

New Chalcidoid Genera and Species from Paraguay.*)

By

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Early in March, 1911 I received a second consignment of *Chalcidoidea* from the director of the Königl. Zoologisches Museum at Berlin, a first consignment having already been reported upon by me (Girault, 1911). As time allowed I have worked at this larger consignment and submit the following paper on about a third of the specimens included within it, for the reason that much delay has already resulted and also because this much of a second report had been completed for some time and was in more or less danger of becoming lost or destroyed. The specimens also are in more or less danger from mould and consequently I am anxious to have them returned to their place of deposit as soon as possible. It is hoped that a report on the remaining specimens can be made within a month or two.

When described, all of the specimens were taken as being in normal position (as designated by Comstock).

Family Chalcididae.

Subfamily Chalcidinae.

Tribe Chalcidini.

Thaumateliana new genus.

Female: — Body large, long, the abdomen produced into a long stylus as in *Thaumatelia* Kirby and *Megalocolus* Kirby.

Head normal, the antennal scrobes deeply excavated, forming a continuous scabrous conical cavity, with the cephalic ocellus at its extreme apex, its sides acute or carinate and the bulbs separated at the base of the cavity by a short median carina. Antennae inserted slightly below the ventral ends of the eyes, much below the middle of the face, filiform, 13-jointed with one ring-joint, the club 3-jointed, the apical joint very short, the proximal funicle joint longest, one and a quarter times longer than wide at apex, the pedicel wider than long or nearly, small; the proximal club

*) Owing to the fact that time did not allow us to send the proofsheets to the Author (now in Australia), I myself have undertaken to read the proofs. For misprints which may have escaped notice I thus only am responsible, the Author is it in no way.

Embrik Strand.

joint somewhat longer than the subquadrate seventh or distal funicle joint. Apex of scutellum with a rimmed and projected margin which is convex and entire. Thorax with deep umbilicate punctures, at the scutellum and axillae, the pronotum and mesoscutum with smaller punctures, the metathorax very rough. Base of abdomen rounded, the second (first body) segment occupying not quite half of the main portion of the region, the third segment shortest. Marginal vein long, about half the length of the submarginal, the postmarginal well developed but not much more than a third of the length of the marginal, the stigmal moderate in length, much shorter than the postmarginal. Posterior femora beneath with eight moderate-sized teeth, the middle ones of which are larger, the fourth (from base) largest, twice the size of the sixth, for instance. Metathorax with hairs only in the dorso lateral aspect, apparently without lateral projections.

Male: — Not known.

A genus resembling *Thaumatelia* of Kirby and *Megalocolus* of the same author, but differing from both in bearing more antennal joints and from the former also in bearing a ring joint. But although Kirby (1883) gives the antenna of *Thaumatelia* as 11-jointed in the text, his figures (l. c. pl. IV, figs. 9 and 10) shews twelve joints and leads one to wonder whether, in this case, he has not overlooked the ring-joint and made a mistake in his text. If that is so, we have *Thaumatelia* here. His notes, however, as he states, are based on microscopic examinations. The genus need not be confused with others.

Type: The following species.

1. *Thaumateliana bicolor* new species.

Female: — Length, 1.90 mm.

Black, nonmetallic, marked with flavous as follows: the tegulae, the distal fourth of cephalic femur, the cephalic knee, the cephalic tibia except all of the middle of the interior side and all of the cephalic tarsus except extreme tip of distal joint; a moderate area at tip above of posterior femur, at the middle of its side sending of a short rectangular shoot down (proximo-ventrad) into the outer lateral aspect of the femur; the distal and proximal thirds of the caudal tibia, the middle third black and nearly equal to either of the yellow areas at the ends; posterior knees black; caudal tarsi yellow, the distal joint brown. Venation black, brown at extreme base; fore wings fumated under the whole of the marginal vein, the fumation brown. Abdomen shining, the large second segment glabrous in appearance but with fine and delicate polygonal reticulation ($\frac{2}{3}$ -inch objective, 1-inch optic), the following segments with the reticulation coarser and distinct (with the same magnification) but yet still fine. Parapsides of mesoscutum with the punctures smaller and more shallow than those of the middle lobe; the parapsidal furrow

with a line of moderately large punctures down them, subequal to those of the scutum. Interspaces of punctuation finely reticulated like most of the abdominal segments. Robust.

Antennae black; funicle joints 3 and 4, 5 and 6, subequal, the first pair each slightly longer than the components of the second pair, the third funicle joint a fourth shorter than the second.

(From a single specimen, $\frac{2}{3}$ -inch objective, 1-inch optic, Bausch and Lomb.)

