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NEW AMERICAN SPIDERS OF THE FAMILY CLUBIONIDAE. II

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In this paper, the second under the title above, a number of new species of *Clubiona* are described and notes are given on other species of the genus. A résumé of the species related to *abboti* is presented. Follow-

ing this a number of species of miscellaneous groups are described. The types of all the new species are deposited in the collection of The American Museum of Natural History.

THE ABBOTI GROUP OF CLUBIONA

Emerton recognized the heterogeneity of the species he referred to *Clubiona rubra* Keyserling in his paper of 1889 when he described and figured three similar forms. Subsequently he described two other related species. Because these small spiders are so closely allied in structure and so similar in coloration, the slight but constant differences in the palpi and epigyna have not been recognized for the most part in the past as characters worthy of specific status. The present study of representative material from various sections of the United States reveals that a considerable number of the species are still undescribed.

The *abboti* group is characterized by the small size of the species, the broad pars cephalica, and the proportionately greater separation of the eyes of the posterior row. The median ocular quadrangle is very much broader than long and greatly narrowed in front. The palpi and epigyna are similar in all the species as shown by the figures. As a group these spiders are not separated discretely from all other species of the genus by fixed or unfailing characters, except possibly in the genitalia, but because of a very similar facies they may be considered as a unit.

Most familiar of all of these spiders because of its wide distribution throughout the United States is the typical species, *Clubiona abbotti* L. Koch. This is the species which was named *rubra* by Keyserling

at a somewhat later date. The other species vary in greater or lesser degree from *abboti*, those most divergent being *Clubiona dyasia*, new species, *littoralis* Banks, *pomoa*, new species, and *adjacens* Gertsch and Davis.

The coloration of this group is essentially like that of most species of the genus *Clubiona*. The carapace is ordinarily pale yellow to light yellowish brown, the degree of pigmentation somewhat variable within each species and dependent to some extent upon the age of the specimen. A very thin covering of fine, inconspicuous hairs clothes the carapace, and a few erect black setae are widely separated on the surface while others are concentrated in the ocular region. The eyes are ringed with black. The median groove is visible as a dark linear depression. The under side of the carapace and the appendages are pale yellowish brown, concolorous with the carapace or nearly so, and clothed with fine, erect hairs. The chelicerae are darker brown. The abdomen is duller than the carapace, often gray, but in some specimens light brown or reddish. At the base of the dorsum of the abdomen is a faint longitudinal darker maculation.

The longer than broad carapace is of average height, evenly convex, and the median groove is evident as a linear depression. The illustrations of the carapaces of the male and female of *abbotti* (Figs. 32 and 33) are representative in the

group. The front is broad, equal to about two-thirds or more of the greatest width of the carapace in the females, but somewhat less in the males. In *littoralis* (Fig. 13) the head is especially broad, the front being fully equal to the greatest width of the carapace in some females. This character is correlated in *littoralis* with a great development of the chelicerae which are very robust and project forward. In all the other species the chelicerae are of normal size, vertical or nearly so, moderately stout in the females, somewhat more slender in the males. The armature of the chelicerae offer little for specific characterization, the number of principal teeth being nearly the same among the species, whereas there is a considerable variation in the small teeth.

The short legs are armed with strong spines. The first two legs lack dorsal spines on the distal joints, the full formula being as follows: femur, dorsal, 1-1-1, prolateral, 1 distal; tibia, ventral, 2-2-0; metatarsus, ventral, one long pair at the base; elsewhere, none. Third leg: femur, dorsal, 1-1-2, prolateral, 1 distal; patella, prolateral, 1; tibia, ventral, prolateral and retrolateral, 1-1, and ventral, 2-2. Fourth leg: as third but metatarsus with 1-1-1 on both retrolateral and prolateral surfaces. The various species offer no important differences in the comparative leg measurements and spination.

An outstanding feature of the male palpus is the development of a long, shallow groove on the tegulum (median division) in which the slender embolus lies. This groove is analogous to the tutaculum in the Thomisidae which serves the same purpose but is developed on the cymbium of the tarsus. The embolic portion (distal division) is composed of two elements, the embolus and a conspicuous distal apophysis. It is quite possible that the distal apophysis is in reality the conductor of the embolus and that its function of support of the embolus has been changed secondarily. The embolus proper is a curved spine which is essentially alike for all the species, the principal difference being in the relative length. In *pomoea* and *nicholsi* a rounded enlargement is present toward the

base. The distal apophysis is a more or less conspicuous fold or apophysis which covers the basal portion of the embolus. It is attached to the base of the embolus and expands to a point near or beyond the middle of the tegulum. The apical portion is developed into a stout spur or lobe on the prolateral side. The inner portion may also be prolonged into a conspicuous apophysis as in *abboti*, *newmani* and *adjacens*.

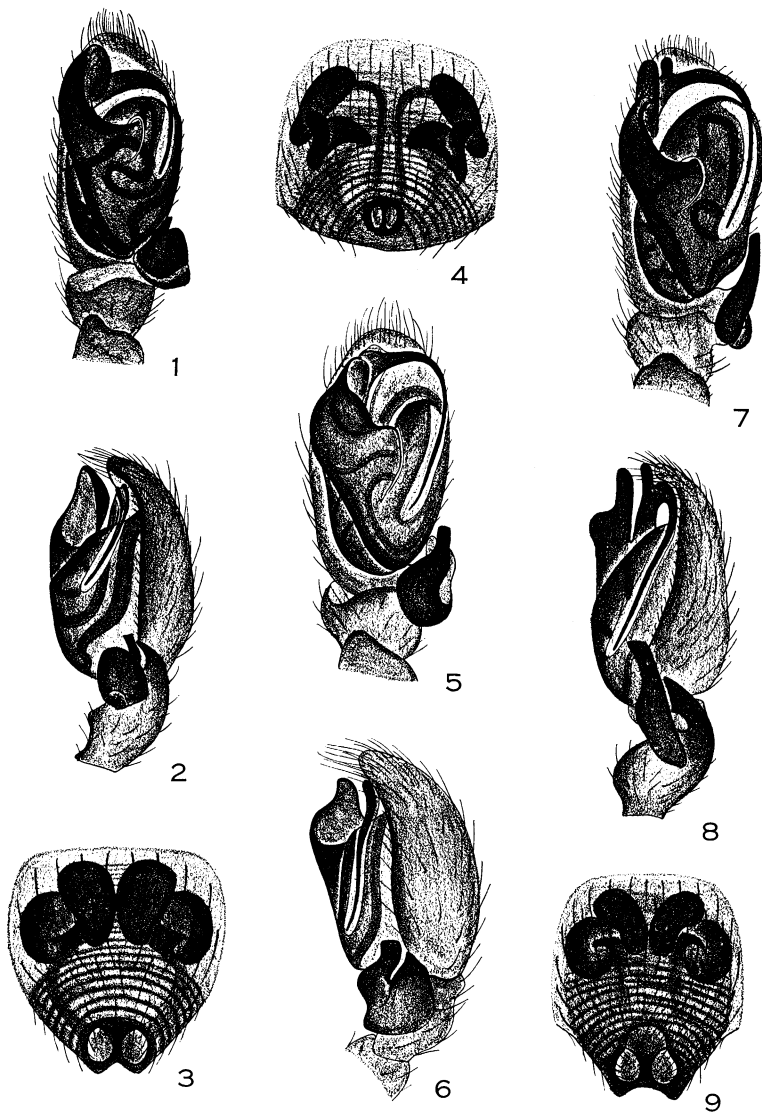
The tibia of the palpus is armed with two conspicuous apophyses, one retrolateral in position and the other dorsal or nearly so. In *dyasia*, the retrolateral apophysis is bifid. In the other species it is single and may equal or exceed the dorsal apophysis in length. The details of these apophyses are useful in separating the various species.

The epigyna of the known females are very similar in appearance but differ in details as illustrated.

A key to the species of this group must be based for the most part on the genitalia. The following key to the males will aid, along with the figures of the palpi, in the identification of the various species.

KEY TO THE MALES

- 1.—Posterior eyes widely separated, the median by three full diameters; chelicerae greatly enlarged, protruding.*C. littoralis* Banks.
Posterior median eyes separated at most by little more than two diameters; chelicerae normal, vertical or nearly so.2.
- 2.—Retrolateral tibial apophysis bifid.*C. dyasia*, new species.
Retrolateral apophysis not bifid.3.
- 3.—Embolus with an enlargement near the base.4.
Embolus without such an enlargement.5.
- 4.—Retrolateral tibial apophysis much longer than the dorsal; enlargement on embolus a rounded tubercle *C. pomoea*, new species.
Tibial apophyses subequal in length; enlargement on embolus less well developed.*C. nicholsi*, new species.
- 5.—Retrolateral apophysis essentially straight, not enlarged at base.*C. catawba*, new species.
Retrolateral apophysis curved or enlarged at base or apex.6.
- 6.—Retrolateral apophysis curved strongly dorsad (Fig. 18).*C. procteri*, new species.
Retrolateral apophysis not as in *procteri*.7.
- 7.—Retrolateral apophysis with an apical enlargement (Fig. 30).*C. adjacens* Gertsch and Davis.



