TRANSACTIONS

OF THE

AMERICAN

ENTOMOLOGICAL SOCIETY.

VOL. XX.

HALL OF THE ACADEMY OF NATURAL SCIENCES OF PHILADELPHIA,
LOGAN SQUARE.

1893.
PRESS OF
P. C. STOCKHAUSEN
PHILADELPHIA.
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A Synopsis of the Harvest-Spiders (Phalangiidæ) of South Dakota.

BY CLARENCE M. WEED.

I am indebted to Messrs. J. M. Aldrich and T. A. Williams for an interesting collection of harvest-spiders from certain points in South Dakota, chiefly Brookings and Custer. These specimens on the whole are peculiar, because of the shortness of the legs and the tendency to melanism. Possibly the former may be due to the fact that in a prairie country long legs are less useful than in a wooded region; this seems especially likely, in view of the fact that, while out-door forms have very short legs, P. cinereum, which lives in sheds and about houses, has legs of normal length.

With the exception of the male Trachyrhinus favosus and Liobunnum (?) calear, the measurements given below are from South Dakota specimens.

Family PHALANGIIDÆ.

Teguments soft or coriaceous. Five or six ventral segments; the first very large and prolonged cephalad between the coxae. Anal piece unique or accompanied by two small lateral pieces. Two eyes situated upon a tubercle, always separated from the anterior border. Two transverse striae on the cephalothorax back of the eye-eminence. Lateral borders of coxae free; maxillary lobe of second pair always visible. Palpi elongate; tarsus longer than tibia, terminated by a claw. Legs similar to each other; tarsi multi-articulate (Simon).

Two subfamilies are represented in the collections at hand. They may be distinguished as follows:

Body very hard and greatly roughened by reticulations or tubercles. Mesosomatinae.

Body soft or subcoriaceous, not much roughened by reticulations or tubercles. Phalanglineae.

Subfamily Mesosomatinae.

Body very hard, most of the dorsal segments being united in a firm, dense plate; much roughened by tubercles or reticulations. In the males the posterior dorsal and the ventral abdominal segments

TRANS. AM. ENT. SOC. XX. OCTOBER, 1893.
have their margins developed into thin overlapping plates. Pores on margin of cephalothorax distinct. Anal piece unique; maxillary lobe of palpi with two tubercles.

The two genera of this subfamily are easily separated by the following characters:

Fourth legs as long as second legs, or nearly so............... **Mesosoma.**
Fourth legs distinctly shorter than second legs............... **Trachyrhinus.**

**MESOSOMA** Weed, 1892.

Dorsum a firm hard plate, thickly studded with small, hemispherical tubercles. Eye-eminence of nearly equal height, length and breadth; not carinated. Palpi moderately robust, not branched, and furnished with many tubercles; claw pectinate; tooth on underside of first joint of mandibles. Legs short, coriaceous, robust; second and fourth pairs of nearly equal length; lateral pores on upper margin of cephalothorax distinct, subcircular.

**Mesosoma nigrum** (Say) Weed. Plate V.


**Mesosoma nigrum**, Weed, Amer. Nat. xxvi, 529.

**Male.**—Body 6 mm. long; 4 mm. wide; palpi 4 mm. long. Legs: first, 10 mm.; second, 17 mm.; third, 11 mm.; fourth, 16 mm. Black; ventrum of cephalothorax including coxae, trochanters and base of femora, brown. In some specimens the apical portion of the legs, and more or less of the ground color of the dorsum is brownish black. Dorsum thickly studded with small hemispherical black granules or tubercles. Segmentation of abdominal scutum indicated by faint impressed lines. Eye-eminence longer than high, not canaliculate; covered with black tubercles like those on the dorsum. Palpi black, all the joints slightly arched, robust, with none of the angles prolonged; furnished with more or less scattered black tubercules and spinose hairs; mandibles blackish. Legs short, robust, granulate; ventral surface of abdomen blackish brown, granulate. Genital organ of male "slender, proximally subcylindrical, then flattened and slightly expanded into a broad, somewhat circular, very thin, alate portion, then suddenly contracted and bent at an obtuse angle, ending in a very fine point."

