to 5.

Texas Record.—Harris County: Houston, June 11, 1937, male (D. and S. Mulaik).

# Dictyna formidolosa Gertsch and Ivie

Dictyna formidolosa Gertsch and Ivie, 1936, American Mus. Novitates, No. 858, p. 10. (New name for D. armata Banks.)

Dictyna armata Banks, 1911, Proc. Acad. Nat. Sci. Philadelphia, p. 444, Pl. xxxiv, fig. 9. (Not Dictyna armata Thorell, 1875.)

TEXAS RECORD.—MONTGOMERY COUNTY: Conroe, August 14, 1938, female (L. I. Davis).

# Dictyna bishopi, new species Figures 30 and 32

Female.—Total length, 1.57 mm.

	Length	$\mathbf{Width}$
CARAPACE	$0.65~\mathrm{mm}$ .	$0.52 \mathrm{\ mm}$ .
Front	0.15	0.30
Sternum	0.43	0.36
Labium	0.10	0.15
MAXILLA	0.17	0.10
ABDOMEN	1.06	0.70

Carapace bright yellow, marked with black as illustrated in Fig. 19, the clothing inconspicuous pale hairs. Sternum yellow, with a narrow black marginal seam. Coxae and mouth parts white to pale yellow, set with erect pale hairs. Legs pale yellow, the distal ends of the tibiae and metatarsi each with a very narrow black ring. Abdomen white to yellow, with a black pattern of spots above as shown in Fig. 32. Sides of the abdomen with black lines and markings; the venter pale but with a median black spot just behind the genital furrow.

Structure essentially typical. First row of eyes gently procurved, the medians separated by four-fifths their diameter, one-fifth their diameter from the slightly larger lateral eyes. Second row of eyes gently recurved, the medians separated by four-fifths their diameter, as far from the subequal laterals. Median ocular quadrangle slightly broader than long (30/26), narrowed in front in about the same ratio. Clypeus equal in height to the diameter of an anterior median eye. Chelicerae moderately stout, lightly incrassated at the base, the lower margin with one small tooth. Legs of moderate length, without spines.

Epigynum as illustrated in Fig. 30.

Type Locality.—Female holotype from Hot Springs, Brewster County, Texas, June 7–10, 1938 (D. and S. Mulaik).

This tiny species differs from other related forms (Dictyna personata Gertsch and Mulaik and D. montgomeryi, new species) in having the carapace unmarked on the sides except by a black marginal seam. The sternum lacks the dark median stripe present in montgomeryi.

### Dictyna montgomeryi, new species

Figure 31 Female.—Total length, 2.30 mm.

Length Width CARAPACE 0.80 mm. 0.70 mm. 0.20FRONT 0.350.500.47STERNUM 0.18LABIUM 0 14 MAXILLA 0.220.131 45 1.05 ABDOMEN

Carapace dull yellow, the pars cephalica with longitudinal black stripes, the pars thoracica strongly marked with radiating dark streaks and the margin with a narrow black seam. Sternum dull yellow, the sides irregularly marked with black, the midline with a black stripe. Labium dusky, the maxillae paler, clothed with pale hairs. Coxae and legs pale yellow, the distal ends of the tibiae and metatarsi with indistinct black rings. Abdomen mostly white to pale yellow above, without a basal maculation but with three or four pairs of irregular black spots in the caudal half. Venter of the abdomen pale, with an indistinct median longitudinal dark stripe from the genital furrow to the spinnerets.

Structure and general appearance essentially as in Dictyna personata Gertsch and Mulaik. Clypeus equal in height to one and one-third times the diameter of an anterior median eye. First row of eyes very gently procurved, essentially straight, the medians separated by their diameter, one-third as far from the larger laterals. Second row of eyes recurved, the medians separated by their diameter, as far from the subequal lateral eyes. Median ocular quadrangle broader than long (16/15), narrowed in front (16/14), the eyes subequal. Chelicera normal, with a small tooth on the lower margin. Legs without spines.

Epigynum as illustrated in Fig. 31.

Type Locality.—Female holotype from twenty-five miles south of Alpine, Brewster County, Texas, June 12, 1938 (S. Mulaik).

This species is most closely related to Dictyna bishopi, new species. It is distinct in color pattern, the sternum having a median black stripe, the abdomen lacking the dark maculation at the base of the dorsum, and the pars thoracica being strongly marked with brown. The epigyna are distinct as illustrated in the figures.

## Dictyna foliacea (Hentz)

Theridion foliaceum Hentz, 1850, Journ. Boston Soc. Nat. Hist., VI, p. 277, Pl. 1x, fig. 14.—Jones, 1936, Field and Laboratory, IV, p. 69.

Texas Records.—San Augustine County: San Augustine, June, 1936, female (S. Mulaik). Dallas County: (Jones, 1936). Robertson County: Brazos River, five miles west of Hearne, July 19, 1938, female (L. I. Davis).

### Dictyna consulta Gertsch and Ivie

Dictyna consulta Gertsch and Ivie, 1936, American Mus. Novitates, No. 858, p. 6, Figs. 12 and 13. Texas Record.—Nolan County: Blackwell, August 16, 1929, male paratype (F. C. Bishopp).