- Fig. 1. *Clubiona dyasia*, new species, left palp, ventral view.
 Fig. 2. Idem, left palp, retrolateral view.
 Fig. 3. *Clubiona oteroana*, new species, epigynum of female.
 Fig. 4. *Clubiona alachua*, new species, epigynum of female.
 Fig. 5. *Clubiona nicholsi*, new species, left palp, ventral view.
 Fig. 6. Idem, left palp, retrolateral view.
 Fig. 7. *Clubiona pomoa*, new species, left palp, ventral view.
 Fig. 8. Idem, left palp, retrolateral view.
 Fig. 9. Idem, epigynum of female.

- Retrolateral apophysis without an apical enlargement.....8.
- 8.—Retrolateral apophysis clearly longer than the dorsal.....9.
- Retrolateral apophysis not appreciably longer than the dorsal.....13.
- 9.—Chelicerae distinctly ridged above (Fig. 40); distal apophysis strongly expanded ventrad (Fig. 42) *C. saltitans* Emerton. Chelicerae not ridged; distal apophysis less strongly expanded.....10.
- 10.—Apex of retrolateral apophysis truncate.....*C. kiowa*, new species. Apex thinner, pointed or rounded.....11.
- 11.—Enlargement of retrolateral apophysis nearer the base.....12.
- Enlargement proportionately nearer the middle of apophysis.....*C. mutata*, new species.
- 12.—Posterior median eyes separated by more than two diameters.....*C. pikei*, new species. Posterior median eyes separated by one and one-half diameters, less than a full diameter from the lateral eyes.....*C. plumbi*, new species.
- 13.—Inner fold of distal apophysis produced into a conspicuous spur.....14.
- Inner fold not conspicuously produced into a spur.....15.
- 14.—Both tibial apophyses directed distad, the retrolateral apophysis longer than broad.....*C. abboti* L. Koch. Both apophyses directed ventrad, the retrolateral apophysis about as broad as long.....*C. newmani* Ivie and Barrows.
- 15.—Retrolateral apophysis considerably longer than the width at base (Fig. 44).....*C. johnsoni*, new species. Retrolateral apophysis about as broad at base as long (Fig. 38).....*C. kastoni*, new species.

***Clubiona dyasia*, new species**

Figures 1 and 2

MALE.—Total length, 3.00 mm.

	Length	Width
CARAPACE	1.56 mm.	1.08 mm.
FRONT	0.20	0.62
STERNUM	0.80	0.54
LABIUM	0.26	0.20
MAXILLA	0.48	0.22
ABDOMEN	1.55	0.85

Coloration and structure typical for the group. Clypeus very low, equal in height to one-fifth the diameter of an anterior median eye. First row of eyes narrower than the second (66/87), straight as seen from in front, the median separated by less than the radius (6/14), about half as far from the slightly larger lateral eyes. Second row of eyes moderately recurved, the median separated by more than the diameter (14/20), less than a full diameter from the subequal lateral

eyes (14/12). Subequal lateral eyes of each side separated by less than the radius of the posterior lateral eye (6/14). Median ocular quadrangle broader than long (50/35), narrowed in front (50/33), the eyes subequal in size.

Lower margin of the furrow of the chelicera with three small teeth.

Leg spines normal. First leg: femur, 0.95 mm., patella, 0.51 mm., tibia, 0.86 mm., metatarsus, 0.64 mm., and tarsus, 0.41 mm. long. Fourth leg: femur, 1.24 mm., patella, 0.54 mm., tibia, 0.94 mm., metatarsus, 1.20 mm., and tarsus, 0.42 mm. long.

Palpus as illustrated in Figs. 1 and 2.

TYPE LOCALITY.—Male holotype from Dyas Creek, Baldwin County, Alabama, June 25, 1940 (A. F. Archer).

This species differs from all other members of the group in having the retrolateral apophysis of the tibia of the male palpus distinctly bifid.

***Clubiona alachua*, new species**

Figure 4

FEMALE.—Total length, 2.90 mm.

	Length	Width
CARAPACE	1.43 mm.	0.91 mm.
FRONT	0.18	0.60
STERNUM	0.84	0.46
LABIUM	0.25	0.20
MAXILLA	0.40	0.18
ABDOMEN	1.50	0.95

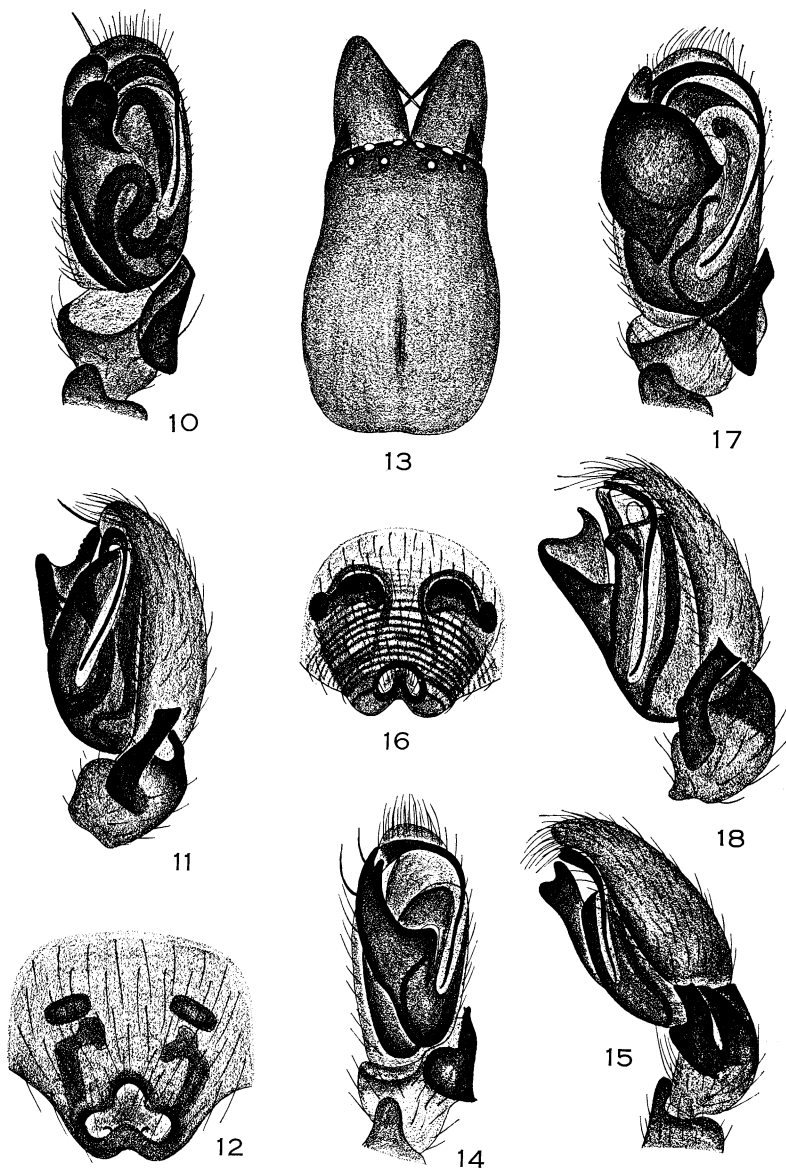
Coloration and structure normal. Clypeus low, equal in height to one-fifth the diameter of an anterior median eye. First row of eyes narrower than the second (64/77), essentially straight, the median separated by three-sevenths the diameter, one-third as far from the equal lateral eyes. Second row of eyes essentially straight, the median separated by less than two diameters (12/22), half as far from the equal lateral eyes (12/11). Median ocular quadrangle broader than long (46/32), narrowed in front (46/31), the eyes subequal in size.

Lower margin of the furrow of the chelicera with five teeth, the three nearest the claw reduced in size.

Leg spines normal. First leg: femur, 0.75 mm., patella, 0.41 mm., tibia, 0.63 mm., metatarsus, 0.43 mm., and tarsus, 0.25 mm. long. Fourth leg: femur, 1.00 mm., patella, 0.45 mm., tibia, 0.81 mm., metatarsus, 0.95 mm., and tarsus, 0.35 mm. long.

Epigynum as illustrated in Fig. 4.

TYPE LOCALITY.—Female holotype from Alachua County, Florida, April 18, 1935 (H. K. Wallace, No. 395). Female paratype from Highland Hammock, near Sebring, Florida, March 24, 1938 (W. J.



- Fig. 10. *Clubiona catawba*, new species, left palp, ventral view.
 Fig. 11. Idem, left palp, retrolateral view.
 Fig. 12. *Clubiona littoralis* Banks, epigynum of female.
 Fig. 13. Idem, dorsal view of carapace and chelicerae of male.
 Fig. 14. Idem, left palp, ventral view.
 Fig. 15. Idem, left palp, retrolateral view.
 Fig. 16. *Clubiona kagani*, new species, epigynum of female.
 Fig. 17. *Clubiona procteri*, new species, left palp, ventral view.
 Fig. 18. Idem, left palp, retrolateral view.

Gertsch). Two female paratypes from Blountstown, Florida, April 18, 1938 (W. J. Gertsch).

***Clubiona kagani*, new species**

Figure 16

FEMALE.—Total length, 3.25 mm.