**Female.**—Body 2 mm. long; 5 mm. wide. Palpi 4.5 mm. Legs: first, 10 mm.; second, 17 mm.; third, 11 mm.; fourth, 16 mm. Besides its larger size it differs from the male in having less black on the ventral surface, which is cinnamon-rufous, spotted with black; mandibles brown, black above, and the outer margins of the dorsum of the abdomen smooth without the black tubercles which form a large distinct quadrangular plate on the middle of the abdomen, and a transverse plate on each of the three posterior segments. The smooth margins are brown.

Described from many specimens.

**Brookings.** This remarkable species seems to be rather common in South Dakota.
**TRACHYRHINUS** Weed, 1892.

Body very hard; dorsum a large plate, with a rough, coarsely punctate surface. Front margin of cephalothorax furnished with two denticulate tubercles. Eye-eminence prominent, with two rows of large tubercles having spinose tips. Legs rather long, thickly beset with spinose tubercles. Pores on margin of cephalothorax rather small, oval; palpal claw smooth; inner distal angle of femur very slightly and of patella quite strongly developed. First joint of mandible furnished with a tooth on lower surface. Second legs decidedly longer than fourth.

*Trachyrhinus favosus* (Wood) Weed.


**Male.**—Body 7 mm. long; 5 mm. wide. Legs: first, 21 mm.; second, 40 mm. third, 21 mm.; fourth, 26 mm. Body and members black, more or less mottled with gray; body very hard, dorsum nearly square and quite level, having projecting angles on the anterior lateral corners; grayish, spotted with black, and a faint central marking; coarsely punctate “so as to have a worm-eaten, almost honey-combed appearance.” Eye-eminence slender, rather high, light brown, with several robust acute spines, which are at their bases gray, but are tipped with black. Palpi roughened with numerous small blackish spines and spinose hairs; inner distal angle prolonged in a pointed, conical protuberance. Legs stout, thickly beset with spines.

**Female.**—Body 7 mm. long; 4.5 mm. wide; palpi 4 mm. long. Legs: i, 18 mm.; ii, 32 mm.; iii, 17 mm.; iv, 25 mm. Similar to male.

A very peculiar and rather common species. Brookings.

**Subfamily Phalanginæ.**

Teguments soft or subcoriaceous, not greatly roughened. Segments indicated by striæ, which are often obsolete. Five ventral segments; a single anal piece; two lateral pores easily seen; maxillary lobe of palpus with two tubercles.

The two genera occurring in South Dakota are distinguishable by the character mentioned below.

A tooth on ventral surface of first joint of mandibles..............*Liobunum.*

No tooth on ventral surface of first joint of mandible.............*Phalangium.*

**LIOBUNUM** C. Koch, 1839.

This genus is defined by Simon practically as follows: Teguments soft or subcoriaceous. Striae of the cephalothorax and of the three last abdominal segments very distinct; those of the anterior seg-
ments scarcely or not at all distinct (especially in the $\delta$). Anterior and lateral borders of the cephalothorax smooth. Eye eminence relatively small; smooth, or rarely provided with small, slightly distinct tubercles; widely separated from the cephalic border. Lateral pores small, oval and marginal. Anal piece large, transverse-oval or semi-circular, much wider than long, and much wider than the reflected borders of the eighth segment. Mandibles short, similar in the two sexes; first joint furnished at the base below with an acute tooth. Palpi simple; femur, patella and tibia without any process and without projecting angles; maxillary lobe provided at the base with two strong, conical teeth. Maxillary lobe of the second pair of feet very long, nearly straight from the base, not attenuated, directed mesad nearly horizontally, and united on the ventro-meson to the lobe from the opposite side without forming a sensible angle; the two together lightly arched on the cephalic border, and forming an even curve. Sternal piece large, slightly contracted between the fourth pair of coxae, gradually enlarging and obtusely truncate cephalad. Feet very long and slender; tibia of the second pair with a few false articulations. Palpal claw denticulate.

The males of the four species so far found in South Dakota may be determined by the following key:

A distinct spur on femur of palpus..............................................calcar.
No spur on palpus.................................................................1.

1.—A distinct black dorsal stripe ..............................................vittatum.
No distinct black dorsal stripe.............................................2.

2.—Dorsum light brown; legs very long; no quadrangular reticulated patch on abdomen ....................................................longipes aldrichi.
Dorsum mostly blackish; legs moderately long; a quadrangular reticulated patch on abdomen..............................................bicolor.


