

SOME ARACHNIDA FROM NEW MEXICO.

BY NATHAN BANKS.

The following list of New Mexican Arachnida is based chiefly on material collected during the past few years by Prof. T. D. A. Cockerell. A few species were collected by his wife and son. Prof. C. H. T. Townsend, when connected with the New Mexico Agricultural Experiment Station, collected and sent to me a small lot of spiders from the vicinity of Las Cruces. The late Mr. Hugo Soltau sent me a very interesting collection from Albuquerque, containing a number of forms not taken by others. I have added the few species recorded by other writers from New Mexico, but not seen by me.

The total sums up to 148 species, nineteen of which appear to be new and are here described. The leading groups may be tabulated as follows:

Araneida,	123
Phalangida,	6
Pseudoscorpionida,	3
Scorpionida,	2
Solpugida,	3
Acarina,	11

Total,	148
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¹⁶ The spiders are included in seventeen families; the leading family in point of numbers is the Attidae with twenty-two species; the others are: Thomisidae with sixteen, Theridiidae with sixteen, Epeiridae with thirteen, and the Lycosidae with ten species. Of especial interest are the species of *Pachylomerus*, *Meriola*, *Corinna*, *Ocyopes*, *Fuentes* and *Taracus*. The list shows many northern as well as southern forms. The species of Northern distribution are mostly from Beulah and Las Vegas. The Southern forms come mostly from Mesilla and Las Cruces. Of the species of northern distribution, many of which occur across the northern part of our country, attention may be drawn to the following forms:

Drassodes robustus, *Pecillochroa montana*, *Gnaphosa conspersa*, *Titanacea americana*, *Grammonota pictilis*, *Tetragnatha extensa*, *Epeira aculeata*, *Xysticus montanensis*, *Lycosa modesta*, *Pardosa glacialis*, *Icius similis*, *Habrocestum oregonense* and *Phalangium cinereum*. These species ally the fauna very strongly to that of Colorado.

The Southern element contains several species not previously known from north of the Mexican boundary. The most characteristic of these species are *Physocyclus globosus*, *Gnaphosa distincta*, *Syspira* sp., *Dictyna texana*, *Epeira nephiloides*, *Epeira oaxensis*, *Ebo mexicana*, *Olios fasciculatus*, *Phidippus bicolor*, *Sadala distincta*, *Ammotrecha peninsulari* and *Lithyphantus fulvus*. There does not appear to be any particular connection between this fauna and that of Arizona, although, of course, there are a number of forms common to both. These forms are such as are rather widely distributed in the West. Of the six harvest-men, one is a northeastern form, one a northwestern one, two are typical Colorado species, and two are known chiefly from New Mexico. Of the three Pseudoscorpions, one is a typical Colorado species and two are California forms.

The collection, as a whole, contains few bright-colored species, and none are of very large size. In fact, many of the specimens are smaller than those from more northerly regions.

Mr. Cockerell gives the following notes on localities:

(1) The Mesilla Valley, about 3,800 feet, includes Mesilla Park and Mesilla (collections by Cockerell) and Las Cruces (collections by Townsend; a few specimens by Cockerell). These places are all close together, and are in the Middle Sonoran zone.

(2) Organ Mountains; collections at La Cueva and Fillmore Cañon by Townsend, and at Dripping Spring by Cockerell. These mountains may be considered Upper Sonoran; they form the eastern boundary of the Mesilla Valley.

(3) White Mountains; collections by Townsend. This includes the localities cited as Ruidoso creek and Eagle creek. The mountains form an isolated range of considerable altitude, and possess some endemic mollusca, at least.

(4) Albuquerque; collections by Soltau. This is Upper Sonoran.

(5) Las Vegas; collections by Cockerell. This has an altitude of about 6,400 feet, and is Upper Sonoran, tinged with Transi-

tion. Las Vegas Hot Springs (collection by Cockerell) is more decidedly Transition.

(6) Santa Fé (collections by Cockerell) is Transition. Altitude 7,000 feet.

(7) Benlah, Sapello Cañon (collections by Cockerell), is in the Las Vegas range, and has an altitude of about 8,000 feet. This belongs to the Canadian zone; the only other arachnids of this zone listed are some from the White Mountains.

(8) Top of range between the Sapello and Pecos rivers, about 11,000 feet; collection by Cockerell. This belongs to the Hudsonian zone.

THERAPHOSIDÆ.

Eurypelma steindachneri Ausserer.

Eurypelma steindachneri Ausserer, Verh. zool.-bot. Ges. Wien, 1875, p. 199.

A male and young female, collected by Prof. Townsend, without definite locality. Mr. Cockerell states that it is common in the Mesilla Valley.

Pachylomerus modestus n. sp.

Cephalothorax and mandibles shining black; abdomen dull black above, no markings; sternum and coxæ yellow-brown; legs blackish, tarsi paler; tibia and tarsus of palpus pale; spinnerets pale. Cephalothorax broad, truncate in front, surface finely and uniformly granulate, from the eye-region backward there are two submedian lines. Posterior eye-row procurved; the P.M.E. fully three times their diameter apart, and touching the slightly larger P.S.E.; anterior eye-row strongly procurved, the A.M.E. equal to the P.M.E., rather more than their diameter apart, closer to the much larger A.S.E. Dorsum of abdomen corrugate. Tibia of male palpus about three and one-half times as long as broad, somewhat swollen below at base, palpal organ of usual form, the stylet very long, curved before middle and again at tip. Eight short spines in the inner row on the inner side of tibia I.

Length 12 mm.

One male, collected by Townsend, probably near Las Cruces.

FILISTATIDÆ.

Filistata hibernalis Hentz.

Filistata hibernalis Hentz, Jour. Bost. Soc. N. H., IV, p. 227 (1843).

Several females from Albuquerque (Soltau), and two males

from Prof. Townsend, without definite locality. The male (as *T. capitata*) is recorded by Dr. Marx.

SCYTODIDÆ.

Scytodes thoracica (Latreille).

Aranea thoracica Latreille, Tabl. Meth. des Ins., p. 134 (1804).

Dr. Marx identifies this among material sent him by Prof. Townsend.

Loxosceles unicolor Keyserling.

Loxosceles unicolor Keyserling, Verh. zool.-bot. Ges. Wien, 1887, p. 474.

Described from New Mexico, and I have one specimen collected by Prof. Townsend; also recorded by Dr. Marx.

PHOLCIDÆ.

Psilochorus pullulus (Hentz).

Theridion pullulum Hentz, Jour. Bost. Soc. N. H., VI, p. 282 (1850).

Pholcus cornutus Keyserling, Verh. zool.-bot. Ges. Wien, 1887, p. 208.

Two males from Albuquerque; the species appears to be moderately common in the Southwest.

Physocyclus globosus (Taczanowski).

Pholcus globosus Taczanowski, Horæ Soc. Entom. Ross., Vol. X, p. 105 (1874).

Pholcus gibbosus Keyserling, Verh. zool.-bot. Ges. Wien, 1877, p. 208.

One female from Mesilla Park, April; young from Las Cruces.

DRASSIDÆ.

Prothesima atra (Hentz).

Herpyllus atra Hentz, Jour. Bost. Soc. N. H., V, p. 455 (1846).

Several examples from Albuquerque (Soltan) and from first Ruidoso camp, Eagle creek, White Mountains, third week in August.

Prothesima cockerelli n. sp.