	Length	Width
CARAPACE	1.35 mm.	0.97 mm.
FRONT	0.17	0.60
STERNUM	0.70	0.45
LABIUM	0.21	0.17
MAXILLA	0.35	0.18
ABDOMEN	2.00	1.20

Coloration and structure typical. Clypeus low, equal in height to one-fourth the diameter of an anterior median eye. First row of eyes narrower than the second (40/53), very gently procurved, essentially straight as seen from in front, the median separated by less than a radius (5/11), nearer the subequal lateral eyes. Second row very gently procurved, essentially straight, the median separated by two diameters (11/22), one full diameter from the subequal lateral eyes. Median ocular quadrangle broader than long (42/30), narrowed in front (42/28), the eyes subequal.

Lower margin of the furrow of the chelicera with two principal teeth and three tiny nodules between the apical tooth and the base of the claw.

Leg spines normal for the group but the tibiae and metatarsi of the first two pairs of legs have a series of small setae between the rows of principal spines. First leg: femur, 0.52 mm., patella, 0.40 mm., tibia, 0.55 mm., metatarsus, 0.42 mm., and tarsus, 0.28 mm. long. Fourth leg: femur, 1.00 mm., patella, 0.45 mm., tibia, 0.75 mm., metatarsus, 0.96 mm., and tarsus, 0.31 mm. long.

Epigynum as illustrated in Fig. 16.

TYPE LOCALITY.—Female holotype from Riesel, Texas, July 26, 1940 (Martin Kagan).

***Clubiona pomoa*, new species**

Figures 7, 8 and 9

FEMALE.—Total length, 5.00 mm.

	Length	Width
CARAPACE	2.24 mm.	1.57 mm.
FRONT	0.25	1.10
STERNUM	1.17	0.77
LABIUM	0.42	0.33
MAXILLA	0.70	0.34
ABDOMEN	2.80	1.60

Coloration and structure typical. Clypeus equal in height to one-third the diameter of an anterior median eye. First row of eyes narrower than the second (9/16), straight, the round median eyes separated by less than their diameter (10/17), as far from the subequal oval

lateral eyes. Second row of eyes very gently recurved, the median separated by twice their diameter (15/32), nearer the equal lateral eyes (15/20). Subequal lateral eyes of each side separated by two-thirds the diameter of the posterior lateral eye. Median ocular quadrangle broader than long (60/42), narrowed in front (60/33), the eyes subequal.

Chelicera with four teeth on the lower margin, the two nearest the claw much smaller, the upper margin with five teeth of which the distal one is considerably enlarged.

Leg spines typical. First leg: femur, 1.20 mm., patella, 0.76 mm., tibia, 0.95 mm., metatarsus, 0.76 mm., and tarsus, 0.50 mm. long. Fourth leg: femur, 1.63 mm., patella, 0.80 mm., tibia, 1.25 mm., metatarsus, 1.55 mm., and tarsus, 0.55 mm. long.

Epigynum as illustrated in Fig. 9.

MALE.—Total length, 5.20 mm.

	Length	Width
CARAPACE	1.90 mm.	1.36 mm.
FRONT	0.24	0.83
STERNUM	1.00	0.70
LABIUM	0.39	0.33
MAXILLA	0.63	0.30
ABDOMEN	2.30	1.30

Structure typical. Eyes as in female but slightly nearer together. Median eyes of second row separated by less than two diameters (15/25), one diameter from the lateral eyes (15/16).

Lower margin of the furrow of the chelicera with three subequal modular teeth.

Leg spines typical. First leg: femur, 1.13 mm., patella, 0.70 mm., tibia, 1.05 mm., metatarsus, 0.80 mm., and tarsus, 0.50 mm. long. Fourth leg: femur, 1.20 mm., patella, 0.70 mm., tibia, 1.15 mm., metatarsus, 1.20 mm., and tarsus, 0.50 mm. long.

Palpus as illustrated in Figs. 7 and 8.

TYPE LOCALITY.—Male holotype, female allotype, and male and female paratypes from Oakland, Alameda County, California, November 27, 1938 (W. M. Pearce). One male paratype from San Francisco, California (R. F. Sternitzky).

***Clubiona oteroana*, new species**

Figure 3

FEMALE.—Total length, 4.60 mm.

	Length	Width
CARAPACE	2.10 mm.	1.35 mm.
FRONT	0.24	1.00
STERNUM	1.05	0.67
LABIUM	0.37	0.30
MAXILLA	0.60	0.30
ABDOMEN	2.30	1.40

Coloration and structure normal. Clypeus equal in height to one-third the diameter of an

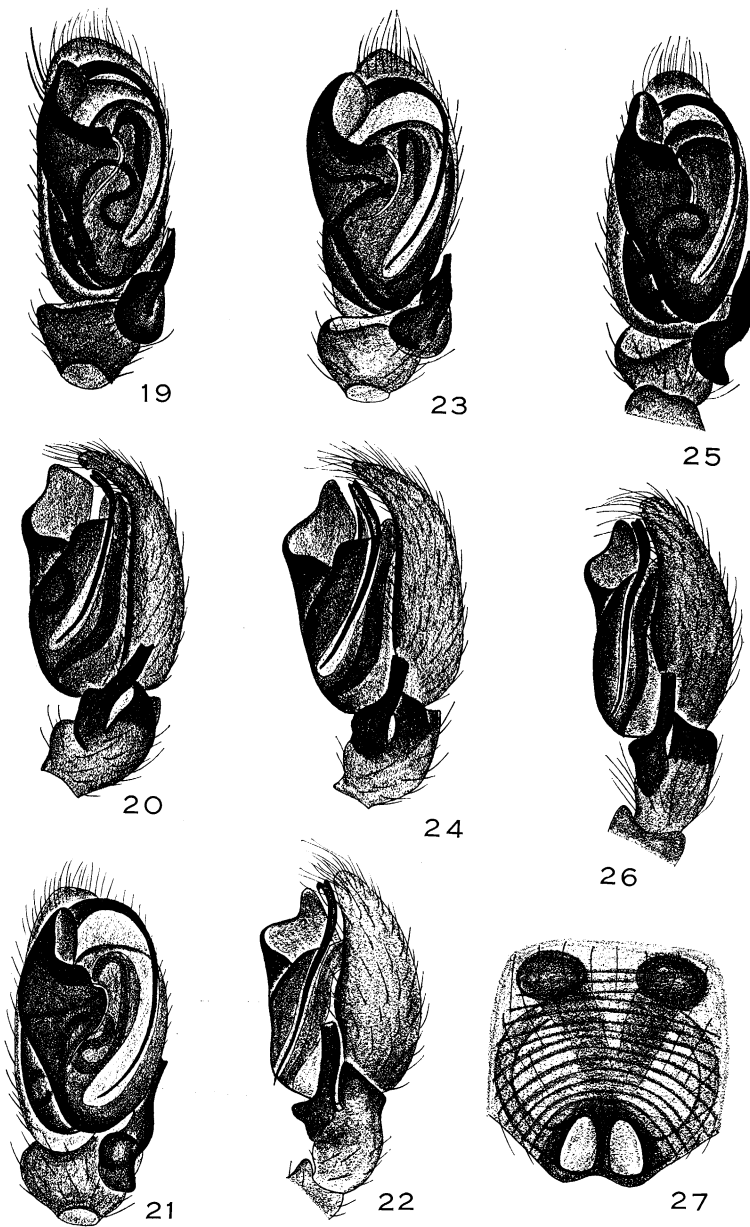


Fig. 19. *Clubiona mutata*, new species, left palpus, ventral view.

Fig. 20. Idem, left palpus, retrolateral view.

Fig. 21. *Clubiona plumbi*, new species, left palpus, ventral view.

Fig. 22. Idem, left palpus, retrolateral view.

Fig. 23. *Clubiona kiowa*, new species, left palpus, ventral view.

Fig. 24. Idem, left palpus, retrolateral view.

Fig. 25. *Clubiona pikei*, new species, left palpus, ventral view.

Fig. 26. Idem, left palpus, retrolateral view.

Fig. 27. Idem, epigynum of female.

anterior median eye. First row of eyes narrower than the second (87/115), straight as seen from in front, the median separated by two-thirds their diameter (10/15), about as far from the subequal lateral eyes. Second row essentially straight, the median eyes separated by more than two diameters (14/34), one diameter from the subequal lateral eyes. Lateral eyes of each side separated by two-thirds the diameter of the posterior lateral eye. Median ocular quadrangle broader than long (64/42), narrowed in front (64/40), the eyes subequal in size.

Chelicera armed as in *pomoo*. First legs missing. Fourth leg: femur, 1.45 mm., patella, 0.70 mm., tibia, 1.15 mm., metatarsus, 1.40 mm., and tarsus, 0.50 mm. long.

Epigynum as illustrated in Fig. 3.

TYPE LOCALITY.—Female holotype from Camp Mary White, Otero County, New Mexico, August 9–12, 1935 (S. Mulaik).

Clubiona oteroana may be distinguished from *pomoo* by the more widely separated eyes of the second row which is almost imperceptibly recurved. The receptacles of the epigynum are proportionately larger.

***Clubiona nicholsi*, new species**

Figures 5 and 6

MALE.—Total length, 4.40 mm.