*Male.*—Body 6 mm. long; 4 mm. wide; palpi, 6 mm. long. Legs: first, 20 mm.; second, 37 mm.; third, 21 mm.; fourth, 30 mm. Femur of first leg 5 mm.; dorsum granulate, in fully colored adults of a deep reddish brown color, with a very distinct black stripe, which begins at the eye eminence expands for a short distance, then contracts until it reaches the cephalic portion of the abdomen, whence it runs with parallel sides a short distance, then very slightly expands until it reaches the caudal third of the abdomen, where it contracts and runs as a stripe to the posterior extremity. Eye eminence of about equal height, length and breadth, sloping slightly backward, black above, lightly canaliculate, with a few (two to five or six) sub-obscure, acute black tubercles; mandibles light brown, tips of claws black; dorsal surface of second joint sparsely covered with short
spinous hairs. Palpi long, reddish brown, depth of color varying with that of rest of body; tarsus distinctly blackish; femur with a row of short conical tubercles on its outer ventro-lateral surface, commencing near the base and running to the apical extremity, where there are about a dozen similar tubercles on the ventral surface; another short, slightly oblique series on the dorsal surface, beginning at the apical margin and extending backward about one-fourth the length of the femur; patella with a row of tubercles on its outer ventro lateral surface, similar to those on the femur, and a few obsolete ones on its dorsal and ventral surfaces; tibia with two nearly parallel rows of tubercles, one on the ventral and the other on the outer ventro lateral surface; a short row also on the distal portion of its inner ventro-lateral surface; tarsus sparsely covered with stiff hairs, and furnished with a well pronounced row of black tubercles on its inner ventro-lateral surface. Ventrum reddish brown, with more or less of a vermilion tint in some specimens, with well-marked granulations. Legs brownish black or black. Coxae slightly tuberculate, each having a row of short tubercles on the cephalic margin. Shaft of genital organ slender, bent nearly at right angles near distal end, and terminating in a very acute point.

**Female.**—Body 8 mm. long; 5 mm. wide; palpi 5 mm. long. Legs: first, 22 mm.; second, 41 mm.; third, 23 mm.; fourth, 32 mm. Femur of first leg 6 mm. Differs from the male in having the body thicker and more rounded, and in having less reddish coloring. The palpi are much more slender, shorter, and have the tubercles partially replaced by hairs; the tip of tarsus only is blackish. The ventrum is sometimes grayish. The black central stripe is very distinct.

Described from six specimens (3 ♂, 3 ♀) taken at Brookings, South Dakota.

The male of this subspecies is accurately illustrated in Trans. Am. Ent. Soc. xix, plate 12. Its structural details are shown in fig. 2, which was drawn from a specimen of the typical *Liobunum vittatum* of the Southern States. The idea of the general structural characters of the female may be obtained from plate v, fig. 2, which also represents a typical specimen from the South.

The claims of this form to subspecific rank rest chiefly upon the extreme shortness of the legs and its melanistic tendencies, the latter being indicated by the intense blackness of the central stripe in both sexes; the unusual blackness of the legs of the female; and the blackish palpal tarsus. These characters are constant in and peculiar to the specimens from the general region under consideration.


**Male.**—Body 3.8 mm. long; 3 mm. wide; palpi 3.2 mm. long. Legs: first, about 34 mm.; second, 62 mm.; third, about 35 mm.; fourth, 46 mm. Dorsum minutely tuberculate, light reddish brown, with a slightly darker subobsolete central marking, sometimes simply represented by obscure, brown blotches; margins of cephalothorax black. Eye eminence at least as broad as high, black, canaliculate, with rows of small, black tubercles on the carina. Mandibles
light yellowish brown, tips of claws black; second joint with sparse hairs. Palpi slender, light brown, distal portion of femur and all of patella black; femur, patella and tibia with small scattered tubercles and short hairs; tarsus pubescent, with a row of small, black tubercles on its inner ventro-lateral surface. Ventrum, including coxæ, paler than dorsum, of a nearly uniform, light brown tint; coxæ tuberculate, tips white; trochanter black. Legs long, slender, black or brownish black; generally, though not always, with apical tenth of tibiae of second pair white. Shaft of genital organ flattened, contracted near its distal extremity and bent upward, terminating in an acute point.