Cephalothorax nearly uniform pale yellowish-brown, a black marginal line and around anterior eyes black; the mandibles and sternum more red-brown; the legs pale yellow-brown, the tibiæ and beyond of anterior legs more red-brown; abdomen gray above, blackish on sides and behind, below more yellowish; spinnerets pale; epigynum red-brown; the male with a yellow shield on base of abdomen above. The cephalothorax is quite narrow in front; posterior eye-row nearly straight; P.M.E.

round, fully diameter apart, about same distance from the equal P.S.E.; A.M.E. much larger than P.M.E., much less than diameter apart, and much closer to the rather smaller A.S.E. Mandibles rather long. Legs of moderate length, tibiae I and II with one spine below at middle and a pair at tip, these metatarsi with a pair near the base; tarsi and metatarsi slightly scopulate; one spine above on base of tibia III. Sternum narrowed in front, pointed behind. Abdomen quite large, depressed, nearly twice as long as broad, with some stiff black hairs at base; the epigynum shows a broad area divided in front, and behind enclosing a triangular septum. The tibia of male palpus shows on the outer side a slender projection, the tip of which is slightly recurved.

Length ♀ 10 mm., ♂ 8 mm.

Several specimens from Mesilla Park (Cockerell).

Prothesima blanda Banks.

Prothesima blanda Banks, Proc. Acad. Nat. Sci. Phila., 1892, p. 18.

Two specimens (one immature) from Albuquerque. Previously known from Ithaca, N. Y., and Colorado.

Drassodes robustus (Emerton).

Drassus robustus Emerton, Trans. Conn. Acad. Sci., VIII, p. 15 (1890).

Several specimens, none quite adult, from Albuquerque, also Las Vegas, February. They agree with Colorado specimens, and there is no probability that an adult would show a different vulva. This species extends across the country from New Hampshire to Washington.

Pæcilochroa montana Emerton.

Pæcilochroa montana Emerton, Trans. Conn. Acad. Sci., VIII, p. 11 (1890).

One female from first Ruidoso camp, White Mountains, latter half of July. A sub-boreal species, known from New Hampshire, northern New York, Colorado and Washington.

Gnaphosa conspersa Thorell.

Gnaphosa conspersa Thorell, Bull. U. S. Geol. Surv. Terr., III, No. 2, p. 489 (1877).

One female from Beulah.

Gnaphosa distincta Banks.

Gnaphosa distincta Banks, Proc. Calif. Acad. Sci., 3d Ser., Zool., Vol. I, p. 222 (1898).

Two specimens from the White Mountains appear to belong to

this Mexican species, not previously recorded from the United States.

Gnaphosa hirsutipes n. sp.

Cephalothorax pale yellow-brown, darker around eyes, margin black, at base of pars cephalica are two oblique blackish spots, more or less distinct. Mandibles and sternum red-brown, the latter with dark margin. Legs pale yellow-brown, the tarsi rather darker. Abdomen uniform light brown above, below rather paler, spinnerets yellowish; epigynum reddish. Posterior eye-row slightly recurved, P.M.E. oval, oblique, at hind ends about their short diameter apart, nearly twice as far from the slightly larger P.S.E.; anterior eye-row shorter, straight; A.M.E. no larger than P.M.E., about diameter apart, and plainly closer to the slightly larger A.S.E. Legs short and stout, quite thickly clothed with fine hairs, very few spines, none under tibia I, one at tip under metatarsus I, a fine one at tip of tibia II, and one at tip of metatarsus II. Sternum short and broad, truncate in front, rounded behind; abdomen depressed, one and one-half times longer than broad, truncate at base where there are many stiff hairs. The epigynum shows a cavity, narrow behind; the anterior part mostly filled by a broad, tapering septum.

Length 8 mm.

Two females from Albuquerque (Soltan).

Micaria albocincta n. sp.

Cephalothorax uniform dark red-brown; mandibles nearly black; sternum black; legs yellow-brown, tips of tarsi yellow, femora I and II dark brown, base of femur III also dark; abdomen black, covered with iridescent scales, a narrow median white band extending well down on each side, and an indistinct one near base. Cephalothorax moderately slender; P.M.E. round, nearly twice their diameter apart, slightly more than the diameter from larger P.S.E.; A.M.E. a little larger than P.M.E., scarcely the diameter apart, closer to the equal A.S.E.; quadrangle of M.E. higher than broad. Tibiæ I and II each with a pair of spines at base, a pair at middle, and a single one at tip, none on metatarsi; metatarsi and tarsi beneath with scant scopula of clavate hairs. Abdomen fully twice as long as broad, not constricted in middle.

Length 5.7 mm.

One specimen from Beulah (Cockerell); another from top of Las Vegas range, 11,000 feet, last of June.

CLUBIONIDÆ.

Chiracanthium inclusum (Hentz).

Clubiona inclusa Hentz, Jour. Bost. Soc. N. H., V, p. 451 (1846).

Some immature specimens from Mesilla Park (Cockerell).

Anyphæna sp.

One immature specimen from Mesilla Park, January, and another from Mesilla.

It has a black clypeus and black mandibles, a brown stripe on each side of the cephalothorax, broadest behind; and two rows of connected spots on the dorsum of abdomen, united behind. It is possibly *A. futilis* Banks, a Mexican species.

Gayenna marginalis n. sp.

Cephalothorax yellowish, margin black, two black stripes above, not reaching hind margin, and two within these near eyes, eyes on black spots; mandibles pale yellowish; legs yellowish, femora with three incomplete narrow black rings, two on the tibiæ, and some spots on the hind pairs of metatarsi. Sternum pale, margined with brown; abdomen pale gray, quite densely marked above with pale brown spots, those on the sides being oblique dashes; venter with a dark stripe each side, and a broader median one, all ending at the ventral furrow. P.M.E. scarcely their diameter apart, barely closer to the rather smaller P.S.E.; A.M.E. much smaller, not one-half their diameter apart, and fully as close to the subequal A.S.E. Tibia I below with five spines in front and four behind; tibia II with four in front and three behind; metatarsi I and II with three pairs beneath.

Length 6 mm.

One female from near Beulah, March, 8,000 feet altitude (Cockerell).

Meriola inornata n. sp.

Cephalothorax, mandibles and sternum dark red-brown; legs pale yellowish, fore pairs little, if any, darker; abdomen above and below pale yellowish, a faint basal brown spear-mark. Cephalothorax and sternum rugosely granulate; posterior eye-row nearly straight, P.M.E. about their diameter apart, no closer to the rather smaller P.S.E.; A.M.E. equal to P.M.E., nearly their

diameter apart, much closer to the nearly equal A.S.E.; quadrangle of M.E. a trifle broader than high. Mandibles large and slightly porrect; sternum truncate in front; hind coxæ widely separated. Legs quite long and slender, no spines, but with many hairs; beneath on tibiæ, metatarsi and tarsi are rows of serrated, semi-clavate hairs, each arising from a pointed granule; these are most evident on anterior legs. Abdomen slightly depressed, about one and one-half times as long as broad, nearly truncate at base. The epigynum shows two elliptical approximate marks beneath the surface, in each outer posterior corner is a black circular cavity, between them are two smaller black dots from which lines extend to the furrow.

Length 3.5 mm.

One female from Albuquerque (Soltau).

Thargalia modesta n. sp.

Cephalothorax pale reddish yellow, black around the eyes; mandibles and femora like cephalothorax, rest of legs pale yellowish, except the fourth pair, which have the tibiæ and metatarsus brown, the former pale on base and tip; sternum brown; venter black; palpi pale yellow; abdomen black, with black hairs and scales, a white band at base, a spot each side behind this band, and a narrow white band before the middle. Cephalothorax quite long and slender, about the length of tibia plus patella IV; head not elevated. Posterior eye-row procurved; P.M.E. round, nearly twice their diameter apart, over diameter from equal P.S.E.; anterior row shorter, nearly straight, A.M.E. about their diameter apart, closer to the equal A.S.E., S.E. about diameter apart and subequal; quadrangle of M.E. much higher than broad, broader behind than in front. Abdomen scarcely longer than the cephalothorax, broadly rounded behind, with a horny shield at base.

Length ♀ 6 mm.

One female from Albuquerque (Soltau).

Thargalia sp.

One immature specimen from Dripping Springs, Organ Mountains, in April. Probably represents an undescribed species.

Corinna bicalcarata Simon.