	Length	Width
CARAPACE	2.10 mm.	1.40 mm.
FRONT	0.27	0.95
STERNUM	1.07	0.70
LABIUM	0.40	0.34
MAXILLA	0.70	0.34
ABDOMEN	2.30	1.40

Coloration and structure normal. Clypeus equal in height to one-fifth the diameter of an anterior median eye. First row of eyes narrower than the second (9/12), very gently procurved, the median separated by one-fifth their diameter, as far from the lateral eyes which are smaller in the ratio 18:22. Second row very gently recurved, essentially straight, the median separated by more than two diameters (16/35), about half as far from the subequal lateral eyes (16/18). Median ocular quadrangle broader than long (70/45), narrowed in front in the same ratio, the anterior median eyes larger in the ratio 22:18.

Chelicera with two teeth on the lower margin.

Leg spines normal. First leg: femur, 1.45 mm., patella, 0.82 mm., tibia, 1.38 mm., metatarsus, 1.05 mm., and tarsus, 0.74 mm. long. Fourth leg: femur, 1.70 mm., patella, 0.68 mm., tibia, 1.34 mm., metatarsus, 1.75 mm., and tarsus, 0.58 mm. long.

Palpus as illustrated in Figs. 5 and 6.

TYPE LOCALITY.—Male holotype from Mastic, Long Island, New York, September 7, 1935 (John T. Nichols).

***Clubiona adjacens* Gertsch and Davis**

Figures 30 and 31

Clubiona adjacens GERTSCH AND DAVIS, 1936, American Museum Novitates, No. 881, p. 19, Fig. 35.

TYPE LOCALITY.—Male holotype from Cameron County, Texas, May 1–2, 1936 (L. Irby Davis).

***Clubiona littoralis* Bank**

Figures 12, 13, 14 and 15

Clubiona littoralis BANKS, 1895, Journ. New York Ent. Soc., III, p. 79.

Clubiona latifrons EMERTON, 1910, Trans. Connecticut Acad. Arts and Sci., XVIII, p. 220, Pl. II, figs. 12, 12a and 12b.

TYPE LOCALITIES.—Male and female cotypes of *littoralis* from Sea Cliff, Long Island, New York (Nathan Banks), in the Museum of Comparative Zoölogy. Male and female cotypes of *latifrons* from Plum Island, Ipswich, Massachusetts, September, and Dighton, Massachusetts, September (J. H. Emerton), in the Museum of Comparative Zoölogy.

This is one of the most distinctive species of the group because of its larger size, the large protruding chelicerae, and the very broad pars cephalica. The eyes are proportionately smaller than in the other species and are more widely spaced. The segments of the male palpus are proportionately longer than in related species. The palpus is illustrated in Figs. 14 and 15. The carapace of the male is shown in Fig. 13. The epigynum of the female has considerable resemblance to that of *kastoni* but differs in details as shown in Fig. 12.

***Clubiona saltitans* Emerton**

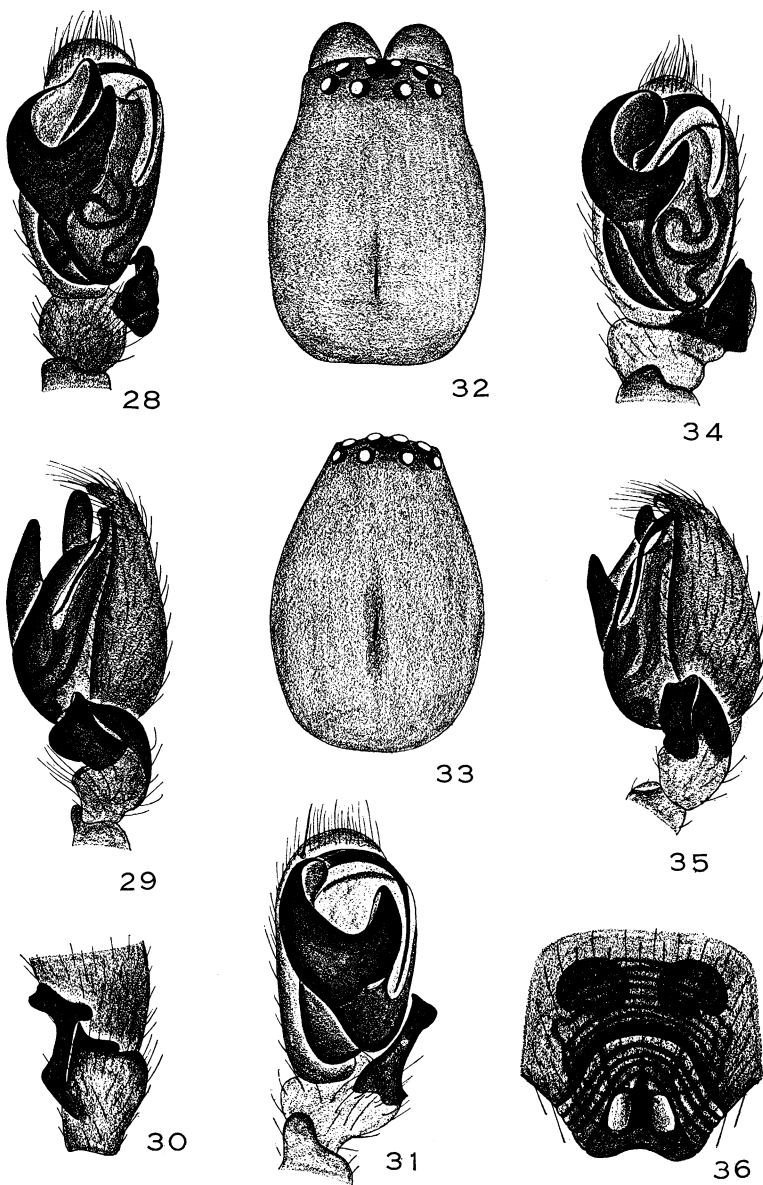
Figures 40, 41 and 42

Clubiona saltitans EMERTON, 1919, Canadian Entomologist, LI, p. 107, Fig. 14.

TYPE LOCALITIES.—Male and female cotypes from Ipswich, Plum Island, Wellfleet, Massachusetts (J. H. Emerton), in the Museum of Comparative Zoölogy.

RECORDS.—Male from Bergen Beach, New York, April 22, 1906. Male from Onondaga County, New York (Britcher).

Miss E. B. Bryant of the Museum of Comparative Zoölogy has advised me that Emerton's type material represents a mixed lot, some of the specimens apparently per-



- Fig. 28. *Clubiona newmani* Ivie and Barrows, left palp, ventral view.
 Fig. 29. Idem, left palp, retrolateral view.
 Fig. 30. *Clubiona adjacens* Gertsch and Davis, tibia of left palp, dorsal view.
 Fig. 31. Idem, left palp, ventral view.
 Fig. 32. *Clubiona abbotti* Koch, carapace of female, dorsal view.
 Fig. 33. Idem, carapace of male, dorsal view.
 Fig. 34. Idem, left palp, ventral view.
 Fig. 35. Idem, left palp, retrolateral view.
 Fig. 36. Idem, epigynum of female.

taining to the species described in this paper as *pikei*, new species. The male which was described and figured by Emerton represents the present species and is regarded as the lectotype. The female of *saltitans* is apparently unknown. *Clubiona pikei*, new species, is a somewhat larger spider and differs from *saltitans* in the details of the palpus as shown in the figures. Illustrations of the palpus of *saltitans* (Figs. 41 and 42) are included for comparison. The chelicerae (Fig. 40) project slightly forward and are marked with a shallow groove on the inner edge of the dorsal aspect, the groove bounded by low ridges.

***Clubiona catawba*, new species**

Figures 10 and 11

MALE.—Total length, 2.85 mm.

	Length	Width
CARAPACE	1.40 mm.	0.95 mm.
FRONT	0.20	0.60
STERNUM	0.78	0.55
LABIUM	0.28	0.22
MAXILLA	0.45	0.22
ABDOMEN	1.55	0.92

Coloration and structure normal. Clypeus equal in height to one-fourth the diameter of an anterior median eye. First row of eyes narrower than the second (64/80), straight, the median separated by the radius (6/13), about half as far from the subequal lateral eyes. Second row weakly recurved, the median separated by more than the diameter (14/23), less than a diameter from the subequal lateral (14/10). Median ocular quadrangle broader than long (50/33), narrowed in front (50/32), the anterior eyes distinctly smaller in the ratio 12:14.

Lower margin of the furrow of the chelicera with five small teeth.

Legs spined as usual. First leg: femur, 0.88 mm., patella, 0.47 mm., tibia, 0.86 mm., metatarsus, 0.57 mm., and tarsus, 0.32 mm. long. Fourth leg: femur, 1.10 mm., patella, 0.46 mm., tibia, 0.88 mm., metatarsus, 1.06 mm., and tarsus, 0.36 mm. long.

Palpus as illustrated in Figs. 10 and 11.

TYPE LOCALITY.—Male holotype and paratype from Kingston, Tennessee, June 10–15, 1933 (W. J. Gertsch). Two male paratypes from near Waycross, Georgia, June (W. J. Gertsch).

***Clubiona procteri*, new species**

Figures 17 and 18

MALE.—Total length, 2.90 mm.