# Dictyna personata Gertsch and Mulaik Figures 20 and 21

Dictyna personata Gertsch and Mulaik, 1936, American Mus. Novitates, No. 851, p. 9, Fig. 3.

Texas Records.—Llano County: Llano, July 9, 1936, male and female (L. I. Davis). Zapata County: thirty miles southeast of Laredo, August 4, 1935, female holotype (S. Mulaik).

# Dictyna longispina Emerton

Dictyna longispina EMERTON, 1888, Trans. Connecticut Acad. Arts and Sci., VII, p. 446, Pl. IX, fig. 4.—Jones, 1936, Field and Laboratory, IV, p. 69.

Dictyna bellans Chamberlin, 1919, Ann. Ent. Soc. America, XII, p. 242, Pl. xv, figs. 3, 4, and 5.

TEXAS RECORDS.—CAMERON COUNTY: no specific locality, January to March, male (L. I. Davis). Fifteen miles southwest of Harlingen, November 18, 1934, male and female (S. Mulaik). New Braunfels, August 19, COUNTY: 1935, male, females (S. Mulaik). Co-MANCHE COUNTY: fifteen miles northeast of Comanche, July 14, 1936, female (L. I. Davis). Dallas County: (Jones, 1936). Dallas, July 17, 1936, female (L. I. Davis). HIDALGO COUNTY: Edinburg, December 1-10, 1934, female (S. Mulaik). County: Jewett, July 17, 1938, female (L. I. Davis). Llano County: no specific locality, July 10-12, 1936, male, female (L. I. Davis). Llano, July 9, 1936, males, females (S. Mulaik). McLennan County: Waco, August, 1936, female (L. I. Davis). Travis County: Austin, 1935, females (L. I. Davis). VAL VERDE COUNTY: Del Rio, August, 1934, male, females (S. Mulaik). Hunt County: seven miles west of Commerce, July 19, 1938, female (L. I. Davis).

# Dictyna reticulata Gertsch and Ivie

Dictyna reticulata Gertsch and Ivie, 1936, American Mus. Novitates, No. 858, p. 7, Fig. 27.

Texas Record.—Cameron County: no specific locality, January to March, male and female (L. I. Davis).

# Dictyna completa Chamberlin and Gertsch

Dictyna completa Chamberlin and Gertsch, 1929, Journ. Ent. Zool., Pomona College, p. 1, Fig. 1.

NEW MEXICO RECORDS.—OTERO COUNTY: Camp Mary White, August 9-12, 1935, male and female (S. Mulaik). Ruidosa Mountains, 9-12,000 feet, August 12, 1935, male, female (S. Mulaik).

# Dictyna calcarata Banks

Dictyna calcarata Banks, 1904, Proc. California Acad. Sci., (3) III, p. 342, Pl. xl., fig. 42.—Jones, 1936, Field and Laboratory, IV, p. 69.

Texas Records.—Cameron County: fifteen miles southwest of Harlingen, females, November 18, 1934 (S. Mulaik). COMAL COUNTY: New Braunfels, August 19, 1935, male, females (S. Mulaik). HIDALGO COUNTY: Edinburg, December, 1934, female (S. Mulaik). KLEBERG County: Kingsville, November 3-4, 1934, females (S. Mulaik). LLANO COUNTY: Llano, August, 1935, male, females (L. I. Davis). Reeves County: San Solomon Springs, Toyahville, July 6, 1934, females (S. Mulaik). TERRELL COUNTY: Sanderson, July 4, 1934, male, females (S. Mulaik). Webb County: Laredo, November 10, 1934, females (S. Mulaik). DALLAS COUNTY: (Jones, 1936).

# Dictyna annamae, new species

Figures 24 and 25

MALE.—Total length, 2.10 mm. Carapace, 1.00 mm. long, 0.76 mm. wide.

Carapace reddish brown, infuscated on the sides of the head, the pars thoracica with a pale submarginal band but otherwise dusky, the eyes narrowly ringed with black. Clothing of the carapace white hairs. Pars cephalica moderately broad in front, elevated, strongly convex, declining rapidly caudally to the less convex pars thoracica. Eyes of the first row straight, the medians separated by a radius, slightly nearer the subequal lateral eyes. Clypeus equal in height to one and one-fourth times the diameter of an anterior median eye. Eves of the second row weakly recurved, the medians separated by nearly a diameter, as far from the subequal laterals. Median ocular quadrangle broader than long (17/14), slightly narrower in front (17/16). Sternum pale yellowish brown, with an indistinct submarginal narrow black stripe, clothed with fine black hairs. Labium and endites concolorous with the sternum. Chelicerae light brown, strongly

curved, the frontal surface concave, armed at the base with a stout apophysis. First leg: femur, 0.95 mm., patella, 0.30 mm., tibia, 0.85 mm., metatarsus, 0.68 mm., and tarsus, 0.40 mm. long. Palpus very characteristic, the patella swollen, subglobose, the tibia with a very weak, bifid spur at the base of the dorsal aspect. Details of the palpus as illustrated in the figures.