Corinna bicalcarata Simon, Ann. Soc. Ent. Belg., 1896, p. 416.

One female from Las Cruces. It was described from Arizona.

Phrurolithus sp.

Two specimens, both females, from the White Mountains, first Ruidoso camp, latter half of July. Very near *P. pugnatus* Emer., and quite possibly identical; a male from Las Vegas, February.

Syspira sp.

One immature specimen from a deep hole in the ground, January 24, at Mesilla Park. Like *S. tigrina* but paler, yet may be identical; both of the described species come from Lower California, and this is the first record of the genus in our country.

AGALENIDÆ.

Agalena longistylus n. sp.

Cephalothorax pale yellowish, with a brown stripe each side, broadest behind, leaving a pale median area, narrower behind; side margins narrowly brown; eyes on black spots; mandibles yellowish brown; sternum yellowish, broadly margined with brown; legs pale yellowish, femora marked with oblique brown spots, tibiæ and metatarsi brown at tips; abdomen brown, a broad pale area above, enclosing a brown basal spear-mark; venter yellowish brown, a brown line on each side; upper spinnerets brown, last joint long and slender like that of *A. navia*. Structure similar to *A. navia*, but the stylet of the male palpus is very much longer, making two full circles, the outside process is proportionally larger and sharper pointed, the tibia extends over the base of tarsus as in *A. navia*.

Length ♂ 7 mm.

One male from first Ruidoso camp, White Mountains, August 10 (Townsend).

Agalena nævia Hentz.

Agalena navia Hentz, Proc. Bost. Soc. N. H., Vol. V, p. 465 (1847).

One small male from Eagle creek, White Mountains, August. The stylus is of the usual length, a trifle more than one circle; the femora are unmarked.

Cicurina arcuata Keyserling.

Cicurina arcuata Keyserling, Verh. zool.-bot. Ges. Wien, 1884, p. 460.

One female from Las Vegas Hot Springs, January.

DICTYNIDÆ.

Dictyna arundinacoides Keyserling.

Dictyna arundinacoides Keyserling, Verh. zool.-bot. Ges. Wien, 1883, p. 665.

Several specimens from Beulah. A pair from top of Las Vegas range, 11,000 feet, last of June.

Dictyna texana Banks.

Dictyna texana Banks, Proc. Calif. Acad. Sci. (3), Vol. I, p. 233 (1898).

Two immature specimens from Mesilla Park

Dictyna sp.

One female of a small species from Las Cruces. It is much like *D. sublata*, but different.

Titanœca americana Emerton.

Titanœca americana Emerton, Trans. Conn. Acad., VII, p. 453 (1888)

One broken specimen from Las Vegas, at the limestone ledges by Gallinas river, January. Does not appear to differ from Eastern form.

Lethia trivittata n. sp.

Cephalothorax dark red-brown, with three stripes of white hairs on the head uniting behind at the dorsal groove; mandibles red-brown; sternum and legs more yellow-brown, paler toward tips; abdomen grayish white above, with a broad median brown stripe with serrated margins. Legs quite long and hairy, no spines; mandibles of male long and slightly concave; palpus of male short, the tibia with a plate-like projection below near the tip, palpal organ simple, a long stylet on outer side, bent over at tip; epigynum shows two transverse cavities in front, and two smaller oblique cavities behind. Posterior eye-row straight, P.M.E. fully their diameter apart, about as far from the equal P.S.E.; A.M.E. equal to P.M.E., about their diameter apart, and closer to the equal A.S.E.; quadrangle of M.E. broader than high.

Length ♀ 6 mm.; ♂ 4.2 mm.

One pair from Albuquerque (Soltau).

THERIDIIDÆ.

Theridium neomexicanum n. sp.

Cephalothorax pale yellowish, with a marginal black line, head with four reddish brown lines, converging back from the eyes and

uniting at dorsal groove; mandibles and sternum pale yellowish; legs pale, tips of patellæ and tibiæ, and sometimes of metatarsi, reddish; abdomen white, a few scattered black dots on dorsum, and two larger black spots above the spinnerets. Cephalothorax of usual shape; P.M.E. rather large, a little less than diameter apart; the A.M.E. smaller, fully diameter apart; quadrangle of M.E. forming a square. Legs of moderate length, metatarsus I a little longer than tibia I. Sternum triangular, the sides slightly rounded. Abdomen (when full of eggs) globular, higher than long; the epigynum shows as a simple median black opening.

Length 4 mm.

Two females from Las Cruces (Cockerell).

Theridium differens Emerton.

Theridium differens Emerton, Trans. Conn. Acad., VI, p. 9 (1882).

A young male from Mesilla Park, November 30, appears to belong to this species (Cockerell).

Steatoda grandis n. sp.

Cephalothorax and mandibles uniform dark red-brown; legs a brighter red-brown, still paler on the tarsi, tips of tibiæ plainly darker; sternum black; abdomen black above, with a narrow white line around base, extending back about one-third the distance to tip; venter pale, with a black mark similar in shape to that of *S. borealis*, but heavier. The posterior eye-row is straight, the P.M.E. fully their diameter apart, rather closer to the slightly larger P.S.E.; the A.M.E. much larger than the P.M.E., about one-half their diameter apart, and still closer to the much smaller A.S.E., the latter nearly touching the P.S.E. The epigynum shows a nearly circular, depressed corneous lid, with a small transverse opening behind. The legs are of moderate length, but rather large and stout.

Length 7.5 mm.

One female from Albuquerque (Soltau). It has much resemblance to the common *S. borealis*, but is larger and heavier; this is particularly noticeable in the size of the legs.

Steatoda borealis (Hentz).

Theridium borealis Hentz, Jour. Bost. Soc. N. H., VI, p. 274 (1850).

One from first Ruidoso camp, White Mountains, latter half of July.

Lithyphantes fulvus Keyserling.

Lithyphantes fulvus Keys., Die Spinn. Amer., Theridiidæ. p. 112, 1884.

One immature specimen from Las Cruces (Cockerell).

Lithyphantes corollatus (Linné).

Aranca corollata Linné, Syst. Nat., Ed. X, i, p. 621 (1758).

A female from Las Vegas (Cockerell), and a pair from Prof. Townsend.

Lathrodictus maotans (Fabricius).]

Aranca maotans Fabricius, Entom. Syst., II, p. 410 (1793).

An adult female from Mesilla Park in April, also young from Las Cruces (Cockerell); one female from Las Vegas Hot Springs, January. It is also found commonly at Santa Fé (Cockerell, Bull. 15, N. M. Agr. Exp. Sta., p. 81).

Euryopsis funebris (Hentz).

Theridium funebris Hentz, Jour. Bost. Soc. N. H., VI, p. 276 (1850).

Several specimens from Beulah.

Grammonota pictilis (Cambridge).

Erigone pictilis Cambridge, Proc. Zool. Soc. London, 1875, p. 396.

Three females and a male from Albuquerque; do not appear to differ from Eastern specimens.

Ceratinella occidentalis n. sp.

Cephalothorax uniform dark red-brown, shining; abdomen dull gray, with a dark red-brown dorsal shield, containing four black submedian impressions forming a trapeze; sternum red-brown; mandibles paler red-brown, fang black in middle; legs pale reddish, the patellæ paler, especially from beneath; abdomen with many small dark pits from which arise hairs. Cephalothorax rather short and broad; P.M.E. fully one and one-half their diameter apart, and as far from the equal P.S.E.; A.M.E. small, close together, farther from the larger A.S.E. Sternum broad, broadly truncate between hind coxæ which are widely separated. Abdomen with a large rounded dorsal shield, about one-third longer than broad, and rather pointed behind; on the venter there is a somewhat semicircular shield each side of the epigynum, another in front of the spinnerets, and several corneous dots as follows: Two behind epigynum, two in front of the anal plate,

and a series each side, of which the basal one is the largest. Legs hairy, without spines.

Length 1.6 mm.