	Length	Width
CARAPACE	1.36 mm.	0.95 mm.
FRONT	0.17	0.55
STERNUM	0.75	0.56
LABIUM	0.23	0.18
MAXILLA	0.44	0.23
ABDOMEN	1.56	0.85

Coloration and structure typical. Clypeus low, equal in height to one-fifth the diameter of an anterior median eye. First row of eyes narrower than the second (46/58), very weakly procurved as seen from in front, essentially straight, the median separated by one-third the diameter half as far from the subequal lateral eyes. Second row of eyes very weakly recurved, the median separated by more than the diameter (14/24), less than a diameter from the subequal lateral eyes (14/10). Median ocular quadrangle broader than long (50/34), narrowed in front (50/33), the eyes subequal.

Lower margin of the furrow of the chelicera with two teeth.

Spines on legs normal. First leg: femur, 0.90 mm., patella, 0.50 mm., tibia, 0.92 mm., metatarsus, 0.70 mm., and tarsus, 0.37 mm. long. Fourth leg: femur, 1.10 mm., patella, 0.48 mm., tibia, 0.82 mm., metatarsus, 1.08 mm., and tarsus, 0.40 mm. long.

Palpus as illustrated in Figs. 17 and 18.

TYPE LOCALITY.—Male holotype from Indian Town, Florida, March 28, 1938 (W. J. Gertsch).

***Clubiona pikei*, new species**

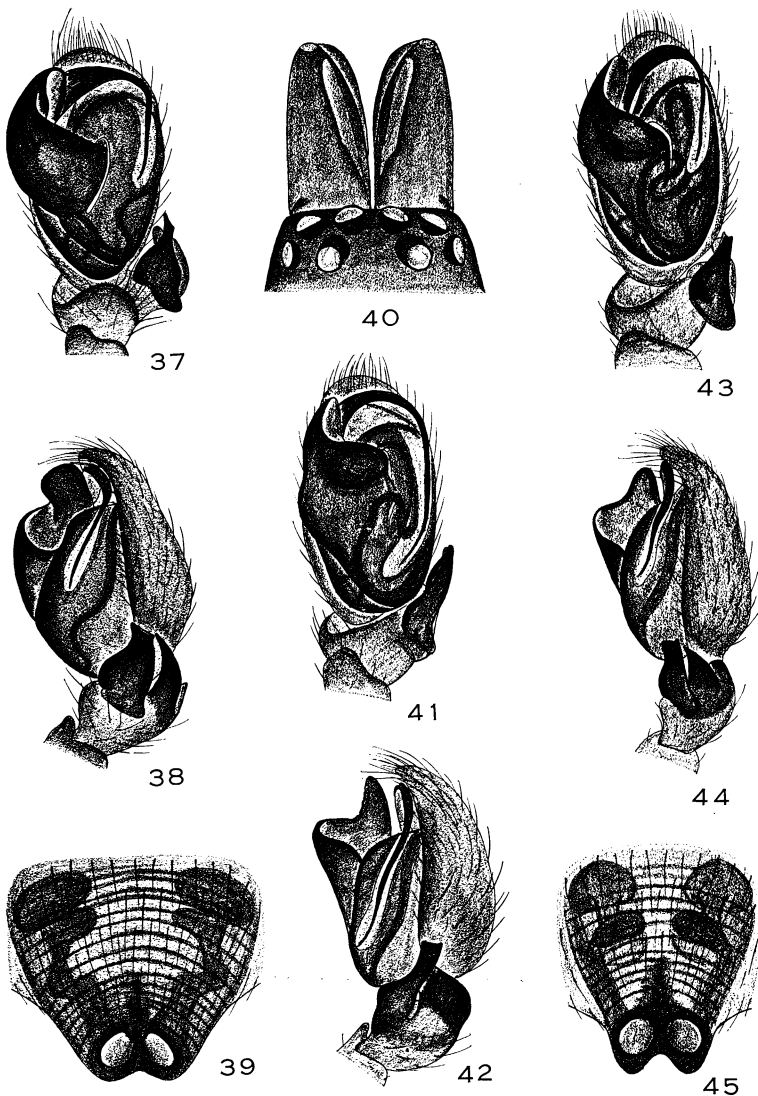
Figures 25, 26 and 27

FEMALE.—Total length, 5.50 mm.

	Length	Width
CARAPACE	1.90 mm.	1.35 mm.
FRONT	0.21	0.90
STERNUM	1.00	0.63
LABIUM	0.35	0.24
MAXILLA	0.55	0.28
ABDOMEN	3.70	2.15

Coloration and structure typical. Clypeus low, equal in height to one-fifth the diameter of an anterior median eye. First row of eyes narrower than the second (83/107), gently recurved as seen from in front, essentially straight, the round median separated by one-third the diameter (6/17), as far from the subequal oval lateral eyes. Second row of eyes essentially straight, the median separated by more than two diameters (14/35), much nearer the equal lateral eyes (14/17). Median ocular quadrangle broader than long (64/40), narrowed in front (64/41), the anterior median eyes larger in the ratio 18:15.

Lower margin of the furrow of the chelicera with six teeth, the four nearest the claw small and contiguous, the upper margin with one large tooth and five or six small ones near the base of the claw.



- Fig. 37. *Clubiona kastoni*, new species, left palp, ventral view.
 Fig. 38. Idem, left palp, retrolateral view.
 Fig. 39. Idem, epigynum of female.
 Fig. 40. *Clubiona saltitans* Emerton, front of head of male with chelicerae projecting forward.
 Fig. 41. Idem, left palp, ventral view.
 Fig. 42. Idem, left palp, retrolateral view.
 Fig. 43. *Clubiona johnsoni*, new species, left palp, ventral view.
 Fig. 44. Idem, left palp, retrolateral view.
 Fig. 45. Idem, epigynum of female.

Leg spines normal. First leg: femur, 1.00 mm., patella, 0.60 mm., tibia, 0.82 mm., metatarsus, 0.55 mm., and tarsus, 0.37 mm. long. Fourth leg: femur, 1.37 mm., patella, 0.63 mm., tibia, 1.04 mm., metatarsus, 1.25 mm., and tarsus, 0.45 mm. long.

Epigynum as illustrated in Fig. 27.

MALE.—Total length, 4.75 mm.

	Length	Width
CARAPACE	2.17 mm.	1.50 mm.
FRONT	0.25	1.00
STERNUM	1.10	0.75
LABIUM	0.40	0.30
MAXILLA	0.70	0.31
ABDOMEN	2.65	1.60

Structure typical. Eyes essentially as in the female. Anterior median eyes separated by more than half the diameter (11/17). Second row gently recurved, the median separated by about two and one-half diameters (15/40), half as far from the lateral eyes.

Chelicera with four or five teeth on the lower margin, the two nearest the base of the claw small.

Leg spines normal. First leg: femur, 1.33 mm., patella, 0.75 mm., tibia, 1.12 mm., metatarsus, 0.87 mm., and tarsus, 0.50 mm. long. Fourth leg: femur, 1.73 mm., patella, 0.75 mm., tibia, 1.30 mm., metatarsus, 1.70 mm., and tarsus, 0.54 mm. long.

Palpus as illustrated in Figs. 25 and 26.

TYPE LOCALITY.—Male holotype, female allotype, and male and female paratypes from Long Island (N. Pike). Female paratype from Norwalk, Connecticut, May 30, 1933 (W. J. Gertsch). Female paratype from Lakewood, New Jersey, June 5, 1929 (Greenspan). Female paratypes from Woods Hole, Massachusetts, July 8, 1901 (Britcher).

Clubiona plumbi, new species

Figures 21 and 22

MALE.—Total length, 2.95 mm.

	Length	Width
CARAPACE	1.36 mm.	0.93 mm.
FRONT	0.21	0.60
STERNUM	0.72	0.48
LABIUM	0.21	0.18
MAXILLA	0.37	0.19
ABDOMEN	1.60	0.85

Coloration and structure typical. Clypeus equal in height to one-fourth the diameter of an anterior median eye. First row of eyes narrower than the second (57/73), essentially straight, the median separated by the radius, half as far from the subequal lateral eyes which are larger

in the ratio 11:10. Second row straight, the median separated by one and one-half times the diameter (12/19), scarcely a diameter from the equal lateral eyes (12/10). Median ocular quadrangle broader than long (43/30), narrowed in front (43/29), the anterior median eyes clearly smaller in the ratio 12:10.

Chelicera with four teeth on the lower margin, the two nearest the base of the claw somewhat smaller. Palpus as illustrated in Figs. 21 and 22.

Leg spines normal. Tibia and patella I, 1.08 mm. long.

TYPE LOCALITY.—Male holotype from Long Island, New York (N. Pike).

This species is closely related to but much smaller than *piki*. The palpi are very similar but differ in detail as illustrated in the figures. *Clubiona plumbi* is easily distinguished by the eyes which are less widely spaced, the posterior median being separated by only one and one-half diameters and slightly less than a full diameter from the posterior lateral eyes.

Clubiona kiowa, new species

Figures 23 and 24

MALE.—Total length, 3.30 mm.