Dorsum of the abdomen white, with a median inverted T-shaped figure at the base which is followed by three pairs of irregular, small black spots. Venter unmarked but the sides of the abdomen with small black flecks. Abdomen clothed evenly with fine white scales, variegated with scattered black scales.

Type Locality.—Male holotype, Comfort, Kendall County, Texas, July 8, 1936 (L. Irby Davis).

This small species is named for Mrs. L. I. Davis. It is easily separated from all known species except *Dictyna floridana* Banks by the incrassated patella. The incrassation of the patella in *annamae* is much less extensive and the details of the conductor are radically different from *floridana*.

# Dictyna petrunkevitchi, new species

Figures 22 and 23

Female.—Total length, 2.00 mm. Carapace light brown, the pars thoracica somewhat infuscated and marked with radiating streaks which define the pars cephalica in front and go nearly to the margins, the sides with a submarginal black line and a very narrow marginal pale stripe. Carapace clothed with a few inconspicuous fine hairs and three rows of stout erect hairs on the dorsal aspect of the pars cephalica. Eyes of the first row straight, the medians separated by three-fourths their diameter, one-fifth their diameter from the subequal lateral eyes. Clypeus equal in height to one diameter of an anterior median eye. Second row of eyes weakly recurved, the medians separated by nearly their diameter, as far from the subequal laterals. Median ocular quadrangle broader than long (17/13), slightly narrowed in front (17/16), the posterior eyes larger. Sternum pale yellow, with a narrow marginal black seam, clothed with erect black hairs. Labium infuscated, the endites concolorous with the sternum. Chelicerae normal, with a very weak basal apophysis. Legs pale yellow, unmarked, clothed evenly with rows of black hairs. Abdomen pale yellow to white, with gray reticulations, strikingly marked on this pale ground with a black pattern as shown in the figure. Venter pale except for a black line at the sides of the spinnerets. Epigynum as figured, the openings subcontiguous.

Type Locality.—Female holotype,

thirty-two miles east of Laredo, Zapata County, Texas, November 11, 1934 (S. Mulaik).

Dictyna declarata Gertsch and Mulaik Dictyna declarata Gertsch and Mulaik, 1936, American Mus. Novitates, No. 851, p. 9, Fig. 11.

Texas Records.—Zapata County: thirty miles southeast of Laredo, August 4, 1935, female holotype and paratype (S. Mulaik). Cameron County: no specific locality, January to March, 1936, female (L. I. Davis).

# Dictyna callida Gertsch and Ivie

Dictyna callida Gertsch and Ivie, 1936. American Mus. Novitates, No. 858, p. 4, Figs. 6. 7, and 8.

Texas Record.—Hidalgo County: Edinburg, October 22, 1934, male holotype (S. Mulaik).

Dictyna idahoana Chamberlin and Ivie Dictyna idahoana Chamberlin and Ivie, 1933, Bull. Univ. Utah, Biol., II, p. 4, Pl. 1, figs. 1, 2, and 3.

Dictyna annexa Gertsch and Mulaik, 1936, American Mus. Novitates, No. 851, p. 6, Fig. 8.

TEXAS RECORDS.—HIDALGO COUNTY: Edinburg, October 12, 1935, male (S. Mulaik); September 17, 1938, female (S. Mulaik). Five miles west of Edinburg, July 4, 1935, male holotype of annexa (S. Mulaik). JIM WELLS COUNTY: Premont, June 7, 1937, female (D. and S. Mulaik). LLANO COUNTY: Llano, July 9, 1936, females (L. I. Davis). LASALLE COUNTY: Cotula, July 8, 1936, female (A. M. and L. I. Davis). STARR COUNTY: five miles west of Rio Grande City, April 19, 1936, male, females (S. Mulaik). ZAPATA County: no specific locality, June 4, 1938, male, female (S. Mulaik).

# Dictyna uintana Chamberlin

Dictyna uintana CHAMBERLIN, 1919, Ann. Ent. Soc. America, XII, p. 240, Pl. xiv, figs. 3, 4, and 5.

New Mexico Record.—Camp Mary White, Otero County, August 9–12, 1935, female (S. Mulaik).

### Dictyna volucripes Keyserling

Dictyna volucripes Keyserling, 1881, Verh. Zool.-Bot. Gesell. Wien, XXXI, p. 286, Pl. xi,

fig. 11.—Jones, 1936, Field and Laboratory, IV, p. 69.

TEXAS RECORDS.—ANDERSON COUNTY: seven miles east of Palestine, July 17, 1938, female (L. I. Davis). BEE COUNTY: three miles north of Beeville, June 7, 1937, 2 males, 2 females (S. Mulaik). BASTROP COUNTY: Bastrop, August 14, 1938, females (A. M. and L. I. Davis). Bowie COUNTY: Maud, June 7, 1936, 2 males (S. Mulaik). Hooks, July 20, 1938, female (L. I. Davis). CAMERON COUNTY: La Gringa Resaca, September 19, 1937, male (L. I. Davis). Arroyo Colorado, September, 1934, males, females (S. Mulaik). HARRIS COUNTY: Houston, June 11, 1937, males, females (S. Mulaik). HIDALGO County: Edinburg, September to December, 1933, females (S. Mulaik). South of Donna, March 15, 1936, females (L. I. Davis). South of Pharr, April 5, 1936, male, female (J. Rutherford). Llano COUNTY: Llano, July 9, 1936, male, females (L. I. Davis). No specific locality, July 10-12, 1936, females (L. I. Davis). NOVARRO COUNTY: no specific locality, April 30, 1938, 2 females (J. H. Robinson). Travis County: Austin, males, females. Dallas County: (Jones, 1936). Zapata County: thirty-two miles southeast of Laredo, November 11, 1934, male, females (S. Mulaik).