Two females from Beulah, March, 8,000 feet altitude (Cockerell).

Tmeticus sp.

One specimen, a male from Eagle creek camp, White Mountains. In many respects similar to *T. perplexa*, but different; not in very good condition.

Tmeticus brevipalpus n. sp.

Cephalothorax yellowish brown, more or less mottled with dull black, eyes on black spots; mandibles more red-brown; legs pale yellowish; sternum dark brown; abdomen black, with some small scattered white spots above. Cephalothorax rather broad, head slightly elevated; posterior eye-row nearly straight; P.M.E. about their diameter apart, and about as far from the equal P.S.E.; A.M.E. smaller, about diameter apart, and rather farther from the larger A.S.E.; quadrangle of M.E. broader behind than in front, and a little higher than broad. Mandibles vertical, slightly diverging, unarmed. Sternum very broad, rounded behind. Legs long, with many hairs, but few spines; metatarsus I scarcely as long as tibia I. The tibia of palpus shows above two projections, a long one at tip and a smaller one toward base. Stylet long and curved once around the tip.

Length 2 mm.

One specimen from the White Mountains (Townsend).

Tmeticus perplexus (Keyserling).

Erigone perplexa Keyserling, Die Spinn. Amer., Therid., II, p. 190, 1886.

Tmeticus pectinatus Emerton, Trans. Conn. Acad., IX, p. 409, 1894.

One male from Albuquerque.

Linyphia communis (Hentz).

Linyphia communis Hentz, Jour. Bost. Soc. N. H., VI, p. 280 (1850).

One female from La Cueva, Organ Mountains, in August; another from one-half mile below first Ruidoso camp, White Mountains, August 8, by sweeping.

Linyphia phrygiana Koch.

Linyphia phrygiana Koch, Die Arach., III, p. 83. 1836.

Several specimens from top of Las Vegas range, 11,000 feet, last of June.

Microneta soltau n. sp.

Cephalothorax and legs yellowish, the mandibles and sternum often more brownish, eyes on black spots, femora of male more reddish; the abdomen is gray above and below, spinnerets yellowish. Posterior eye-row is slightly procurved, P.M.E. about diameter apart, rather closer to the equal P.S.E.; A.M.E. small, close together, much farther from the much larger A.S.E. which are some larger than the P.S.E. to which they are closely approximated; quadrangle of M.E. much higher than broad, broader behind than in front. Mandibles divergent, no teeth in front. Tibia of male palpus swollen below, above, as well as the patella tipped with several strong hairs; tarsus broad, rather angular above near base; the palpal organ broadest near tip; a dark piece extending across the base, close to the surface, tapering and twisted, but little curved; a large and prominent hook on inner face, curved and twisted at the tip where it is bifid. The epigynum is prominent and triangular in form, with a small median finger behind.

Length ♂ 2.4 mm.; ♀ 2.8 mm.

Several specimens from Albuquerque (Soltau).

TETRAGNATHIDÆ.

Tetragnatha extensa (Linné).

Aranea extensa Linné, Syst. Nat., Ed. XII, p. 621 (1767).

One pair from Beulah, and a male from the White Mountains, Eagle creek camp, third week in August.

Tetragnatha laboriosa Hentz.

Tetragnatha laboriosa Hentz, Jour. Bost. Soc. N. H., VI, p. 27 (1850).

Several specimens from Las Cruces; one from one-half mile below first Ruidoso camp, August 4, by sweeping.

Eugnatha pallida Banks.

Tetragnatha pallida Banks, Proc. Acad. Nat. Sci. Phila., 1892, p. 51.

One male from Beulah.

EPEIRIDÆ.

Argiope transversa Emerton.

Argiope transversa Emer., Trans. Conn. Acad., VI, p. 330, 1884.

Epeira fasciata Hentz, Jour. Bost. Soc. N. H., V, p. 468 (1847).

One fine specimen from Las Vegas, September (Miss Ada Springer).

Argiope aurantia Lucas.*Argiope aurantia* Lucas, Ann. Soc. Entom. France, 1833, p. 86.*Epeira riparia* Hentz, Jour. Bost. Soc. N. H., V, p. 468 (1847).

One specimen collected by Prof. Towuseud.

Gasteracantha cancriformis (Linné).*Araña cancriformis* Linné, Syst. Nat., Ed. XII, p. 1037 (1767).

Recorded from New Mexico by Dr. Marx, in his Catalogue. Mr. Cockerell says he has never seen it, so far as he can remember.

Epeira placida Hentz.*Epeira placida* Hentz, Jour. Bost. Soc. N. H., V, p. 475 (1847).

Two females from one-half mile below first Ruidoso camp, White Mountains, August, by sweeping. They are not quite adult, and differ considerably from the usual form. There are no stripes on the cephalothorax; the abdomen is light chocolate-brown, with some white marks in front and where the stripe should be, behind there are two black spots each side. The spinnerets are black, with the usual two spots each side. Structurally there are no differences from the Eastern specimens, but the male might show differences in the palpus. *E. placida* has not previously been recorded from the West.

Epeira oaxensis Keyserling.*Epeira oaxensis* Keyserling, Sitzungsber. Isis, Dresden, 1863, p. 121.*Epeira vertebrata* McCook, Proc. Acad. Nat. Sci. Phila., 1888, p. 196.

Several specimens from Las Cruces, September 6 (Cockerell), and Eagle creek camp and Ruidoso creek, White Mountains, third week in August. An abundant species in the extreme Southwest and in Mexico.

Epeira aculeata Emerton.*Epeira aculeata* Emerton, Bull. U. S. Geol. Surv. Terr., 111, No. 2, p. 528 (1877).

A few specimens from Beulah (Cockerell). A species common in the foothills of Colorado.

Epeira labyrinthea Hentz.*Epeira labyrinthea* Hentz, Jour. Bost. Soc. N. H., V, p. 471 (1847).

Three specimens from Eagle creek camp, White Mountains, August.

Epeira displicata Hentz.*Epeira displicata* Hentz, Jour. Bost. Soc. N. H., V, p. 476 (1847).

One specimen swept from Solidago patch on Ruidoso side of

divide, about 200 feet below top of divide, White Mountains, August 17.

Epeira trivittata Keyserling.

Epeira trivittata Keyserling, Sitzungsber. Isis, Dresden, 1863, p. 95.

Recorded by McCook from New Mexico; one specimen collected by Prof. Townsend, and one each from Mesilla Park and Ruidoso creek.

Epeira nephiloides Cambridge.

Epeira nephiloides Cambridge, Biol. Cent.-Amer. Arach.-Aran., I, p. 32 (1890).

Dr. Marx records a specimen from Fort Canby.

Epeira gemma McCook.

Epeira gemma McCook, Proc. Acad. Nat. Sci. Phila., 1888, p. 193.

A female from Rio Ruidoso, 200 feet above first Ruidoso camp; a large female from East Las Vegas.

Epeira trifolium Hentz.

Epeira trifolium Hentz, Jour. Bost. Soc. N. H., V, p. 471 (1847).

Several from top of ridge near Eagle creek, White Mountains, August, September.

Epeira mæsta Keyserling.

Epeira mæsta Keyserling, Die Spinn. Amer., IV, p. 108 (1892).

Dr. Marx had a specimen from New Mexico, without more definite locality.

THOMISIDÆ.

Xysticus bicuspis Keyserling.

Xysticus bicuspis Keyserling, Verh. zool.-bot. Ges. Wien, 1887, p. 478.

One male from Dripping Springs, Organ Mountains, and a female from Las Cruces, which probably belongs to the male. The epigynum consists of a simple transverse elliptical cavity without any indentation.

Xysticus montanensis Keyserling.

Xysticus montanensis Keyserling, Verh. zool.-bot. Ges. Wien, 1887, p. 479.

Xysticus pulverulentus Emerton, Trans. Conn. Acad., IX, p. 417, 1894.