	Length	Width
CARAPACE	1.70 mm.	1.10 mm.
FRONT	0.22	0.70
STERNUM	0.90	0.56
LABIUM	0.26	0.22
MAXILLA	0.50	0.26
ABDOMEN	1.60	0.85

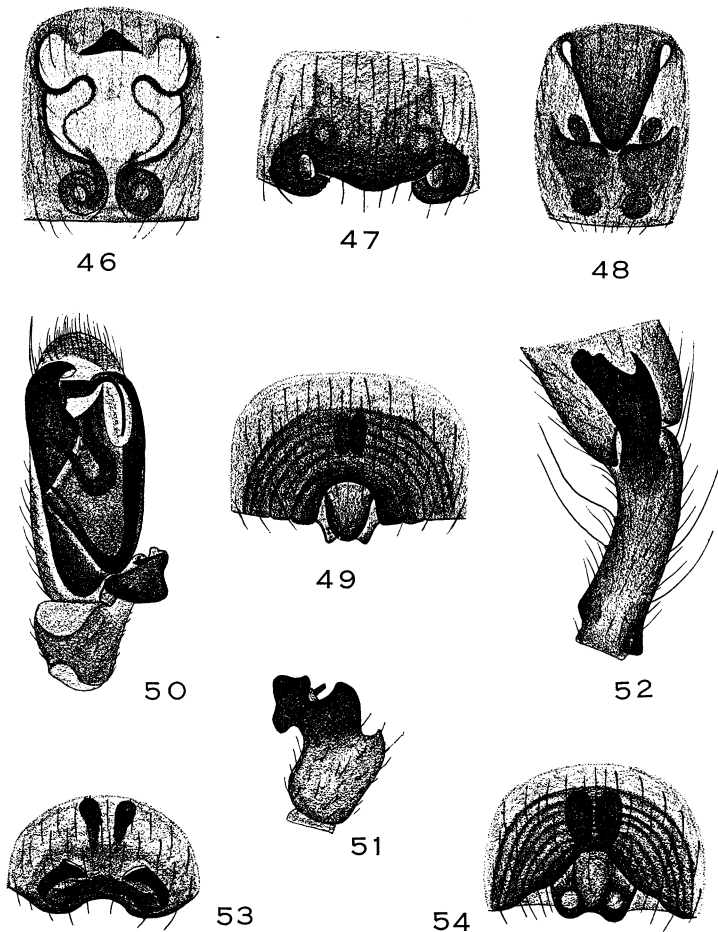
Coloration and structure normal. Clypeus equal in height to one-fifth the diameter of an anterior median eye. First row of eyes narrower than the second (71/91), essentially straight from in front, the median separated by two-thirds their diameter (10/15), half as far from the somewhat smaller lateral eyes. Second row very gently procurved, essentially straight, the median separated by scarcely two diameters (14/27), one diameter from the subequal lateral eyes. Median ocular quadrangle broader than long (55/35), narrowed in front (55/36), the eyes subequal.

Lower margin of the furrow of the chelicera with three small teeth.

Leg spines normal. First leg: femur, 1.00 mm., patella, 0.56 mm., tibia, 0.95 mm., metatarsus, 0.70 mm., and tarsus, 0.43 mm. long. Fourth leg: femur, 1.35 mm., patella, 0.56 mm., tibia, 1.10 mm., metatarsus, 1.30 mm., and tarsus, 0.43 mm. long.

Palpus as illustrated in Figs. 23 and 24.

TYPE LOCALITY.—Male holotype from Dallas, Texas, 1936 (John H. Robinson).



- Fig. 46. *Clubiona implicata*, new species, epigynum of female.
 Fig. 47. *Clubiona rileyi*, new species, epigynum of female.
 Fig. 48. *Clubiona languida*, new species, epigynum of female.
 Fig. 49. *Clubiona intermontana* Gertsch, epigynum of female.
 Fig. 50. *Clubiona chippewa*, new species, left palp, ventral view.
 Fig. 51. *Idem*, tibia of left palp, dorsal view.
 Fig. 52. *Clubiona richardi*, new species, tibia of left palp, subretrolateral view.
 Fig. 53. *Clubiona rowani*, new species, epigynum of female.
 Fig. 54. *Clubiona altana*, new species, epigynum of female.

***Clubiona mutata*, new species**

Figures 19 and 20

MALE.—Total length, 2.60 mm.

	Length	Width
CARAPACE	1.64 mm.	1.10 mm.
FRONT	0.22	0.73
STERNUM	0.86	0.57
LABIUM	0.32	0.24
MAXILLA	0.55	0.26
ABDOMEN	2.00	1.10

Coloration and structure typical. Clypeus equal in height to one-fourth the diameter of an anterior median eye. First row of eyes narrower than the second (75/97), very gently procurved from in front, essentially straight, the median eyes separated by the radius (8/15), somewhat nearer the subequal lateral eyes. Second row of eyes straight, the median separated by two diameters (13/25), nearer the lateral eyes (13/16). Median ocular quadrangle broader than long (52/33), narrowed in front (52/35), the eyes subequal.

Lower margin of the furrow of the chelicera with four teeth.

Leg spines normal. First leg: femur, 0.90 mm., patella, 0.52 mm., tibia, 0.75 mm., metatarsus, 0.54 mm., and tarsus, 0.36 mm. long. Fourth leg: femur, 1.16 mm., patella, 0.54 mm., tibia, 0.90 mm., metatarsus, 1.10 mm., and tarsus, 0.44 mm. long.

Palpus as illustrated in Figs. 19 and 20.

TYPE LOCALITY.—Male holotype from Salt Lake City, Utah, June 27, 1940 (Gertsch and Hook). Male paratype from Saskatoon, Saskatchewan.

***Clubiona johnsoni*, new species**

Figures 43, 44 and 45

FEMALE.—Total length, 3.90 mm.

	Length	Width
CARAPACE	1.93 mm.	1.20 mm.
FRONT	0.20	0.77
STERNUM	1.05	0.64
LABIUM	0.31	0.22
MAXILLA	0.55	0.26
ABDOMEN	1.95	1.25

Coloration and structure typical. Clypeus equal in height to one-third the diameter of an anterior median eye. First row of eyes narrower than the second (75/95), gently procurved from in front, essentially straight, the median separated by scarcely the diameter (9/13), half as far from the subequal lateral eyes. Second row straight, the median separated by two diameters (13/28), about half as far from the subequal lateral eyes (13/15). Median ocular quadrangle broader than long (55/35), narrowed in front (55/35), the eyes subequal.

Chelicera with four or five teeth on the lower

margin, the three nearest the base of the claw very small.

Leg spines normal. First leg: femur, 0.91 mm., patella, 0.54 mm., tibia, 0.74 mm., metatarsus, 0.56 mm., and tarsus, 0.40 mm. long. Fourth leg: femur, 1.30 mm., patella, 0.59 mm., tibia, 1.02 mm., metatarsus, 1.21 mm., and tarsus, 0.44 mm. long.

Epigynum as illustrated in Fig. 45.

MALE.—Total length, 3.30 mm.

	Length	Width
CARAPACE	1.56 mm.	1.10 mm.
FRONT	0.21	0.60
STERNUM	0.86	0.56
LABIUM	0.26	0.21
MAXILLA	0.44	0.20
ABDOMEN	1.80	0.95

Structure typical. Eyes essentially as in the female. Posterior median eyes separated by less than two diameters (13/23), less than a diameter from the lateral eyes (13/11). Median ocular quadrangle broader than long (50/33), narrowed in front (50/33), the eyes subequal.

Chelicera with four teeth on the lower margin.

Leg spines normal. First leg: femur, 1.03 mm., patella, 0.53 mm., tibia, 0.96 mm., metatarsus, 0.73 mm., and tarsus, 0.43 mm. long. Fourth leg: femur, 1.35 mm., patella, 0.56 mm., tibia, 1.07 mm., metatarsus, 1.30 mm., and tarsus, 0.43 mm. long.

Palpus as illustrated in Figs. 43 and 44.

TYPE LOCALITY.—Male holotype, female allotype, and male and female paratypes from Norwalk, Connecticut, May 30, 1933 (W. J. Gertsch). Male paratype from Watertown, Connecticut, May 30, 1937 (B. J. Kaston). Female paratype from Shelton, Connecticut, March, 1935 (B. J. Kaston). Male paratype from Ramsey, New Jersey, June, 1935 (W. J. Gertsch). Female paratype from near Chicago, Illinois, May. Male paratype from Saskatoon, Saskatchewan, July 15, 1929 (King).

***Clubiona kastoni*, new species**

Figures 37, 38 and 39

FEMALE.—Total length, 5.00 mm.

	Length	Width
CARAPACE	1.90 mm.	1.35 mm.
FRONT	0.20	0.83
STERNUM	1.00	0.66
LABIUM	0.34	0.26
MAXILLA	0.55	0.28
ABDOMEN	3.20	1.75

Coloration and structure typical. Clypeus equal in height to one-fourth the diameter of an anterior median eye. First row of eyes narrower than the second (80/105), essentially straight,

the median separated by two-thirds the diameter, nearer the subequal latera leyes. Second row gently procurved, the median separated by less than two diameters (15/27), nearer the subequal lateral eyes (15/16). Median ocular quadrangle broader than long (57/40), narrowed in front (57/38), the eyes subequal.

Chelicera with four teeth on the lower margin, the two nearest the base of the claw very small.

Leg spines normal. First leg: femur, 1.05 mm., patella, 0.58 mm., tibia, 0.84 mm., metatarsus, 0.65 mm., and tarsus, 0.40 mm. long. Fourth leg, femur, 1.50 mm., patella, 0.65 mm., tibia, 1.17 mm., metatarsus, 1.45 mm., and tarsus, 0.50 mm. long.