# Dictyna crosbyi, new species

Figure 29

FEMALE.—Total length, 3.65 mm.

	$\mathbf{Length}$	$\mathbf{Width}$
CARAPACE	1.15  mm.	$0.90 \ \mathrm{mm}$ .
FRONT	0.30	0.53
STERNUM	0.70	0.55
LABIUM	0.21	0.24
MAXILLA	0.30	0.16
ABDOMEN	2.45	1.80

Carapace dark brown, lightened on the pars cephalica, clothed with long white hairs which are most numerous on the head. Sternum, labium, and maxillae light brown, the labium dusky, the clothing long white hairs. Chelicerae dark brown, clothed with short black hairs. Coxae and legs pale yellowish brown, without markings, set with rows of fine black hairs. Dorsum of the abdomen light brown, with a large suboval dark brown maculation at the base and a few dark spots behind. Venter of the abdomen pale brown, with a median longitudinal reddish-

brown stripe from the genital furrow to the

Structure and general appearance very much like Dictyna volucripes Keyserling. Clypeus equal in height to two diameters of an anterior median eye. First row of eyes straight, the medians separated by slightly more than their diameter, not quite a full diameter from the slightly larger lateral eyes. Second row of eyes gently recurved, the medians separated by one and one-half times their diameter, as far from the subequal lateral eyes. Median ocular quadrangle broader than long (31/23), narrowed in front (31/26), the anterior eyes somewhat smaller. Chelicerae typical, lightly incrassated at the base, the lower margin with a single small tooth. Legs moderately long, the first tibia and patella equal in length to the carapace.

Epigynum as illustrated in Fig. 29.

Type Locality.—Female holotype from Scott Able Canyon, New Mexico, July, 1934 (S. Mulaik).

This is a species of the *volucripes* group and agrees closely in color and general structure with that and related species. It is distinct in the epigynum which has the atriobursal orifices widely separated, not near together.

# Dictyna bostoniensis Emerton

Dictyna bostoniensis Emerton, 1888, Trans. Connecticut Acad. Arts and Sci., VII, p. 447, Pl. 1x, fig. 3.

Texas Records.—Dallam County: Texline, July 14, 1939, female (L. I. Davis). HEMPHILL COUNTY: Canadian, July 15, 1939, female (L. I. Davis).

### Dictyna frondea Emerton

Dictyna frondea Emerton, 1888, Trans. Connecticut Acad. Arts and Sci., VII, p. 449, Pl. 1x, fig. 9.

Texas Record.—Collingsworth County: Salt Fork of Red River, near Wellington, July 16, 1939, three females (L. I. Davis).

Dictyna ingenuata, new species Figure 19

Male.—Total length, 1.45 mm.

	Length	Width
CARAPACE	$0.62 \; \mathrm{mm}$ .	$0.50 \; \mathrm{mm}$ .
FRONT	0.16	0.25
STERNUM	0.37	0.36
Labium	0.13	0.13
MAXILLA	0.20	0.11
Abdomen	0.80	0.55

Carapace dusky, dull reddish brown, the pars cephalica somewhat darker, outlined by an indistinct black stripe on each side from the obsolete median groove to the sides of the head. Clothing of the carapace sparse, consisting of a few long setae in the cephalic portion. Sternum dull yellowish brown, evenly but sparsely covered with erect hairs. Labium and maxillae concolorous with the sternum but clothed with fewer hairs. Legs dull yellow, without contrasting markings, clothed with inconspicuous hairs. Abdomen dusky, without evident darker markings or pattern, clothed with dark hairs.

Structure essentially typical, comparable in most respects with Dictyna annamae, new species. Clypeus equal in height to one and one-fourth times the diameter of an anterior median eye. First row of eyes very gently procurved, essentially straight, the medians separated by twothirds their diameter, half as far from the larger lateral eyes. Second row of eyes moderately recurved, the medians separated by four-fifths their diameter, a full diameter from the subequal lateral eyes. Median ocular quadrangle broader than long (18/15), narrowed in front in the same ratio, the anterior median eyes smaller. Chelicerae modified as usual in males of the genus, the inner margins moderately excavated, the base with a weak spur. Legs without spines.

Palpus as illustrated in Fig. 19.

Type Locality.—Male holotype from Edinburg, Hidalgo County, Texas, May 2, 1939 (D. Mulaik).

This small species is characterized by the palpus which presents modifications on both the patella and tibia. The enlarged patella is armed above with an upright spiny process. The tibia has a small dorsal spur and a strong retrolateral process which is parallel to the long axis of the joint and is directed caudad. The species is distinct from *Dictyna annamae* in having the patella armed above and in the form of the tibial apophyses.

