EXPLANATION OF PLATES.

(Drawings made under writer's supervision by Mr. Harry Bradford, of the U. S. Bureau of Entomology.)

Plate 3.

Adult and pupal structures of Santuzza kuwanii Heinrich.

Fig. 1. Male genitalia of moth.

Fig. 2. Male genitalia of moth; detail (Aedoeagus with anellus attached).

Fig. 3. Venation of moth.

Fig. 4. Pupa (dorsal view).

Fig. 5. Caudal end of pupa (lateral view).

Fig. 6. Pupa (ventral view).

Plate 4.

Larval structures of Santuzza kuwanii Heinrich.

Fig. 7. Head capsule—dorsal view.

Fig. 8. Head capsule—lateral view.

Fig. 9. Labrum.

Fig. 10. Epipharynx.

Fig. 11. Crochets arrangement of abdominal proleg.

Fig. 12. Mandible.

Fig. 13. Labium and maxillae.

Fig. 14. Setal map of pro- and mesothorax and abdominal segments 3, 8 and 9.

NEW AMERICAN CLERIDAE, WITH NOTE ON THE SYNONYMY OF MICROPTERUS CHEVR (COLEOPT.).

By Edward A. Chapin, Washington, D. C.

The material upon which the following new species of Cleridae are based has been derived mainly from the United States National Museum, for the use of which thanks are due Messrs. E. A. Schwarz and H. S. Barber. For the use of the material of *Isolemidia substriata*, n. sp., I thank Dr. F. E. Lutz and Mr. A. J. Mutchler, of the American Museum of Natural History.

In an article entitled, "Descriptions de quelques Térédiles de l'Afrique australe, du voyage de M. Drege" (Rev. Mag. Zool. (1), V, 277, 1842), M. Chevrolat described a new species of clerid as *Micropterus* N. G. *brevipennis*. The genus is characterized by the specific description and therefore must be considered valid until proven otherwise. Inasmuch as this name is preoccupied by *Micropterus* Lacépéde (Hist. Nat. Poiss. IV, 325, 1802), I would

suggest the new name *Micropteroclerus* as a substitute for *Micropterus* Chevrolat (1842).

Isolemidia substriata, new species.

derived Elongate oblong, sides parallel, head across eyes as wide as elytra at humeri, thorax quadrate, as long as broad, width of head: width of thorax:: 13:10. Color bluish black with a metallic luster, head and thorax with a trace of greenish, apical and basal margins of thorax narrowly, legs, antennae, mouth parts (except for mandibles) testaceous. Mandibles piceous. Head vertical, eyes widely separated, space between eyes shallowly excavate, just above clypeus transversely wrinkled, otherwise with longitudinal wrinkles. these almost effaced in the median portion but more prominent near eyes. Part of head back of eyes with fine grooves and ridges. Punctures coarse but sparse, most abundant anterior to a line across the head at the middle of the eyes. Punctures are continued backward from this space on two areas. either side of a median smooth space on the vertex. Pubescence very sparse, a mixture of black and pale vertical hairs. Antennae nearly reaching base of thorax, eleven segmented, segments 9-11 forming a lax club, 9 and 10 globular, 11 somewhat longer and pointed, slightly sinuate on inner sides. Thorax quadrate, smooth and polished though quite uneven, without distinct punctures. Apical and basal transverse impressions present though not deep. Sides gradually expanded just before the middle. On the disk, just behind the apical transverse impression, there is a conspicuous pit which is sharply delineated before and at the sides but posteriorly is continued in a groove which constantly becomes more shallow and is finally effaced just in front of the posterior transverse impression. Pubescence very sparse, of erect pale hairs. Scutellum cordate, densely pubescent. Elytra long, entire, completely covering the abdomen, slightly wider at apical fourth, suture closed, extreme tips slightly rounded. Surface highly polished but more or less irregular, the irregularities tending to form striae. Lateral margins double for basal three-fourths. Pubescence more dense than on head or thorax, erect, pale. Under parts black, polished, minutely punctulate, moderately pubescent on the pleurae. Terminal dorsal segment of abdomen broadly truncate at apex, and lateral angles of the truncature rounded, at the middle very shallowly emarginate. Terminal ventral segment, deeply and broadly emarginate, the only visible parts being two slender, lateral horns or claspers. The penultimate ventral segment is also broadly but not as deeply emarginate. Legs long and slender, posterior femora not equaling tips of elytra. Tarsi normal, claws simple.