Epigynum as illustrated in Fig. 39.

MALE.—Total length, 3.90 mm.

	Length	Width
CARAPACE	1.83 mm.	1.30 mm.
FRONT	0.25	0.65
STERNUM	0.93	0.63
LABIUM	0.28	0.23
MAXILLA	0.48	0.25
ABDOMEN	2.10	1.25

Structure typical. Clypeus equal in height to one-fifth the diameter of an anterior median eye. Eyes much as in the female, the first row gently procurved, the median separated by two-thirds the diameter, half as far from the slightly larger oval lateral eyes. Second row very gently procurved, essentially straight, the median separated by less than their diameter (15/24), less than a diameter from the subequal lateral eyes (15/13). Median ocular quadrangle broader than long (59/39), narrowed in front (57/37), the anterior median eyes somewhat smaller.

Lower margin of the furrow of the chelicera with three small teeth.

Leg spines typical. First leg: femur, 1.23 mm., patella, 0.60 mm., tibia, 1.12 mm., metatarsus, 0.81 mm., and tarsus, 0.45 mm. long. Fourth leg: femur, 1.60 mm., patella, 0.60 mm., tibia, 1.22 mm., metatarsus, 1.50 mm., and tarsus, 0.48 mm. long.

Palpus as illustrated in Figs. 37 and 38.

TYPE LOCALITY.—Male holotype, female allotype, and paratypes from Norwalk, Connecticut, June 4, 1933 (W. J. Gertsch); female paratypes, May 3, 1933 (W. J. Gertsch). Male paratype from Lake Sebago, Interstate Park, New York, July 3, 1935 (W. J. Gertsch). Female paratype from Cheshire, Connecticut, June, 1935 (H. L. Johnson). Female paratypes from Orono, Maine, September 20, 1901 (Britcher). Male paratypes from Kingston, Tennessee, July 10–15, 1933 (W. J. Gertsch). One male and six female paratypes from Scappoose, Oregon, April 23, 1938 (J. Schuh and K. Gray). Five male

paratypes from Goble, Oregon, April 22, 1938.

Clubiona newmani Ivie and Barrows

Figures 28 and 29

Clubiona newmani IVIE AND BARROWS, 1935, Bull. Univ. Utah, Biology, XXVI, p. 20, Pl. VII, figs. 57 and 58.

TYPE LOCALITY.—Male holotype from Lake Newman, Gainesville, Florida (W. M. Barrows), in the University of Utah.

RECORDS.—Two males from Highland Hammock, near Sebring, Florida, March 24, 1938 (W. J. Gertsch). Male from Alachua County, Florida (Kilby).

This interesting species is most closely related to *Clubiona abbotti* Koch, differing chiefly in the much broader retrolateral apophysis of the tibia of the male palpus.

Clubiona abbotti L. Koch

Figures 32 to 36

Clubiona abbotti L. KOCH, 1866, Die Arachniden-Familie der Drassiden, p. 303, Pl. XII, fig. 193.

Clubiona rubra KEYSERLING, 1887, Verh. Zool.-Bot. Gesell. Wien, XXXVII, p. 436, Pl. VI, fig. 12.—EMERTON, 1889, Trans. Connecticut Acad. Sci., VIII, p. 182, Pl. v, figs. 6, 6a and 6b (not figs. 7 and 8).

TYPE LOCALITIES.—Female type of *abbotti* from Baltimore, Maryland (L. Koch collection). Male type of *rubra* from the vicinity of Cambridge, Massachusetts, in the Museum of Comparative Zoölogy.

RECORDS.—Norwalk, Connecticut, May 30, 1933, males and females (W. J. Gertsch). Two males and one female from Staten Island, New York, February 22, 1913. Male from Bergen Beach, New York, May 4, 1912. Males and females from Onondaga County, New York (Britcher). Males and females from Ramsey, New Jersey, May 9 and June 5 (W. J. Gertsch). Males and females from Lake Sebago, Interstate Park, New York, June 22, 1935 (W. J. Gertsch). Males and females from Kingston, Tennessee, July 10–15, 1933 (W. J. Gertsch). Three females from Louisville, Kentucky, July 18, 1933 (W. J. Gertsch). Male from Pittsburgh, Pennsylvania, July 9, 1933 (H. K. Wallace). Male from Douglas Lake, Michigan, July 3, 1931 (E. L. Miner). Males and females from Lake Pepin, Minnesota, April 13,

1931 (W. J. Gertsch). One female from south of Ariton, Dale County, Alabama, July, 1939 (A. F. Archer). One female from Andalusia, Covington County, Alabama, 1939 (A. F. Archer). Two females from Clay County, North Carolina, April 29, 1938 (T. H. Hubbell). One male from Sorrento, Louisiana, August 12, 1938 (L. Irby Davis). One female from Orange, Texas, June 12, 1937 (S. Mulaik). One male from Houston, Texas, June 11, 1937 (S. Mulaik). One male from Liberty, Texas, June 12, 1937 (S. Mulaik). One male from Fountain Valley, El Paso County, Colorado, June 23, 1940 (Gertsch and Hook). Two females from City Creek Canyon, Salt

Lake City, June (W. J. Gertsch). Males from west side of Utah Lake, Utah, August 31 (W. J. Gertsch).

This is the commonest and most widely distributed member of the group and occurs almost everywhere in the United States. The most characteristic feature of the palpus is the development of a distinct tooth on the middle of the bulb similar to that present in *newmani*. The tibial apophyses are approximately equal in length. Illustrations of the palpus (Figs. 34 and 35) are included for comparison. The epigynum is distinctive as shown in Fig. 36. The carapace of the male and female are illustrated in Figs. 32 and 33.

MISCELLANEOUS SPECIES OF *CLUBIONA*

Clubiona bryantae, new name

Clubiona agrestis EMERTON, 1924, Psyche, XXXI, p. 144, Fig. 6. (Not *Clubiona agrestis* HENTZ, 1847, Journ. Boston Soc. Nat. Hist., V, p. 453, Pl. xxiii, fig. 21.)

TYPE LOCALITY.—One mature male and one just molted (cotypes) from Holliston, Massachusetts, June 17, in the Museum of Comparative Zoölogy.

Clubiona chippewa, new species

Figures 50 and 51

MALE.—Total length, 4.50 mm.

	Length	Width
CARAPACE	2.10 mm.	1.57 mm.
FRONT	0.26	0.80
STERNUM	1.13	0.82
LABIUM	0.37	0.27
MAXILLA	0.68	0.30
ABDOMEN	2.40	1.20

Coloration as in *Clubiona rileyi*, new species, *mixta* Emerton and related species. Structure closely approximating the latter species.

Clypeus equal in height to one-fifth the diameter of an anterior median eye. First row of eyes narrower than the second, essentially straight, the median separated by about their radius (9/17), half as far from the lateral eyes which are larger in the ratio 20:17. Second row of eyes weakly recurved, essentially straight, the median separated by more than their diameter (19/26), half as far from the subequal lateral eyes (19/14). Median ocular quadrangle broader than long (60/40), narrowed in front in the same ratio, the anterior median eyes smaller in the ratio 19:17.

Chelicera with three teeth on the lower margin, the one nearest the claw very small.

Legs spined as in *rileyi*. First leg: femur, 1.80 mm., patella, 0.83 mm., tibia, 1.80 mm., metatarsus, 1.35 mm., and tarsus, 0.80 mm. long. Fourth leg: femur, 2.20 mm., patella, 0.80 mm., tibia, 1.83 mm., metatarsus, 2.30 mm., and tarsus, 0.75 mm. long.

Palpus as illustrated in Figs. 50 and 51.

TYPE LOCALITY.—Male holotype from St. Croix Falls, Wisconsin, May, 1931 (W. J. Gertsch).

Clubiona altana, new species

Figure 54

FEMALE.—Total length, 7.75 mm.

	Length	Width
CARAPACE	3.10 mm.	2.25 mm.
FRONT	0.37	1.30
STERNUM	1.53	1.05
LABIUM	0.55	0.42
MAXILLA	0.93	0.47
ABDOMEN	4.75	3.00

Coloration and structure in close agreement with *rileyi*.

Clypeus low, equal in height to one-third the diameter of an anterior median eye. First row of eyes narrower than the second (11/14), essentially straight, the median separated by their diameter, nearer the clearly larger lateral eyes (10/17). Second row of eyes essentially straight, the median separated by two diameters (20/41), nearer the subequal lateral eyes (20/28). Median ocular quadrangle broader than long (80/50), narrowed in front in the same ratio, the front eyes slightly smaller.

Chelicera with three teeth on the lower margin, the one nearest the base of the claw very small.

Leg spines as in *rileyi*. First leg: femur, 2.10 mm., patella, 1.15 mm., tibia, 1.85 mm., metatarsus, 1.35 mm., and tarsus, 0.85 mm. long.

Fourth leg: femur, 2.65 mm., patella, 1.20 mm., tibia, 2.10 mm., metatarsus, 2.70 mm., and tarsus, 0.85 mm. long.

Epigynum as illustrated in Fig. 54.

TYPE LOCALITY.—Female holotype and paratype from Seba, Alberta, June, 1929.