Dictyna evicta, new species Figure 18

Male.—Total length, 1.80 mm.

	Length	$\mathbf{W}\mathbf{idth}$
CARAPACE	$0.90  \mathrm{mm}$ .	$0.65~\mathrm{mm}$ .
FRONT	0.15	0.33
Sternum	0.50	0.42
LABIUM	0.16	0.20
MAXILLA	0.30	0.13
ABDOMEN	1.00	0.72

Carapace uniform dusky brown in color, the pars thoracica with faint darker radiating lines and margined with a narrow indistinct black seam, the cephalic sutures obsolete, their position indicated by a narrow black line on each

side from the median groove to the sides of the head. Clothing of the carapace sparse, consisting of subprocumbent light hairs which are most numerous in the ocular region. Sternum and mouth parts dusky brown. Legs dusky, lighter than the carapace, clothed with inconspicuous hairs. Abdomen nearly black above, with transverse rows of very small indistinct pale spots. Venter of the abdomen dusky gray.

Structure essentially as in Dictyna angulata Emerton and related species. Carapace considerably longer than broad, the pars cephalica relatively narrow in front, elevated as usual. Clypeus protruding, equal in height to one and one-half times the diameter of an anterior median eye. First row of eyes gently procurved as seen from in front, essentially straight, the medians separated by two-thirds their diameter, about half as far from the slightly larger lateral eyes. Second row of eyes gently recurved, the medians separated by their diameter, as far from the subequal lateral eyes. Median ocular quadrangle broader than long (22/19), narrowed in front in the same ratio, the anterior eyes smaller. Chelicerae modified as usual in the group, excavated on the inner margin, the tubercle at the base rounded, very weak. Legs of moderate length, without spines.

Palpus as illustrated in Fig. 18.

Type Locality.—Male holotype from Hays County, Texas, April 15, 1939 (D. and S. Mulaik).

This species is most closely related to Dictyna angulata Emerton but is somewhat smaller in size. The dorsum of the abdomen is nearly uniform black, whereas in angulata there is a black pattern of spots on a pale base. The palpi are similar in general features but are distinct in the details of the conductor of the embolus as illustrated.

# Mimetidae Ero C. Koch

# Ero pensacolae Ivie and Barrows

Ero pensacolae IVIE AND BARROWS, 1935, Bull. Univ. Utah, Biol., III, p. 19, Pl. VII, fig. 54.

Texas Record.—Cameron County: no specific locality, May 1–2, 1936, immature female (L. I. Davis).

# MIMETUS HENTZ

# Mimetus hesperus Chamberlin

Mimetus hesperus Chamberlin, 1923, Journ. Ent. Zool., Pomona College, XV, p. 5, Figs. 2 and 7.—Chamberlin and Ivie, 1935, Bull. Univ. Utah, Biol., II, Pl. x, fig. 76.

Texas Records.—Bexar County: San Antonio (Chamberlin, 1923). Hidalgo

COUNTY: Monte Christo, September 19, 1935, immature male, female (S. Mulaik). South of Pharr, April 5, 1936, male (S. Mulaik). STARR COUNTY: Five miles west of Rio Grande City, April 10, 1936, female (S. Mulaik). TRAVIS COUNTY: Austin (Chamberlin, 1923).

### Mimetus notius Chamberlin

Mimetus notius Chamberlin, 1923, Journ. Ent. Zool., Pomona College, XV, p. 7, Figs. 4 and 10.

Texas Records.—Atascosa County: Jourdantown, June 28, 1934, female (Rutherford). Cameron County: fifteen miles southwest of Harlingen, November 18, 1934, female (L. I. Davis). Dallas County: Dallas, July 17, 1936, female (L. I. Davis). HIDALGO COUNTY: Edinburg, January to May, 1934, male (S. Mulaik); March, 1934, males and females (S. Mulaik); October 28, 1934, two females (S. Mulaik); February 10, 1935, male, females (S. Mulaik); December 7, 1935, female (W. A. Green); October 12, 1935, female (S. Mulaik); September 10, 1935, female (S. Mulaik). April 8, 1936, female (S. Mulaik). Terrell County: Sanderson, July 4, 1934, female (S. Mulaik). SAN Patricio County: Portland, June, 1936, male (S. Mulaik). JIM WELLS COUNTY: nine miles north of Premont, June 7, 1937 (S. Mulaik). Anderson County: east of Palestine, July 7, 1937, female (L. I. Davis).

# Mimetus interfector Hentz

Mimetus interfector Hentz, 1850, Journ. Boston Soc. Nat. Hist., VI, p. 3, Pl. IV, figs. 12 and 13.—Chamberlin, 1923, Journ. Ent. Zool., Pomona College, XV, p. 6, Figs. 5 and 9.

There are no authentic records of this species from Texas but it will undoubtedly be found in the humid eastern portion of the state.

# Mimetus haynesi, new species

Figures 5 and 6

MALE.—Total length, 3.90 mm. Carapace, 1.85 mm. long, 1.35 mm. wide.