Q Similar to the male in size, form and sculpture. The coloration of the elytra differs in that they are brown with paler tips, with no trace of blue. Both dorsal and ventral terminal segments are simple in outline, the ventral having a longitudinal median impressed furrow. The legs are darker than in the male.

Habitat.—Chili.

Described from four specimens in the American Museum of Natural History, representing both sexes. Type and allotype at the Museum, a pair of paratypes in the collection of the author.

A key to the known species of this genus has been prepared and is offered here. Owing to the fact that it is based largely on the original descriptions the characters chosen for use were of necessity mainly color, of rather questionable value in the *Hydnocerini*. Before much progress can be made, a great many of the early described species of Cleridae will have to be redescribed.

Key to the Species of Isolemidea.

1. Front of head between the eyes carinate; elytra much shorter than the abdomen
Front between the eyes planate or excavate; elytra as long as or longer
than the abdomen
2. Elytra black, with a blue-green or emerald-green transverse fascia3
Elytra without green transverse fascia4
3. Legs red (tibiae greenish)pulchella Gorh.
Legs olivaceous (posterior tibiae black)batesi Gorh.
4. Elytra uniformly blue-black
Elytra brown or piceous with distinct markings of another color5
5. Elytra greenish brown, each with a single round brown spot behind the
middlebipunctata Schklg.
Elytra piceous, marked with yellowish or yellowish green6
6. Elytra with the apex pale stramineous
Elytra with basal markings in addition to the apical ones
7. Elytra with an ill-defined yellowish green spot at base, apex broadly rufo-
piceousapicalis Gorh.
Elytra with base, apex and a median cross bar, also margin narrowly,
yellowishsubtilis Gorh.
y chowish

Orthoplevra cyanipennis, new species.

Similar to *O. texana* Bland, but with the elytra steel-blue and thorax bright red. Elongate, rufous to rufo-piceous, elytra steel-blue. Head finely punctured, the punctures becoming quite sparse toward vertex, antennae with the club and a few of the segments of the funicle piceous, the scape and adjacent segments rufous. Thorax with the sides parallel, slightly broader than long (26–28), punctures rather fine and well separated one from another. No trace of a carina on the basal median portion. Pubescence of head and thorax rufous, short and rather sparse. Elytra long, tapering strongly to apex, suture closed, apices conjointly rounded but with the sutural angles blunt, basal portion as far as the faint lunate brownish fleck which occurs on each elytron, moderately coarsely punctured, the punctures scattered, not

tending to form rows; apical portion smooth, very finely punctured. The fine punctures are extended to the base among the coarse ones, and each bears a short black bristly hair. Under parts polished, finely and sparsely punctured, metasternum with a deep median longitudinal groove reaching two-thirds to the mesosternum. Legs rufous, very densely pubescent. Claws with basal tooth, as in the genus.

Hab.—Venodio, Sinaloa, Mexico, June 27-August 14. A. Kusche, collector.

Type.—No. 22556, U. S. N. M.

Described from fifteen specimens taken at Venodio between the above-mentioned dates. It is possible that this species is the one mentioned by Gorham (Biol. Cent. Amer. Col., Vol. 3, Pt. 2, Suppl. p. 345) as a variety of *O. damicornis* Fabr. Its affinities are, however, with *O. texana*. These three species may be separated by the following table:

Lateral margins of prothorax sinuate, punctuation not dense
Lateral margins of prothorax parallel.
Punctuation of pronotum dense and evenly distributedtexana Bland.
Punctuation of pronotum sparse, slightly more dense at side
cyanipennis n. sp.