One female from Beulah; it may possibly be a different species, but the differences are so slight that, in the absence of males, I refer it to this species. The epigynum has the same general shape, but is longer.

Xysticus emertoni Keyserling.

Xysticus emertoni Keyserling, Die Spinn. Amer., I, Latr., p. 39 (1880).
Xysticus elegans Keyserling, *ibid.*, p. 31.

A female from Beulah and a male from Las Vegas Hot Springs appear to belong here. The male is like males from New England, which both Emerton and myself consider *X. elegans*. The female is not, however, so certain.

Xysticus cunctator Thorell.

Xysticus cunctator Thorell, Bull. U. S. Geol. Surv. Terr., III, No. 2, p. 495 (1877).

Xysticus quinquepunctatus Keyserling, Die Spinn. Amer., I, Latr., p. 12 (1880).

Several specimens from Albuquerque (Soltau), and Beulah and Mesilla Park (Cockerell). This gives the species a vertical range from 3,800 feet to 8,000 feet.

Xysticus gulosus Keyserling.

Xysticus gulosus Keyserling, Die Spinn. Amer., I, Latr., p. 43 (1880)

One young female from summit of range between the Pecos and Sapello rivers, August (Cockerell); adult female from Las Vegas, February.

Coriarachne versicolor Keyserling.

Coriarachne versicolor Keyserling, Die Spinn. Amer., I, p. 53 (1880)

An immature male from Mesilla.

Misumena oblonga Keyserling

Misumena oblonga Keyserling, Die Spinn. Amer., I, Latr., p. 79 (1880).

One female from Mesilla Park.

Misumena vatia (Clerk).

Araneus vatia Clerk, Sven. Spindlar, p. 128 (1757).

A few from top of ridge near Eagle creek, White Mountains, August and September; also from Eagle creek camp.

Misumena sp.

Three immature specimens of a species new to the United States, but may be young of some Mexican form. It has the anterior legs evenly sprinkled with red dots, and many similar dots on cephalothorax and dorsum of abdomen; the cephalothorax has a dark stripe on each side.

Taken in White Mountains, one-half mile below forks, August 6, sweeping; another, nearly adult, from one-half mile below first Ruidoso camp, August 4, by sweeping.

Ebo mexicana Banks.

Ebo mexicana Banks, Proc. Calif. Acad. Sci., 3d Ser., Zool., Vol. I, p. 265 (1898).

Several specimens from Mesilla Park, January. Among them is the male, not previously known; it is a little smaller than the female, but marked like it. Previously recorded only from Hermosillo, Mex., but I have some specimens from El Paso, Tex.

Thanatus coloradensis Keyserling.

Thanatus coloradensis Keyserling, Die Spinn. Amer., I, Laterigrade, p. 206 (1880).

A pair from Las Cruces (Townsend). Readily separated from *T. rubicundus* by the fact that the eyes of the anterior row are of equal size; in the latter species the side eyes are much larger than the median ones.

Thanatus rubicundus Keyserling.

Thanatus rubicundus Keyserling, Die Spinn. Amer., I, p. 201 (1880).

Two specimens from Beulah.

Tibellus duttoni (Hentz).

Thomisus duttoni Hentz, Jour. Bost. Soc. N. H., V., p. 488 (1846).

Several specimens from Albuquerque (Soltau), and Mesilla Park and Beulah (Cockerell); young from Las Vegas.

Philodromus alaskensis Keyserling.

Philodromus alaskensis Keyserling, Verh. zool.-bot. Ges. Wien, 1883, p. 674.

An immature specimen from Las Vegas (Cockerell).

Philodromus spectabilis Keyserling.

Philodromus spectabilis Keyserling, Die Spinn. Amer., I, p. 210 (1880).

Several specimens, mostly immature, from Mesilla Park, in January.

Philodromus inquisitor Thorell.

Philodromus inquisitor Thorell, Bull. U. S. Geol. Surv. Terr., III, 2, p. 502 (1877).

One female from top of Las Vegas range, 11,000 feet, last week in June.

SPARASSIDÆ.

Olios fasciculatus Simon.

Olios fasciculatus Simon, Act. Soc. Linn. Bord., XXXIV, p. 307 (1880).
Olios giganteus Keyserling, Verh. zool.-bot. Ges. Wien, 1883, p. 681.

An immature specimen from La Cueva, Organ Mountains, September.

Olios abnormis Keyserling.

Olios abnormis Keyserling, Verh. zool.-bot. Ges. Wien, 1883, p. 679.

The species was described from Santa Fé, N. M.

Olios concolor Keyserling.

Olios concolor Keyserling Verh. zool.-bot. Ges. Wien, 1883, p. 682.

This species was described from Punta del Agua, N. M.

CTENIDÆ.**Ctenus hibernalis** Hentz.

Ctenus hibernalis Hentz, Jour. Bost. Soc. N. H., IV, p. 393 (1843).

This is recorded from New Mexico in Dr. Marx's Catalogue.

LYCOSIDÆ.**Lycosa helluo** Walckenaer.

Lycosa helluo Walckenaer, Ins. Apt., I, p. 337 (1837).

Lycosa bubingtoni Blackwall, Ann. Mag. Nat. Hist., XVII, p. 30, (1846).

Lycosa nideola Emerton, Trans. Conn. Acad., VI, 482 (1885).

One female and several young from Albuquerque; apparently identical with Eastern specimens.

Lycosa modesta (Thorell).

Tarentula modesta Thorell, Bull. U. S. Geol. Surv. Terr., III, No. 2, p. 520 (1877).

Several specimens from Beulah.

Lycosa coloradensis Banks.

Lycosa coloradensis Banks, Jour. N. Y. Ent. Soc., 1891, p. 50.

Two specimens from Las Cruces, not quite adult.

Lycosa sp.

Two immature specimens from Las Vegas, limestone ledges by Gallinas river. The cephalothorax is dark brown, with three pale stripes, the median the broadest, and of nearly equal width from eye-region to tip; sternum dark; coxæ pale, legs more or less marmorate above with brown, the hind tibia broadly banded at base and tip with black; abdomen discolored.

Lycosa caroliniensis Hentz.

Lycosa caroliniensis Hentz, Jour. Bost. Soc., Nat. Hist., IV, p. 230 (1843).

One adult male, fully colored, from Eagle creek canon, White Mountains, August 15; under a log.

Trochosa parva Banks.

Trochosa parva Banks, Jour. N. Y. Ent. Soc., 1894, p. 52.

Several examples from Albuquerque (Soltau), Beulah (Cockerell), and Eagle creek camp, White Mountains, third week in August.

Trochosa cinerea (Fabricius).

Araneus cinereus Fabricius, Entom. Syst. II, p. 423 (1793).

A female from Las Cruces, September 2; at light.

Trochosa sp.

One female of a pale species from Albuquerque. It is apparently new, but does not show any marked characters in this sex.

Pardosa glacialis (Thorell).

Lycosa glacialis Thorell, Öfv. K. Vetensk.-Akad. Förh., 1872, p. 159.

Lycosa concinna Thorell, Bull. U. S. Geol. Surv. Terr., III, No. 2, p. 506 (1877).

One male and several young from Albuquerque, and adults from summit of range between the Pecos and Sapello rivers, August, July.

Pardosa sternalis (Thorell).

Lycosa sternalis Thorell, Bull. U. S. Geol. Surv. Terr., III, No. 2, p. 504 (1877).

Pardosa luteola Emerton, Trans. Conn. Acad., IX, p. 427, 1894.

One male from the White Mountains.

OXYOPIDÆ.

Oxyopes pictipes n. sp.