Color pattern in close agreement with *Mimetus notius* Chamberlin. Carapace pale yellow with a slight greenish tinge, with a triangular darker area extending from the median groove forward to the eyes, this area actually made up of four stripes or lines which have coalesced. Eye

tubercles reddish brown. Clypeus, sternum, and coxae pale yellow; the labium and endites infuscated. Chelicerae pale at the base but the distal two-thirds black. First two pairs of legs with irregular broken black annulae at the distal end of the femora, on the patellae, and at the basal and distal ends of the tibiae; otherwise concolorous with the carapace and irregularly and sparsely flecked with black. Posterior legs as the anterior ones but the femora pale. Abdonnen gray to white, marked with black lines which are heavier on the sides, the venter pale, with a central black spot.

Structure essentially as in Mimetus notius Chamberlin. Clypeus two-thirds as high as the diameter of an anterior median eye. First row of eyes very weakly procurved, essentially straight as seen from in front, the medians separated by scarcely a diameter (13/16), one-third of their diameter from the smaller laterals (5/16). Lateral eyes of each side contiguous, on a common tubercle, subequal in size. Posterior eye row very weakly procurved, the medians separated by about one-fourth their diameter (4/14), one diameter from the laterals. Median ocular quadrangle broader than long (20/15), narrowed behind (20/12), the eyes subequal. Carapace clothed with a few inconspicuous short hairs, the pars cephalica with two spines behind the median eyes and a row of five or six from the lateral eye of each side to the median groove. Chelicera about five times as long as broad, the sides subparallel, clothed with a few weak hairs. the distal end with a strong spine near the base on the inner side and seven shorter spines that overlap the claw. Both cheliceral margins without denticles. Dorsum of abdomen set with rows of long spines. Legs with strong spines characteristic of the genus. First leg: femur, 4.00 mm., patella, 0.95 mm., tibia, 4.20 mm., metatarsus, 4.70 mm., and tarsus, 1.90 mm. long. Palpus as figured.

Type Locality.—Male holotype from thirty-two miles southeast of Laredo, Zapata County, Texas, April 10, 1936 (Haynes). Male paratype from fifteen miles southwest of Harlingen, Cameron County, Texas, November 18 (L. I. Davis).

This species is related to Mimetus notius Chamberlin in general structure but is distinctive in the palpus. The ectal margin of the cymbium lacks spines proximad of the apex in both species. The principal lamella of the distal bulbal apophysis in notius is a broadly rounded plate and the ectal element is reduced to a short spur. In Mimetus haynesi the ectal element is a rounded lobe and the principal lamella is drawn out into a long fingerlike spur. In this last character this species suggests Mimetus eutypus Chamberlin and Ivie but

the great differences in the cymbia of the palpi will separate the two.

### Uloboridae

### MIAGRAMMOPES SIMON

# Miagrammopes lineatus O. Cambridge

Miagrammopes lineatus O. Cambridge, 1894, Biol. Centr. Amer., Arach., I, p. 137, Pl. xvii, fig. 12.—Bryant, 1933, Bull. Mus. Comp. Zoöl, LXXIV, p. 171.

Texas Record.—Cameron County: Brownsville, young female (C. Schaeffer) (Bryant, 1933).

### HYPTIOTES WALCKENAER

# Hyptiotes cavatus (Hentz)

Cyllopodia cavata Hentz, 1847, Journ. Boston Soc. Nat. Hist., V, p. 466, Pl. xxx, fig. 3.

Hyptiotes cavatus EMERTON, 1888, Trans. Connecticut Acad. Arts and Sci., VII, p. 456, Pl. xI, fig. 2.

TEXAS RECORDS.—PANOLA COUNTY: nineteen miles north of Carthage, June 6, 1936, immature females (S. Mulaik). SAN ANGUSTINE COUNTY: San Augustine, June, 1936, immature female (S. Mulaik). Tyler County: Woodville, August 13, 1938, immature male (L. I. Davis).

### ULOBORUS LATREILLE

### Uloborus geniculatus (Olivier)

Aranea geniculata OLIVIER, 1791, Encycl. Method., p. 214. No. 57.

Uloborus geniculatus McCook, 1893, "American Spiders," III, p. 272, Pl. xxvII, figs. 1 and 2.—Petrunkevitch, 1911, Bull. American Mus. Nat. Hist., XXIX, p. 99.

We have no authentic records of this species from Texas, but it will probably occur in the humid eastern portion along the coast.

# Uloborus variegatus O. Cambridge

Uloborus variegatus O. Cambridge, 1898, Biol. Centr. Amer., Arach., I, p. 266, Pl. xxxviii, fig. 11.

Texas Records.—Cameron County: branch of Arroyo Colorado, one mile northwest of Rio Hondo, August, 1937, female (L. I. Davis). Hidalgo County: Mission, March 14, 1936, males, females (S. Mulaik). Edinburg, females (S. Mulaik). Thirty miles northwest of Edinburg, November 26, 1933, females (S. Mulaik). Five miles east of Edinburg, December 1,

1934, immature male, females (S. Mulaik), South of Donna, March 15, 1936, male, females (S. Mulaik). South of Pharr, April 5, 1936, male (W. Waite). Piper's Lake, August 26, 1936, immature female (S. Mulaik). Five miles southeast of Weslaco, July 21, 1935, immature male, female (S. Mulaik). STARR COUNTY: five miles east of Rio Grande City, October 26, 1936, female (Mulaik).