Female.—Body 5 mm. long; 3.5 wide. Third legs, 30 mm. long. Body larger and legs shorter than in male. Dorsum mottled brown and black, with a distinct dark central marking, twice interrupted on posterior third of abdomen. Legs brown, with whitish annulations at many of the joints. Palpi colored as in ♂.

The short legs and melanistic tendencies distinguish this subspecies from the normal form in other regions. The blackness of part of the palpable joints, of the eye eminence, and of the margin of the cephalothorax, are all very pronounced.

Named for Mr. J. M. Aldrich.

Liobunum bicolor (Wood) Weed.


Liobunum bicolor Weed, Am. Nat. xxi, 935; xxvii, 295.

Male.—Body 5 mm. long; 3.5 mm. wide; palpi 4 mm. long. Legs: i, 20 mm.; ii, 38 mm.; iii, 21 mm.; iv, 31 mm. Dorsum brownish black, with a faint indication of a lighter central marking, and a large, brown, quadrangular, reticulated patch on the central portion of the dorsum of abdomen, behind which are two other transverse reticulated bands. There are also on the dorsum of the abdomen more or less distinct transverse rows of whitish tubercles with black tips. Eye eminence prominent, brown, lightly canaliculate, with a row of well-developed, acute, brown tubercles on each carina. Mandibles light yellowish brown, smooth, with only a few indistinct whitish hairs. Palpi short, light brown, with femur and patella more or less dusky; all joints except tarsi, with numerous small spinose tubercles; ventral surface, including coxæ, brownish white; a transverse row of minute tubercles on each abdominal segment; coxæ closely tuberculate. Legs light brown, very slender, long; proximal joints with rows of acute conical tubercles.

Female.—In this sex there is a large, triangular, reticulated patch on the cephalothorax, the posterior portion including the eye eminence; between this and the quadrangular patch on abdomen is a smooth grayish black space, which is interrupted by a transverse reticulated band.

A rare species. Taken at Brookings and Custer, S. D.

Liobunum (?) calcar (Wood) Weed.


Liobunum (?) calcar, Weed, Am. Nat. xxi, 935.

Male.—Body 7.5 mm. long; 4.5 mm. wide. Legs: first, 31 mm.; second, 56 mm.; third, 32 mm.; fourth, 40 mm. Body pyriform. Dorsum reddish brown, minutely tuberculate; some specimens having a faint indication of a central
marking, and scattered light colored spots. Eye eminence of moderate size, of nearly equal height, length and breadth; blackish above; slightly canaliculate, with a row of small, acute tubercles on each carina. Mandibles yellowish brown, with obscure markings of acute tubercles of a darker color, especially on the inner dorso-lateral surface of the second joint, where they are arranged in the form of a series of irregular parallelograms; dorsal surface of second joint sparsely clothed with stiff hairs; tips of claws black. Palpi long, very robust; dark reddish brown, lighter distally; femur enlarging from base to apex, with a very robust spur-like process on its outer ventro-lateral surface, near the distal extremity, the anterior edge of which is provided with a row of short black tubercles; dorsal surface of femur with numerous scattered, short, black tubercles, and a few also on the proximal portion of the inner ventro-lateral surface; sparsely provided with spinose hairs; patella short, thick, so united with the femur as to form an arch; with sparse hairs and a few scattered tubercles on its dorsal and outer lateral surfaces; tibia arched, densely clothed with long, black hairs; a patch of short, black tubercles on the proximal portion of its ventral surface, and a short row of similar tubercles on the apical portion of its inner ventro-lateral surface; tarsus terminating with a short, denticulate claw. Ventrum light reddish brown; coxae reddish, with a few short hairs; two anterior pairs with a row of subobsolete tubercles on the cephalic border. Legs reddish brown, with darker annulations; joints near body having rows of short spines. Shaft of genital organ very robust, flattened, distally contracted and curved, and terminating in a short acute point.

No fully developed specimens of this species were present in the collections at hand, and the above measurements and description are taken from individuals from Illinois and North Carolina. I presume adult Dakota forms will have much shorter legs than the above measurements, and shall not be surprised if they prove sufficiently distinct for a subspecific name.