Cephalothorax uniform gray-brown on sides and in front, eye-region black, above a broad pale area, broader in front than behind, with a narrow median extension forward to the eyes, and each side at base of pars cephalica is a short extension, in front on the clypeus is a small median pale spot; mandibles dark brown; palpi pale, banded with black; legs pale, a longitudinal black line beneath on the femora of anterior pairs, apical halves of all femora mostly black, patellæ mostly black, bands on middle and apex of tibiæ, and on base, middle and apex of metatarsi, black. Sternum pale; coxæ dark; venter mostly black; dorsum of abdomen pale, nearly interrupted beyond middle by an extension upward of the black sides. Head of the cephalothorax rather high, sloping off gradually behind. Posterior eye-row procurved; P.M.E. about twice their diameter apart and fully as far from

the equal P.S.E.; eyes of second row larger than P.M.E., about twice their diameter apart, closer to the P.S.E.; eyes of first row very small, and directly below the second row. Abdomen rather short, and acute at tip. Legs of moderate length.

Length 7 mm.

One specimen from Albuquerque (Soltau).

Hamalatiwa grisea Keyserling.

Hamalatiwa grisea Keyserling, Verh. zool.-bot. Ges. Wien, 1887, p. 458.

Dr. Marx determined this in the material Prof. Townsend sent him.

ATTIDÆ.

Phidippus opifex McCook.

Phidippus opifex McCook, Proc. Acad. Nat. Sci. Phila., 1878, p. 276.

One male from Las Cruces. *Purnanus* (?) *griseus* Peckham, recently described from the same locality, is probably this species.

Phidippus bicolor Keyserling.

Phidippus bicolor Keyserling, Verh. zool.-bot. Ges. Wien, 1884, p. 496.

Phidippus ardens Peckham, Trans. Wisc. Acad. Sci., XIII, 288 (1901).

Phidippus californicus Peckham, *ibid.*, p. 289.

A few specimens from Las Cruces, September 6; La Cueva, August; Fillmore Cañon (near the falls), Organ Mountains; White Mountains, September 11; and limestone ledges by Gallinas river near Las Vegas. I have also seen the species from Arizona (Yuma). Peckham describes the sexes as separate species, although noting the possibility of their identity. Keyserling's specimen came from Utah.

Phidippus comatus Peckham.

Phidippus comatus Peckham, Trans. Wisc. Acad. Sci., XIII, p. 291 (1901).

Described from Las Vegas.

Phidippus tyrellii Peckham.

Phidippus tyrellii Peckham, Trans. Wisc. Acad. Sci., XIII, 296 (1901).

A few specimens from Beulah, August, and Eagle creek, White Mountains. A very pretty species in the male sex. I also have it from Bear, Idaho.

Dendryphantès octavus (Hentz).

Attus octavus Hentz, Jour. Bost. Soc. N. H., V, p. 365 (1846).

Several specimens from Las Cruces (Cockerell) and first Ruidoso camp, White Mountains, latter half of July.

Dendryphantes nubilus (Hentz).

Attus nubilus Hentz, Jour. Bost. Soc. N. H., V, p. 358 (1846).

Several examples from under bands on apple and pear trees at Mesilla Park, January (Cockerell). The bands were those which had been put on to catch the larvæ of the Codling Moth.

Dendryphantes vitis Cockerell.

Dendryphantes vitis Cockerell, The Entomologist, 1894, p. 207.

Described from Las Cruces, April; also occurs at Mesilla Park, under bands on apple and pear trees (Cockerell).

Philæus rimator (Walckenaer).

Attus rimator Walckenaer, Ins. Aptères, I, p. 446 (1837).

Phidippus auctus Koch, Die Arachn., XIII, p. 148, 1845.

One female on *Larrea* at Mesilla Park, January 22.

Sadala distincta Peckham.

Sadala distincta Peckham, Trans. Wisc. Acad., VII, p. 53 (1888).

Recorded from New Mexico in Dr. Marx's Catalogue; described from Mexico.

Plexippus paykulli (Aud. et Sav.).

Attus paykulli Andouin et Savigny, Descrip. Egypte, XXII, p. 172 (1827).

I have seen a few specimens from New Mexico, without definite locality.

Marptusa californica Peckham.

Marptusa californica Peckham, Trans. Wisc. Acad., VII, p. 81 (1888).

Young specimens from Mesilla Park (Cockerell), and also from Prof. Townsend.

Idius neomexicanus n. sp.

Cephalothorax reddish, eyes on a black band, two indistinct dark spots in middle of eye-region, a white stripe each side below eye-region and extending backward, lower sides black, some golden hairs around the anterior eyes; mandibles reddish; sternum red-brown; femora red-brown, rest of legs clear pale yellow, except the patella, tibia and metatarsus of leg I, which are red-brown like the femora; abdomen reddish brown above, with faint indications of a few black spots, the sides of the abdomen are distinctly white, the venter nearly black, spinnerets black. Cephalothorax low and rather long; the eye-region scarcely as broad behind as in front, eyes of second row rather closer to laterals of first row

than to third row; the anterior row is curved, the top of laterals being even with top of median eyes, the latter are very large, close together and close to the anterior margin, so that the clypeus is extremely narrow. The mandibles are small and vertical; leg I much thickened, tibia and metatarsus I with two pairs of spines below; tibia III with a spine near base below, and a pair at tip; tibia IV with one at tip; metatarsi III and IV with several spines grouped at tip. Anterior coxæ separated by more than width of lip, hind coxæ nearly touching, the sternum much longer than broad. Abdomen about once and two-thirds as long as broad. The tibia of male palpus has a stout curved hook on outer tip; the palpal organ is tipped with three short black stylets, all of them only visible directly from below.

Length ♂ 3.8 mm.

One male from Beulah, 8,000 feet (Cockerell).

Icius peckhamæ Cockerell.

Icius peckhamæ Cockerell, Can. Entom., 1897, p. 223.

Several specimens from Mesilla Park. It is often found on fruit trees in the orchards.

Icius similis Banks.

Icius similis Banks, Can. Entom., 1895, p. 100.

Some immature examples from under bands on apple and pear trees, Mesilla Park (Cockerell).

Icius piraticus Peckham.

Icius piraticus Peckham, Trans. Wisc. Acad., VII, p. 49 (1888).

One male from San Augustine (Cockerell).

Fuentes vittata n. sp.

Cephalothorax blackish in eye-region and on sides, red-brown in thoracic part; sparsely clothed with white hair, and longer black ones; clypeus densely clothed with hair; many long black hairs above first row of eyes; dorsum of abdomen brown, rather mottled, with a whitish tapering stripe from base to tip, its sides ragged but distinct; on lower posterior sides a few pale oblique spots; venter pale brown; mandibles and sternum red-brown; leg I mostly red-brown, metatarsi and tarsi paler, other legs pale yellowish, all banded, especially above with blackish; these bands principally at tips of femora, middle of patellæ, base and middle of tibiæ and base and tip of metatarsi. Cephalothorax rather

long and flat; first eye-row like that of *F. pertinax*, the second, however, is full as near to the dorsal as to lateral eyes. Legs moderately slender, and well spined; metatarsi III and IV spined along their length; leg I much enlarged, except the metatarsi and tarsi; three pairs of spines under tibia I, two pairs under metatarsus I; tibia and patella I rather more hairy than the other joints; coxæ I separated by width of lip. Abdomen nearly twice as long as broad, tapering behind, somewhat depressed. The epigynum shows a broad tapering cavity, limited behind by two approaching corneous pieces, leaving a median emargination.

Length 6 mm.

Two females from Albuquerque (Soltau). Readily known from our two other species by its coloration as well as the structure of the vulva.

Pellenes oregonense Peckham.

Habrocestum oregonense Peckham, Trans. Wisc. Acad., VII, 1888, p. 66.

One male from Las Vegas Hot Springs. It is much rubbed, but the male palpus agrees with Peckham's figure.

Pellenes hirsutum Peckham.

Habrocestum hirsutum, Peckham, Trans. Wisc. Acad., VII, p. 64, (1888).

Prof. Peckham so named a specimen sent him by Prof. Townsend from Las Cruces.

Pellenes cockerelli n. sp.