# Uloborus segregatus Gertsch

Uloborus segregatus Gertsch, 1936, American Mus. Novitates, No. 852, p. 4, Fig. 7.

Texas Records.—Hidalgo County: Edinburg, September 16, 1935, male and female types (S. Mulaik). Five miles southeast of Weslaco, July 21, 1935, females (S. Mulaik). Piper's Lake, August 25, 1933, female (S. Mulaik).

### Uloborus americanus Walckenaer

Uloborus americanus Walckenaer, 1842, Ins. Apt., II, p. 229.—F. Cambridge, 1902, Biol. Centr. Amer., Arach., II, p. 363.

TEXAS RECORDS.—ANDERSON COUNTY: seven miles east of Palestine, July 17, 1938, two females (L. I. Davis). Atascosa County: thirty miles south of San Antonio, August 20, 1934, male, females (S. Mulaik). Bowie County: Hooks, July 20, 1938, immature specimens (L. I. Davis). Brewster County: Big Bend, top of Chisos Mountains, July 24, 1933, immature male (S. Mulaik). Cameron COUNTY: La Gringa Resaca, September 19, 1938, female (L. I. Davis). No specific locality, January to March, 1936, female (L. I. Davis). Dallas County: Dallas, May, 1938, female (Ottys Sanders). Goliad County: Cologne, June 7, 1937, two females (S. Mulaik). HIDALGO COUNTY: Edinburg, March-April, 1934, female (S. Mulaik); November 11, 1934, females (C. Rutherford). Ten miles southeast of Edinburg, October 20, 1934, two females (S. Mulaik). Thirty miles west of Edinburg, November 24, 1934, female (S. Mulaik). Hunt County: seven miles west of Commerce, July 19, 1938, two females (L. I. Davis). Montgomery County: Conroe, August 14, 1938, female, male (L. I. Davis). NEWTON COUNTY: Newton, August 13, 1938. two females (L. I. Davis). Polk

County: Livingston, August 15, 1938, two females (C. Davis). Starr County: east of Rio Grande City, November 11, 1934, females (S. Mulaik). Washington County: Brenham, August 14, 1938, female (L. I. Davis). Zapata County: four miles west of Arroyo Tigre, November 11, 1934, females (S. Mulaik).

# Oecobiidae

# OECOBIUS LUCAS

# Oecobius parietalis (Hentz)

Thalamia parietalis Hentz, 1850, Journ. Boston Soc. Nat. Hist., VI, p. 35, Pl. vi, fig. 16. Oecobius parietalis Emerton, 1909, Trans. Connecticut Acad. Arts and Sci., XIV, p. 212, Pl. viii, fig. 1.—Chamberlin and Ivie, 1935, Ann. Ent. Soc. America, XXVIII, pp. 267-270, Pl. 1, fig. 1, Pl. II, figs. 3-10, Pl. III, figs. 11-21.

Texas Records.—Atascosa County: Jourdantown, June 28, 1935, female (C. Rutherford). Bexar County: San Antonio, August, 1935, female (L. I. Davis); December 28, 1935, immature females (L. I. Davis). Cameron County: no specific locality, January to March, 1936, female (L. I. Davis). Green Island Bird Sanctuary, May 11, 1935, male and female (S. Mulaik). Dallas County: no specific locality, female (Robinson). HIDALGO County: Edinburg, February 12, 1935, immature female (S. Mulaik); November 18, 1934, female (M. Welch); November 19, 1936, females (S. Mulaik); December, 1934, females (S. Mulaik); January 10-20, 1935, two females (S. Mulaik); September 20, 1935, two females (M. Welch); April, 1934, females (S. Mulaik). Thirty miles west of Edinburg, November 24, 1935, female (S. Mulaik). South of Pharr, April 5, 1936, female (S. Mulaik). Nueces County: Alice, June 20-28, 1935, female (H. C. Sibley, Jr.). STARR COUNTY: five miles west of Rio Grande City, April 10, 1936, females and immature specimens (S. Mulaik).

# Oecobius texanus Bryant

Oecobius texanus BRYANT, 1936, Psyche, XLIII, p. 87, Figs. 1-1d.

Texas Record.—Dallas County: Dallas, two males and two females, types and paratypes (S. Jones).

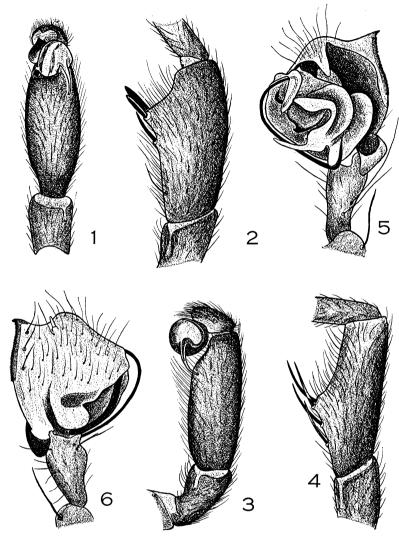


Fig. 1. Fig. 2. Fig. 3. Fig. 4. Fig. 5. Fig. 6.