An additional character for distinguishing the sexes in the species of *Orthoplevra* may be found in the distance separating the eyes. In the male the eyes are much closer together in front than in the female. This character used in connection with that of the antennae should be sufficient to always distinguish the sex of a specimen.

Corinthiscus sinaloae, new species.

Form rather broad and depressed, slightly broader toward apex. Piceous, elytra pale, basal region of elytra piceous, humeri rufous, subapical band rufous edged with piceous. Head piceous, moderately coarsely and very densely punctured, eyes prominent, coarsely granulate, head between the eyes depressed, vertex distinctly swollen, in some specimens very obsoletely carinate. Antennae rufous, basal segment sparsely punctured, club piceous except for apical half of eleventh segment, finely pubescent; palpi rufo-testaceous. Thorax rufo-piceous, longer than wide (25:21), sides parallel, suddenly narrowed near base, disk with a short deep median longitudinal groove, limited behind by a smooth raised space and with four shallow depressions on either side of the median line; surface very coarsely and quite densely punctured. Elytra with very large and deep pit-like punctures, which are scattered, surface between the punctures very smooth and shining; color pale stramineous, basal fourth piceous, just beyond this patch of color is a transverse undulating, very narrow piceous line, more or less broken. The humeri are rufous. On the apical fourth there is an irregular transverse band of rufous, rather broadly edged with piceous. Tips pale. Under parts piceous, legs piceous, with exception of the coxae, knees and tarsi which are pale. Length $6.5{\text -}12~\mathrm{mm}$.

Male has the rami of the antennal club slightly prolonged and has the terminal ventral segment with a median raised portion, strongly depressed on either side.

Female has the surface of the terminal ventral even, not depressed laterally.

Mexico: Venodio, Sinaloa, late June, July and August; Tehuantepec, Oaxaca, July 7; Mazatlan, Sinaloa, September 15. Type from Venodio.

Described from twenty-three specimens.

Type.—No. 22557, U. S. N. M.

Corinthiscus spinolae, new species.

Form similar to C. sinaloae but larger. Head, pronotum, meso- and metasterna piceous, elytra pale with dark spots, abdomen pale, legs pale with knees piceous. Head much as in the preceding species but the punctures are slightly finer. Scape and funicle of antenna reddish chestnut, club darker. Palpi rufo-testaceous. Thorax slightly longer than broad (33:29), form similar to that of C. sinaloae but without the lateral depressions and with the median fissure very much less distinctly marked. The post median smooth space is not raised and is in the form of a narrow line. Elytral punctures finer than in the preceding and become obsolete near apex. The ground color is pale testaceous; the base is dark, the dark extending toward the apex for a short distance at the humeri and on the disk, there is a medium fascia which is broken into three spots on each elytron, the middle one of which is larger and is more apical in position; near the apex is a transverse fascia apparently composed of four large spots, two on each elytron, the spots just touching. Under parts of the thorax piceous, of the abdomen pale. The legs are pale but for the knees which are dark, the dark color sharply demarked from the pale. Length 11-12 mm.

Described from four specimens, all females, collected at Venodio, Sinaloa, Mexico, June 27 to July 10, 1918, A. Kusche, collector. *Type.*—No. 22558, U. S. N. M.

DESCRIPTIONS OF SIX NEW WASPS (HYM.).

By S. A. ROHWER, Bureau of Entomology.

The six new wasps described in the following pages were submitted for identification by Dr. Chas. Robertson. The types of all of them are in the collection of the U. S. National Museum.

Elis floridanus, new species.

In size, appearance and structure this new species is much like *interrupta* (Say), but it can readily be distinguished by the yellow