Cephalothorax above black, with black hair, a narrow white stripe each side arising above the lateral eyes and running just below the dorsal eyes back and then down to the hind margin, below this is a black stripe, and the lower sides are clothed with white hair; between the M.E. and on the anterior part of the eye-region is a median white line; the male shows a more distinct pale V-mark connecting the dorsal eyes; clypeus with white hair; mandibles reddish, with some white hair on basal part; all legs pale in both sexes, dotted and mottled with dark brown, more densely so on the hind pairs, all with black hairs and white scales; patella I of male paler than the tibia, patella III not modified; male palpus short, patella and base of tibia very pale, beyond very dark. Abdomen gray above and on the sides, clothed with white hair, with two broad black submedian stripes from base to

tip, in the male broader and nearly connected behind, in the female interrupted behind by a prominent oblique white mark on each side; venter dark, with two pale submedian lines on basal part.

Length ♀ 7 mm.; ♂ 5 mm.

One pair from top of Las Vegas range, 11,000 feet; last week in June.

Pellenes klauserii Peckham.

Pellenes klauserii Peckham, Bull. Wisc. N. H. Soc., Oct., 1900,¹ p. 216.

Peckham describes this from two males from New Mexico, without more definite locality. The figure of the palpus looks much like that of *P. cockerelli*, but the description does not apply.

Pellenes birgei Peckham.

Pellenes birgei Peckham, Bull. Wisc. N. H. Soc., Oct., 1900, p. 217.

Described from one male from Mesilla Park.

Pellenes politus Peckham.

Pellenes politus Peckham, Bull. Wisc. N. H. Soc., Oct., 1900, p. 223.

Described from two females from New Mexico, without more definite locality; quite probably they are females of *P. klauserii*.

Pellenes cognatus Peckham.

Pellenes cognatus Peckham, Bull. Wisc. N. H. Soc., Oct., 1900, p. 224.

Peckham records one female from New Mexico.

Pellenes sp.

A male, one moult from maturity, from Ruidoso creek, one-half mile below forks, August 6, sweeping. It has black legs, with the bases of all femora pale; the palpi pale, with a large black spot on the patella; the abdomen is black, with a few small white spots.

Sassacus popenœi Peckham.

Sassacus popenœi Peckham, Occ. Pap. Wisc. N. H. Soc., Vol. II, No. 3, p. 177 (1895).

Two young specimens; one from Prof. Townsend, the other under bands on apple and pear trees, Mesilla Park (Cockerell).

Homalattus cyaneus (Hentz).

Attus cyaneus Hentz, Jour. Bost. Soc. N. H., V, p. 365 (1846).

One from Mesilla Park, January 23, on *Larrea* (Cockerell).

¹ Dated October, 1900, but not distributed till July, 1901; paper not completed till early in 1901.

PHALANGIDA.

Homolophus biceps (Thorell).

Mitopus biceps Thorell, Bull. U. S. Geol. Surv. Terr., III, No. 2, p. 525 (1877).

Several specimens from Beulah, Eagle creek, White Mountains, and ridge between Sapello and Pecos rivers, 11,000 feet. This is a common species in Colorado. In New Mexico it appears to belong to the Canadian and Hudsonian zones.

Trachyrhinus marmoratus Banks.

Trachyrhinus marmoratus Banks, Jour. N. Y. Entom. Soc., 1894, p. 145.

Described from Santa Fé; also found at Las Cruces, September (Cockerell).

Liobunum townsendi Weed.

Liobunum townsendi Weed, Amer. Nat., 1893, p. 295.

Described from Las Cruces (Townsend). Specimens have been examined from Las Cruces, Beulah, and various places in the White Mountains, some under logs and rocks, July, August and September. By far the most abundant Phalangid.

Taracus packardi Simon.

Taracus packardi Simon, C. R. Soc. Ent. Belg., 1879, p. lxxiv.

A pair from Beulah (Cockerell). Described from Colorado, but not taken by recent collectors. It is one of the rarest and most interesting of our "daddy-long-legs."

Phalangium cinereum Wood.

Phalangium cinereum Wood, Comm. Essex. Inst., VI, p. 25 (1868).

One specimen from Raton, Colfax county (Cockerell). Not previously known from the West; a common species in the extreme northeastern States. The specimen was taken on the railroad track at Raton station, and may possibly have been introduced with freight in some way.

Solerobunus robustus (Packard).

Scotolemon robustus Packard, Bull. U. S. Geol. Surv. Terr., III, p. 164, (1877).

Specimens come from Beulah (Cockerell), from Eagle creek camp, White Mountains, August 21, in dead, rotten, wet pine log, and ridge of Eagle creek camp, White Mountains, under log, August. It belongs to the Canadian zone, both in New Mexico and Colorado.

PSEUDOSCORPIONIDA.

Chelanops validus Banks.

Chelanops validus Banks, Jour. N. Y. Ent. Soc., 1895, p. 7.

Two specimens from Mesilla. They are larger, but differ little in structure from the Lake Tahoe specimens.

Chelanops grossus Banks.

Chelanops grossus, Banks, Can. Entom. 1893, p. 65.

Two specimens from Eagle Creek, White Mountains; the fingers are a trifle longer than in Colorado specimens.

Chelifer scabrisculis Simon.

Chelifer scabrisculis Simon, Ann. Soc. Ent. France, 1878, p. 154.

Chelifer degeneratus Balzan, Ann. Soc. Ent. France, 1891, p. 532.

Three specimens from Eagle creek, White Mountains; they are like specimens that I have seen from Utah.

SCORPIONIDA.

Vejovis punctipalpi Wood.

Vejovis punctipalpi Wood, Proc. Acad. Nat. Sci. Philad., 1863, p. 109.

One from Mesilla, June, and a young one from La Cueva, Orgau Mountains, August 30, under a rock.

Centrurus carolinianus (Beauvois).

Scorpio carolinianus Beauv., Ins. rec. Afr. Amer., p. 190, 1805.

One immature specimen from Las Vegas (Cockerell).

SOLPUGIDA.

Eremobates sulphurea (Simon).

Datames sulphurea Simon, Ann. Soc. Entom. France, 1879, p. 142.

One male from San Augustine, eastern base of Organ Mountains. Two females, one from Las Cruces, September 3, the other from Las Vegas, June 29, 1899 (W. Porter and M. D. Cockerell).

Eremobates californicus (Simon).

Datames californica Simon, Ann. Soc. Entom. France, 1879, p. 143.

One male from Mesilla valley is probably this species.

Eremobates pallipes (Say).

Galvodes pallipes Say, Long's Exped. Rocky Mts., Philad., 1823, Vol. II.

One specimen from Aztec, San Juan county, October (C. A. Grommet), appears to be this species.

Ammotrecha peninsulana (Banks).

Cleobis peninsulana Banks, Proc. Calif. Acad. Sci. (3), Zool., I, 290, 1898.

One specimen from La Cueva, Organ Mountains, September 2, at light in tent running over the blanket; another from Las Vegas Hot Springs, January.

ACARINA.

Trombidium gemmosum n. sp.

Body above densely clothed with short, thick, but scarcely clavate, hairs; below with short, stiff, pointed bristles; legs and palpi with fine slender hairs. Body once and one-half as long as broad, broadest in front, plainly constricted near middle above the third legs, the dorsum with several small impressed spots. Legs very short; leg I about as long as width of body, last joint but little swollen, no longer than preceding joint; fourth legs not reaching beyond tip of body. Palpi short; second joint much swollen above, below with long hairs; third rather longer than broad and plainly narrower at tip; fourth quite long, ending in a long stout claw; fifth, or thumb, clavate, hardly reaching beyond the claw, with short, simple hairs. Color red.

Length 2.4 mm.

Several specimens from Las Vegas in January (Cockerell), one from Eagle creek, White Mountains (Townsend). Closely related to *T. scabrum*, but with shorter legs, and shorter terminal joint to leg I. Mr. Cockerell states that this species is extremely abundant at Las Vegas.