I have never been able to determine definitely the female of this species. Until this sex is found we shall be unable to say definitely whether the species belongs to Liobunum or not.

**PHALANGIUM** *Linne, 1758.*

Teguments soft; dorsum furnished with small, acute tubercles, lateral pores large, elongate-oval; first joint of mandibles with no tooth on lower surface. Palpi simple, sometimes having the inner distal angle of the patella very slightly produced, but never prolonged into a process; claw not pectinate; maxillary lobe of second pair of legs much longer than wide, gradually narrowing from the base to apex, directed obliquely forward. Legs long, more or less robust. Eye eminence of medium size, canaliculate, provided with two series of pointed tubercles.
Phalangium cinereum Wood.


**Male.**—Body 7 mm. long; 4.8 mm. wide; palpi 5 mm. long. Legs: first, 29 mm.; second, 51 mm.; third, 29 mm.; fourth, 38 mm. Dorsum ash-gray, sometimes more or less brownish, with a wide, vase-shaped central marking, which is sometimes obsolete. There is a transverse series of small spinose tubercles behind the eye eminence, another row on posterior border of cephalothorax, and one row on each abdominal segment except the last two; a curved series of similar tubercles is found in front of the eye eminence. These tubercles have whitish bases and acute black apices, and generally also have a spinose hair arising on one side near the apex of the white portion and reaching beyond the tip of the tubercle. In front of eye eminence there are two longitudinal series of three each of these tubercles. Lateral borders of cephalothorax subinunate. Eye eminence low, canaliculate, with a series of five or six tubercles like those on dorsum on each carina. Mandibles brownish white, tips of claws black; second joint and apical portion of first joint furnished with short, black, stiff hairs. Palpi light brown, rather slender, first four joints with minute tubercles and short black hairs; none of the angles prolonged; tarsal joint without tubercles, but with hairs; claw moderately robust. Venter, including coxae, light grayish brown, with many somewhat quadrangular patches of a more pronounced brown, and scattered blotches of chocolate-brown. Trochanters light brown, with many small tubercles; remaining joints of legs cinnamon-brown, more or less annulated with lighter and deeper shades; angular, with longitudinal rows of black spines; sheath of genital organ subcylindrical, truncate; shaft robust, with two lateral oval openings near distal extremity, then contracted into a blunt scoop-shaped piece, turned upward at nearly a right angle and terminating in a slender, acute point.

**Female.**—Body 8 mm. long; 5 mm. wide; palpi, 5 mm. long. Legs: first, 23 mm.; second, 42 mm.; third, 29 mm.; fourth, 31 mm. Differs from male as follows: Body larger, rounder. Dorsum darker gray, more mottled, central marking more distinct; tubercles on dorsum smaller, those on eye eminence more numerous, and those forming the longitudinal series in front of eye eminence also more numerous. Palpi with hairs, but without tubercles. Legs with annulations more distinct; trochanters without tubercles; spines on femur less prominent, and those on tibia obsolete; narrow quadrangular patches on venter of abdomen arranged in transverse series. Distal joints of ovipositor blackish; about thirty in number.

Brookings, South Dakota.

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**EXPLANATION OF PLATE V.**

Fig. 1.—Mesosoma nigrum ♀. Natural size.

" 2.—Parts of same. Magnified.

" 2a.—Body.

" 2b.—Eye eminence. Side view.

" 2c.—Eye eminence. Front view.

" 2d.—Palpus. Side view.

" 2e.—Claw of palpus. Side view.
Fig. 1

Fig. 2.

**Mesosoma Nigrum** (Say).
THE COSMETIDÆ OF THE UNITED STATES.

BY CLARENCE M. WEED.

The family Cosmetidæ belongs to the suborder Mecostethi (Laniatores Thorell) of the order Opileonea. The first species from the United States was described* by Thomas Say as Gonyleptes ornatum, from specimens taken in Georgia and Florida. In 1868, Dr. H. C. Wood described† a form from Texas under Say’s name, concerning the identity of which he expresses doubt. Several years later E. Simon, in his Essai d’une Classification des Opileones Mecostethi,‡ states that G. ornatus probably belongs to the genus Cynorta, and that the Texas species described by Wood is different from Say’s Florida species; he proposes to call the former C. Sayi. Finally, in 1884, Wm. Sorensen, in his Opileones Laniatores Musei Hauniensis,§ described as Cosmetus albolineatus, a species from New Orleans, which he says perhaps belongs to the genus Cynorta.