Astrosoga stolida, new species, left male palpus, ventral view. Idem, tibia of first left leg, retrolateral view. Idem, left male palpus, retrolateral view. Idem, tibia of second left leg, retrolateral view. Mimetus haynesi, new species, left male palpus, ventral view. Idem, left male palpus, dorsal view.

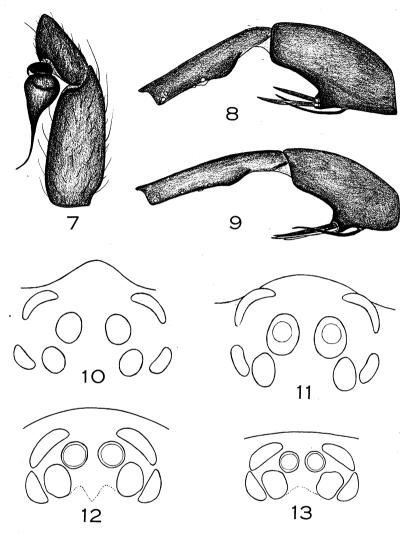


Fig. 7. Fig. 8. lateral view.  $Euagrus\ apacheus$ , new species, left male palpus, retrolateral view.  $Euagrus\ ravenus$ , new species, tibia and metatarsus of left second leg of male, retro-

Fig. 9. Euagrus chisoseus Gertsch, tibia and metatarsus of left second leg of male, retrolateral view.

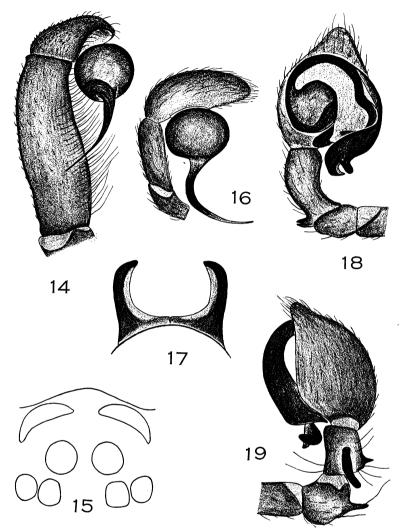
Fig. 10.

Fig. 11.

Fig. 12.

Fig. 13.

Pachylomerides absolutus, new species, eyes of female. Pachylomerides beatulus, new species, eyes of female. Euagrus apacheus, new species, eyes of male. Euagrus ravenus, new species, eyes of male.



Pachylomerides celsus, new species, right male palpus, retrolateral view. Idem, eyes of male.

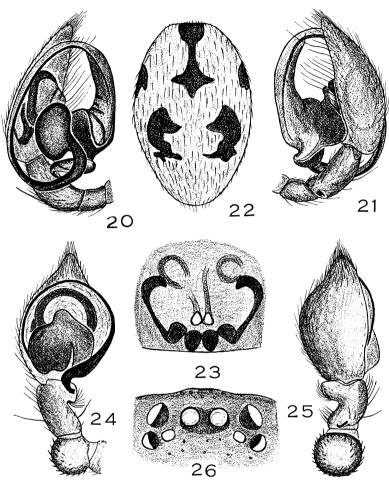
Orthonops lapanus, new species, right male palpus, retrolateral view.

Psilochorus imitatus, new species, cheliceral spurs of male, dorsal view.

Dictyna evicta, new species, left male palpus, ventral view.

Dictyna ingenuata, new species, left male palpus, retrolateral view.

Fig. 14. Fig. 15. Fig. 16. Fig. 17. Fig. 18. Fig. 19.



Dictyna personata Gertsch and Mulaik, left male palpus, ventral view. Idem, left male palpus, dorsal view. Dictyna petrunkevitchi, new species, abdomen of female, dorsal view. Idem, epigynum of female. Dictyna annamae, new species, left male palpus, ventral view. Idem, left male palpus, dorsal view. Astrosoga stolida, new species, eyes of male. Fig. 20. Fig. 21. Fig. 22. Fig. 23. Fig. 24. Fig. 25. Fig. 26.

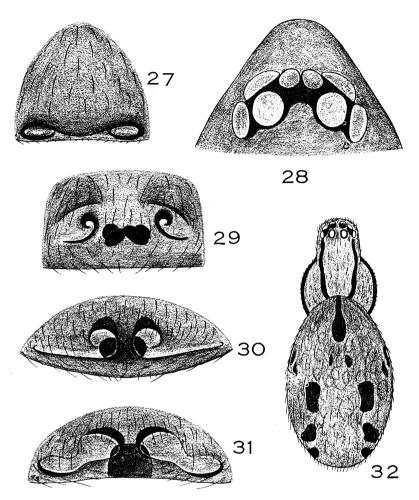


Fig. 27. Fig. 28. Fig. 29. Fig. 30. Fig. 31. Fig. 32.

Pholoophora diluta, new species, epigynum of female. Idem, eyes and front of female, dorsal view.

Dictyna crosbyi, new species, epigynum of female.

Dictyna bishopi, new species, epigynum of female.

Dictyna montgomeryi, new species, epigynum of female.

Dictyna bishopi, new species, carapace and abdomen of female, dorsal view.