Trombidium magnificum Le Conte.

Trombidium magnificum Le Conte, Proc. Acad. Nat. Sci. Philad., 1853, p. 145.

I have seen specimens from several parts of southern New Mexico.

Rhyncholophus sp.

Several specimens from Beulah. Very similar to *R. simplex*, but, I think, different.

Tetranychus bimaculatus Harvey.

Tetranychus bimaculatus Harvey, Rept. Me. Exp. Sta., f. 1892 (1893), p. 133.

Specimens from Mesilla Park on violet leaves (in cultivation) appear to belong to this common species. They were found by

Mr. Fabian Garcia, and the species was doubtless imported with the violets.

Tetranychus desertorum Banks.

Tetranychus desertorum Banks, Bull No. 8, Tech. Ser., Div. Entom., U. S. Dept. Agric., p. 76 (1900).

Described from specimens from Mesilla Park on *Larrea tridentata* and *Phacelia crenulata*. The latter, at least, were probably collected by Prof. J. D. Tinsley. Mr. Cockerell says the *Phacelia* was doubtless *P. intermedia* Wootton, until recently confused with *P. crenulata*.

Bryobia pratensis Garman.

Bryobia pratensis Garman, 14th Rept. State Entom. Ill, p. 73 (1885).

Prof. Cockerell has seen it from various parts of the Territory—Mesilla, Mimbres, etc.

Argas sanchezi Neumann.

Argas sanchezi Neumann, Mém. Soc. Zool. France, 1896, p. 16.

I have seen specimens from Deming.

Ixodes diversifossus Neumann.

Ixodes diversifossus Neumann, Mém. Soc. Zool. France, 1899, p. 136.

Described from two specimens taken from *Procyon lotor* from New Mexico; I have not seen it.

Dermacentor reticulatus (Fabricius).

Acarus reticulatus Fabricius, Ent. Syst., IV, p. 428, 1794.

Recorded by Neumann from the Territory; it is moderately common in the Western States.

Boophilus annulatus Say.

Ixodes annulatus Say, Journ. Acad. Nat. Sci. Philad., II, 1821, p. 75.
Ixodes boris Riley, Spec. Rept. U. S. Dept. Agric., 1869.

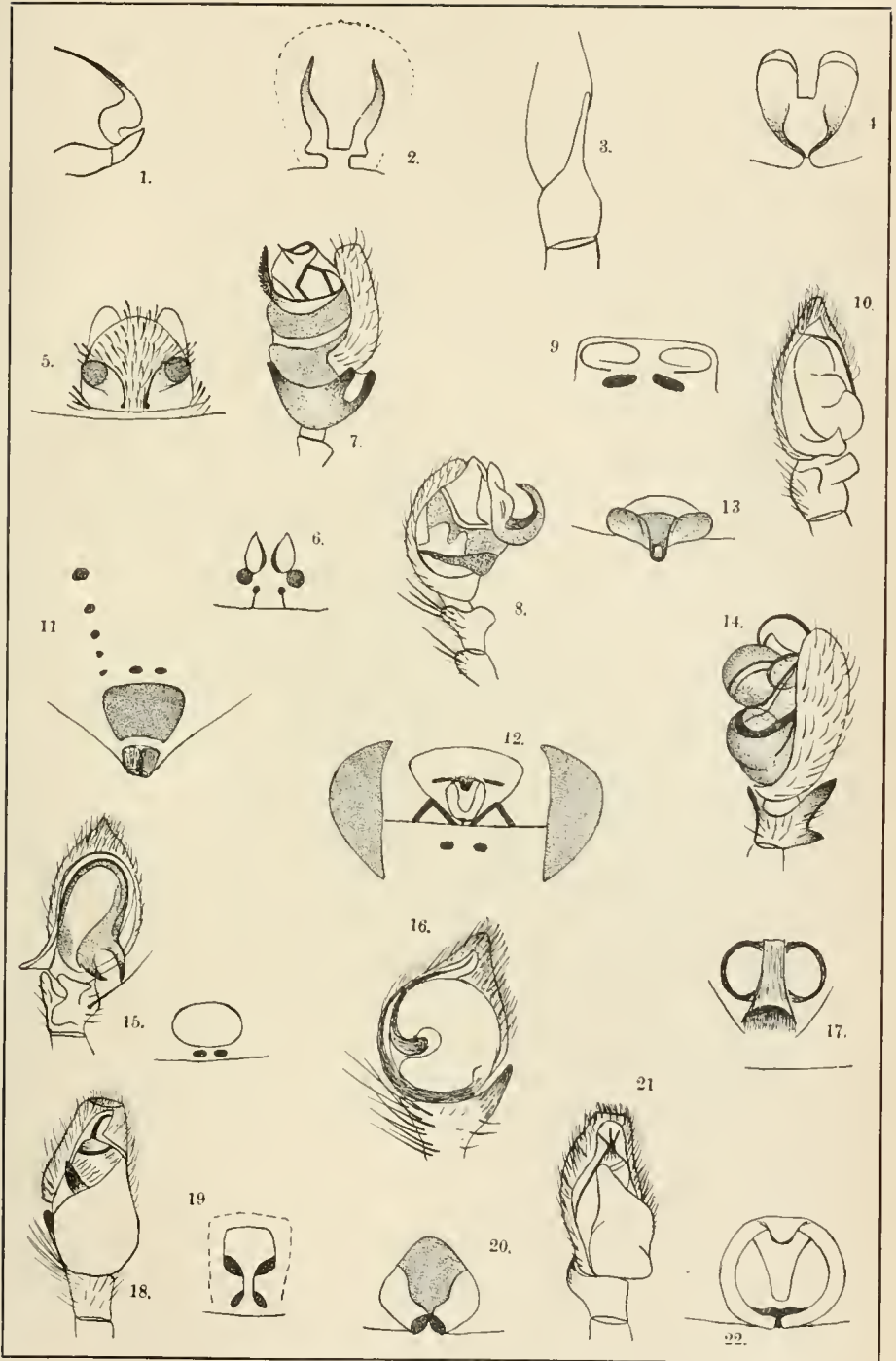
Neumann records the well-known cattle-tick from New Mexico. Mr. Cockerell has not met with it.

Laelaps sp.

An undescribed species was taken under a rock at Las Vegas, April 7, in company with *Lasius interjectus*.

EXPLANATION OF PLATE XXXIII.

- Fig. 1.—*Pachylomerus modestus*, palpus.
Fig. 2.—*Prosthesima cockerelli*, vulva.
Fig. 3.—*Prosthesima cockerelli*, palpus.
Fig. 4.—*Gnaphosa hirsutipes*, vulva.
Fig. 5.—*Thargalia modesta*, vulva.
Fig. 6.—*Meriola inornata*, vulva.
Fig. 7.—*Tmeticus perplexus*, palpus.
Fig. 8.—*Microneta soltauvi*, palpus.
Fig. 9.—*Lethia trivittata*, vulva.
Fig. 10.—*Lethia trivittata*, palpus.
Fig. 11.—*Ceratinella occidentalis*, venter.
Fig. 12.—*Ceratinella occidentalis*, vulva.
Fig. 13.—*Microneta soltauvi*, vulva.
Fig. 14.—*Tmeticus brevipalpus*, palpus.
Fig. 15.—*Xysticus bicuspis*, palpus and vulva.
Fig. 16.—*Pellencs cockerelli*, palpus.
Fig. 17.—*Pellencs cockerelli*, vulva.
Fig. 18.—*Phidippus tyrelli*, palpus.
Fig. 19.—*Xysticus montanensis*, vulva.
Fig. 20.—*Fucntes vittata*, vulva.
Fig. 21.—*Icius neomexicanus*, palpus.
Fig. 22.—*Gayenna marginalis*, vulva.



BANKS. SPIDERS OF NEW MEXICO.