The present study is based upon a collection of nearly two hundred specimens from Texas, Louisiana, Mississippi, Illinois and Florida. Those from Illinois belong to the Illinois State Laboratory of Natural History, while the others are in my own collection. The accompanying plate was drawn by Miss Freda Detmers.

Family COSMETIDÆ.

Two front pairs of legs with one claw; two hind pairs with two claws; spiracles conspicuous; hind coxae united to abdomen; palpi short, with femora compressed; tibia lamellate on both margins; tarsus short, armed with a short, strong claw.

The three species of this family as yet found in the United States all appear to belong to the genus Cynorta of C. Koch, which is characterized by Simon|| substantially as follows:

Body usually longer than broad, with scutum slightly convex and not depressed in middle; scutum and ocular tubercle more or less tuberculate; palpal

patella not lamellate. Legs rather short, more or less robust, first tarsus 6-jointed, with first joint not much longer than the rest, and joints 1, 2, 3, or 4 thickened, third and fourth tarsi slender.

In order to consider that in these species the first tarsus is 6-jointed, one must include the joint at the end of the metatarsus attached to the latter by an oblique false articulation (see plate vi, fig. 2, e). The thickening of these first tarsi is also not very distinct.

The three United States species of *Crynorta* may be separated by the following key:

Posterior pair of abdominal tubercles very prominent; four or five times as large as anterior pair.......................... ......................C. ornata.

Posterior pair of abdominal tubercles little larger than anterior.

Dorsum with a distinct yellow Y connected posteriorly with a distinct transverse yellow line.......................... ......................C. albolineata.

Dorsum without, or with very little yellow marking........C. sayi.

**Crynorta sayi** Simon.


Body 6 mm. long; 5 mm. wide. Legs: first, 8.5 mm.; second, 13.5 mm.; third, 11.5 mm.; fourth, 15 mm. General color ferruginous brown, more or less blotched with a darker shade. Legs dusky toward distal ends. In some specimens there is a more or less distinct yellow marking on dorso-meson behind eye eminence, and a transverse line near posterior margin of abdominal scutum. Eye eminence very low and wide, with a longitudinal depression between the black eyes; a pair of small, low, blunt tubercles on abdominal scutum, just back of suture between cephalothorax and abdomen; another similar pair about 2 mm. caudad of this, and behind the latter are three similar tubercles arranged transversely. The central portion of the abdominal scutum is finely and remotely tuberculate, and its margins together with the margins of the posterior abdominal segments (both on dorsum and ventrum) are much more distinctly tuberculate, the tubercles being rounded, and on the segments arranged in transverse rows; a large, distinct, slightly curved tooth is on the outer dorsal surface of the hind margin of each posterior coxa. Legs furnished with longitudinal rows of small acute tubercles. Mandibles short, first joint with a large truncate tubercle-like projection on the dorsal surface of its distal half; second joint rounded and swollen, with its claws unequal, the larger one being curved, and both having not very distinct teeth. Palpi short, robust; femur compressed, its lower surface crenulate; patella arched, swollen from base to extremity; tibia much flattened, margined at the side; tarsus short, its lower edge furnished with a few spinose hairs, armed with a strong curved claw. Genital organ of male straight, cylindrical, distally much enlarged and abruptly truncated, its end furnished on each side with three curved, hook-like spines. *

Described from many specimens. Houston and Harwood, Texas (H. F. Wickham); Brazos County, Texas (N. Banks).
Cynorta albolineata (Sorensen) Weed. Plate vi.