Clubiona intermontana Gertsch

Figure 49

Clubiona intermontana GERTSCH, 1933, American Museum Novitates, No. 637, p. 9, Figs. 10 and 13.

TYPE LOCALITY.—Male holotype from Slough Creek, Yellowstone National Park, Wyoming, August, 1931 (W. E. Gertsch), in The American Museum of Natural History.

A female from Banff, Alberta, September (Cockerell) is referred to this species with some doubt. An illustration of the epigynum (Fig. 49) is included for comparison with Clubiona altana, new species, a larger species with a similar epigynum.

Clubiona rowani, new species

Figure 53

FEMALE.—Total length, 4.00 mm.

	Length	Width
CARAPACE	1.85 mm.	1.32 mm.
FRONT	0.22	0.80
STERNUM	1.00	0.73
LABIUM	0.34	0.24
MAXILLA	0.60	0.30
ABDOMEN	2.20	1.30

Carapace and appendages pale yellow as usual in the genus. Abdomen yellow, the dorsum reddish, marked above with a darker hastate marking.

Clypeus low, equal in height to one-third the diameter of an anterior median eye. First row of eyes narrower than the second (80/104), gently procurved, essentially straight, the median separated by two-thirds their diameter (10/14), half as far from the slightly larger lateral eyes. Second row of eyes gently recurved, essentially straight, the median separated by two diameters (14/30), half as far from the subequal lateral eyes (14/16). Median ocular quadrangle broader than long (57/36), narrowed in front (57/38), the eyes subequal.

Lower margin of the furrow of the chelicera with three teeth, the one nearest the claw very small.

Spines normal, as in rileyi. Femur, 1.12 mm., patella, 0.65 mm., tibia, 0.93 mm., metatarsus, 0.73 mm., and tarsus, 0.50 mm. long. Fourth leg: femur, 1.40 mm., patella, 0.66 mm., tibia, 1.14 mm., metatarsus, 1.44 mm., and tarsus, 0.54 mm. long.

Epigynum as illustrated in Fig. 53.

TYPE LOCALITY.—Female holotype from Seba, Alberta, June 29 (Wm. Rowan).

Clubiona rileyi, new species

Figure 47

FEMALE.—Total length, 7.80 mm.

	Length	Width
CARAPACE	3.50 mm.	2.50 mm.
FRONT	0.48	1.60
STERNUM	1.70	1.10
LABIUM	0.74	0.50
MAXILLA	1.25	0.65
ABDOMEN	4.30	2.80

Carapace pale yellowish brown, unmarked except for the narrow black rings around the eye and the dark median groove. Chelicerae, labium and maxillae light brown. Sternum and legs pale yellow, unmarked. Abdomen pale yellow, with a faint basal hastate maculation at the base of the dorsum and tinged with red behind.

Clypeus low, equal in height to one-third the diameter of an anterior median eye. First row of eyes narrower than the second (15/19), essentially straight, the median separated by nearly the diameter (21/25), nearer the subequal lateral eyes (15/25). Second row of eyes essentially straight, the median separated by scarcely two diameters (23/44), nearer the subequal lateral eyes (23/33). Median ocular quadrangle broader than long (92/64), narrowed in front (92/67), the eyes subequal in size. Chelicera with three teeth on the lower margin, the one nearest the base of the claw small.

First leg spined as follows: Femur with one distal prolateral and 1-1-1 dorsal spines; tibia with 2-2-0 ventral spines; metatarsus with a single basal pair of spines. First leg: femur, 2.65 mm., patella, 1.35 mm., tibia, 2.50 mm., metatarsus, 1.80 mm., and tarsus, 1.15 mm. long. Fourth leg: femur, 3.25 mm., patella, 1.35 mm., tibia, 2.65 mm., metatarsus, 3.40 mm., and tarsus, 1.15 mm. long.

Epigynum as illustrated in Fig. 47.

TYPE LOCALITY.—Female holotype from Itasca Park, Minnesota, May 29, 1932 (W. J. Gertsch). Female paratype from Meriden, Connecticut, June 2, 1935 (H. L. Johnson).

Clubiona richardi, new species

Figure 52

MALE.—Total length, 13.00 mm.

	Length	Width
CARAPACE	6.25 mm.	4.20 mm.
FRONT	0.75	2.30
STERNUM	3.10	1.80
LABIUM	1.06	0.75
MAXILLA	1.80	0.80
ABDOMEN	7.00	3.40

Carapace and appendage yellowish brown. Chelicerae chestnut. Abdomen gray to white, with a pattern of many transverse dark chevrons above and a yellowish scutum which covers the base and extends back two-thirds the length. Venter pale, with traces of a dusky median band.

Structure in close agreement with *Clubiona tigrina* Cambridge and related species. Median groove of the evenly convex carapace a short linear depression situated back two-thirds of the total length. Clypeus low, equal in height to three-fifths the diameter of an anterior median eye. First eye row very weakly procurved as seen from in front, the median separated by less than their radius (13/30), slightly nearer the subequal lateral eyes (10/30). Second row of eyes straight, the median separated by about twice their diameter (23/44), nearer the slightly larger lateral eyes (15/44). Median ocular quadrangle broader than long (90/63), narrowed in front in the same ratio, the anterior median eyes much larger in the ratio 30:23. Chelicera with four subequal teeth on the lower margin.

Palpus as illustrated in Fig. 52.

First tibia with one basal prolateral, one basal retrolateral and three pairs of ventral spines, the last pair apical. First metatarsus with a basal pair of spines. First leg: femur, 4.90 mm., patella, 2.50 mm., tibia, 4.60 mm., metatarsus, 4.20 mm., and tarsus, 2.00 mm. long. Fourth leg: femur, 5.20 mm., patella, 2.20 mm., tibia, 4.40 mm., metatarsus, 6.00 mm., and tarsus, 1.65 mm. long.

TYPE LOCALITY.—Male holotype from Lake Atitlan, Spanish Honduras, March, 1938 (Paul Richard).

Clubiona implicata, new species

Figure 46

FEMALE.—Total length, 6.90 mm.

	Length	Width
CARAPACE	2.80 mm.	1.90 mm.
FRONT	0.35	1.10
STERNUM	1.40	0.90
LABIUM	0.44	0.35
MAXILLA	0.75	0.38
ABDOMEN	4.15	2.70

Carapace and appendages pale yellowish brown. Abdomen gray above, marked with a pale basal hastate maculation and rows of black chevrons. Venter pale.

Structure in close agreement with *Clubiona pallens* Hentz and related species. Linear median groove of carapace situated back two-thirds of the length. Clypeus low, equal in height to scarcely the radius of an anterior median eye. First eye row very gently procurved as seen from in front, the median eyes separated by two-thirds their diameter (20/13), half as far from the subequal lateral eyes (20/7).

Second row of eyes straight, the median separated by about twice their diameter (19/35), nearer the subequal lateral (19/25). Median ocular quadrangle broader than long (70/44), narrowed in front (70/51), the eyes subequal in size. Chelicerae with six teeth on the lower margin.

First leg armed with spines as follows: tibia with a basal and a median pair of ventral spines but lacking a distal pair; metatarsus with a basal pair of spines; femur with two dorsal and two prolateral spines near the distal end. First leg: femur, 1.70 mm., patella, 1.00 mm., tibia, 1.40 mm., metatarsus, 1.20 mm., and tarsus, 0.70 mm. long. Fourth leg: femur, 2.30 mm., patella, 1.00 mm., tibia, 1.70 mm., metatarsus, 2.30 mm., and tarsus, 1.40 mm. long.

Epigynum as illustrated in Fig. 46.

TYPE LOCALITY.—Female holotype and immature paratype from Kenscoff, Haiti, February 17, 1935 (Bird and Winkhaus).

Clubiona languida, new species

Figure 48

FEMALE.—Total length, 4.50 mm.

	Length	Width
CARAPACE	2.00 mm.	1.65 mm.
FRONT	0.35	0.85
STERNUM	0.90	0.75
LABIUM	0.35	0.30
MAXILLA	0.63	0.33
ABDOMEN	2.50	1.50

Carapace and appendages pale yellowish brown. Abdomen dull yellow, with indistinct black chevrons above, the venter pale.

Structure in close agreement with *Clubiona implicata*, new species. Clypeus low, equal in height to slightly less than the radius of an anterior lateral eye. First row of eyes very gently recurved as seen from in front, essentially straight, the median separated by the radius (19/10), half as far from the subequal lateral eyes. Second row of eyes straight, the median separated by scarcely two diameters (30/17), nearer the lateral eyes (20/17). Median ocular quadrangle broader than long (63/40), narrowed in front (63/47), the anterior median eyes somewhat larger. Lower margin of the furrow of the chelicera with four teeth.

Spines on legs as in *implicata*. First leg: femur, 1.30 mm., patella, 0.80 mm., tibia, 1.10 mm., metatarsus, 0.90 mm., and tarsus, 0.54 mm. long. Fourth leg: femur, 1.60 mm., patella, 0.75 mm., tibia, 1.40 mm., metatarsus, 1.90 mm., and tarsus, 0.55 mm. long.

Epigynum as illustrated in Fig. 48.

TYPE LOCALITY.—Female holotype and paratype from Costa Rica.