Body 5 mm. long; 4 mm. wide. Legs: first, 8 mm.; second, 15 mm.; third, 11 mm.; fourth 15 mm. General color dark reddish brown, with apical portions of legs dusky. Dorsum striped with light yellow, as follows: a distinct V enclosing the eye eminence and having a straight line running on dorso-meson from base of V back to a rather wide, transverse, wavy line running across abdominal scutum just back of the posterior pair of tubercles. Between the two pairs of tubercles on abdominal scutum are two transverse lines, and on the side margins of the scutum there is more or less blotching with yellow. These blotches and the last-named transverse lines, and sometimes even the line on the dorso-meson, are often subobsolete, represented only by scattered yellow dots. Eye eminence very low and wide, with a longitudinal depression between the black eyes and a few small tubercles over the eyes; a pair of small, rounded tubercles on abdominal scutum, slightly behind base of V; another similar pair about 1 5 mm. caudal of this front pair, the hind ones being about twice as large as the front ones. There are a few small and scattered tubercles on the central portion of the abdominal scutum, and its margins together with the margins of the posterior abdominal segments (both on dorsum and ventrum) are much more distinctly tuberculate, the tubercles being rounded and on the segments arranged in transverse rows; a moderate tooth on outer dorsal surface of hind margin of each posterior coxa. Mandibles and palpi similar to those of C. sayi.

Described from many specimens; Agricultural College, Mississippi (H. E. Weed); Macomb, Miss. (F. S. Earle); Morgan City, La. (H. F. Wickham); southern Louisiana (H. E. Weed); southern Illinois (H. Garman).

Cynorta ornata (Say) Simon.


Body 6 mm. long; 5 mm. wide; palpi 3.5 mm. long. Legs: first, 10 mm.; second, 18 mm.; third, 14 mm.; fourth, 19 mm. General color dark ferruginous brown; tarsi dusky, sometimes having a greenish tinge. Dorsum striped with canary-yellow as follows: a distinct V enclosing eye eminence, the base of the V being on dorso-meson half way between eye eminences and first pair of abdominal tubercles and the sides reaching nearly to margin of cephalothorax at a point as far cephalad as is the anterior border of eye eminence; from the base of the V an interrupted line runs caudal almost to the large posterior tubercles, the back half of this line is only indicated by isolated dots; just caudal of the front pair of abdominal tubercles there is a transverse line extending nearly two-thirds across the abdominal scutum, crossing the longitudinal line on dorso-meson at right angles; half way between this line and the posterior tubercles runs another similar line which is often interrupted on the dorso-meson. Starting at the cephalo-mesal corner of the base of each of the posterior tubercles a distinct line runs around the base behind, and then proceeds obliquely forward and outward until it reaches near the margin, it then curves and proceeds obliquely backwards to the margin. There is also an interrupted yellow blotch on each outer margin of the abdominal scutum opposite the anterior transverse

transverse stripe. The degree of distinctness of these markings varies much in
different specimens. The eye eminence is very broad and low, with a slight
longitudinal depression between the black eyes. The first pair of tubercles is
about 2 mm. behind the eye eminence; these tubercles are close together, small,
low, conical and truncate. The tubercles of the second pair are situated near
the posterior margin of the abdominal scutum; they are nearly 1.5 mm. high,
project upward and backward, and are obtusely pointed. There is a single tu-
bercle very similar to those on the dorso-distal margin of each posterior coxa;
posterior abdominal segments with rows of equidistant rounded tubercles, giving
a crenulate appearance. The inner hind margin of posterior trochanters pro-
vided with a single well-developed tubercle. Inner sides of posterior legs cov-
ered with longitudinal rows of small rounded tubercles, other legs furnished
with longitudinal rows of much smaller tubercles. Mandibles short, first joint
with a large, truncate, tubercle-like projection on the dorsal surface of its distal
half; second joint rounded and swollen, furnished with a few hairs; claws un-
equal, larger one curved, both provided with teeth. Palpi short, robust; femur
compressed, furnished with about five compressed, rounded teeth on ventral
surface; patella arched, swollen from base to extremity, its inner margin slightly
roughened; tibia much flattened, margined at the sides; tarsus short, its lower
edge furnished with a few spinose hairs; armed with a strong, curved claw.

Described from many specimens; Inverness, Fla. (C. M. Weed).

In southern Florida in the Winter of 1891–92 I found this species
often exceedingly abundant in the pine woods under logs. Some-
times thirty or forty would occur under a single log.

**EXPLANATION OF PLATE VI.**

Fig. 1.—*Cynorta albolineata.* Natural size.

" 2.—Parts of same magnified: a, body; b, eye eminence, side view; c, eye
eminence, front view; d, palpus, side view; e, first tarsus; f, second
tarsus.
Cynorta albolineata.