Male: — Unknown.

Described from a single female specimen, pinned and labelled „Paraguay (San Bernardino). K. Fiebrig. S. V.” [= Sammler und Verkäufer] and „5637”.

Habitat: South America—San Bernardino, Paraguay.

Type: Katalogue No. 31 942, Zool. Museum, Berlin, the foregoing specimen mounted on a spin (the head missing) plus one slide bearing a female antenna (xylol-balsam).

Tribe Smicrini.

Genus *Trismicra* Ashmead.

1. *Trismicra contracta* (Walker).

A single specimen agreeing in general with the description of this Brazilian species; apparently a male. Comparing the specimen before me with the original description, the general color is honey yellow; the head is black behind as therein stated but only in the occipital depression as seen from above; for instance the head is not black behind the eyes. The hind border of the pronotum is not black at all but the „narrow black band, which is slightly arched in front” is along the cephalic margin of the mesoscutum, is dilated at each end (barely not, or just, reaching the parapsidal furrows) and with the mesial black stripe of the mesoscutum, forms almost an exact representation of an old-fashioned ship’s anchor inverted. It is distinctly arched. The „three broad black stripes” of the mesothorax consist of the median stripe of the scutum which is dilated at a point about two-thirds the way back to the apex of the scutum and then continued to the apex in a thin black line; and of a stripe on each parapside, along the mesal third, dilating from its lateral margin caudad and not reaching the caudal margin; its mesal margin is nearly straight, slightly emarginate caudad. The cephalic and caudo-mesal margins of the axillae are very narrowly edged with black, which is what Walker means, perhaps, by „paraptera black towards each other”. The black stripe of the scutellum is median and enlarges uniformly caudad; it has the appearance of an inverted exclamation mark. In this Paraguayan specimen there are no marks on the metathorax. The apical black spot on the posterior femora is not present here, but there are two

small spots above, one on each side of the femur, and a large, transverse spot beneath, bilobed where it crosses behind the third tooth, a lobe on each side; the apex of the posterior femur is fuscous; the first tooth is pyramidal and black at apex; the other two are slender and wholly black and acute. There is a fourth very minute black tooth further cephalad in the bilobed black spot, or rather directly cephalad of it. Otherwise as described; the fore wings are slightly smoky; marginal and submarginal veins subequal in length, long, the stigmal vein much shorter than either. Along the face, in the antennal scrobes between the eyes are two large ovate black dots, side by side. They are usually concealed by the scape.

The antennae of my specimen are reddish-brown, suffused above with dusky, the scape yellow like the body, dark along its dorsal aspect and with a black stripe along the distal half of each side. The ocelli are in a slightly curved line, black, the eyes yellowish green. The distal ciliation of both wings is dense, short and uniform. The dorsal thorax (except metathorax) is densely punctate and is clothed with a fine, yellowish pile, somewhat more conspicuous on the metathorax. Length, 4.5 mm.

Thus, although not agreeing in every detail with the original description, still the likenesses are so many that one cannot do otherwise than identify this specimen as that of Walker's *Smicra contracta*, 1864, described from the Amazonian Region of Brazil.

I append a few descriptive notes on its antennae: 13-jointed, filiform, one ring-joint, club not enlarged, pubescence short, moderately dense and fine; pedicel small, only half the length of the first funicle joint, broadest distad; first funicle joint longest, about one and a half, or less, times longer than broad; the other six gradually shortening distad, joints 6 and 7 of funicle subequal, subquadrate, each about two thirds the length of joint 1; first two club joints wider than long, the second shortest; not as long as the pedicel, the third as long as the distal funicle joint; scape not long, slightly dilated ventrad.

(From one specimen, the same magnification.)

From a single male, minutien mounted, labelled „Paraguay (San Bernardino). K. Fiebrig. S. V. 6272". Male antenna on slide. Specimen and slide in Zool. Museum Berlin.

Genus *Tetrasmicra* Ashmead.

1. *Tetrasmicra bicolor* new species.

Female: — Length 4.6 mm.

Differing from all other species of the genus (excepting *maculata* whose original description has not been accessible and *concitata*) in being black instead of luteous. From the black *concitata*, it may distinguished at once by the following characteristics: the cephalic margin of the prothorax is margined with honey yellow; the lateral margins of the scutum, along the parapsidal

furrows, are margined with the same; the posterior margin of the scutellum is honey yellow while there is a prominent short, oblique stripe of the same along the lateral margins, not meeting at the base of the sclerite and not reaching to the convex marginal stripe of the caudal margin; they are straight; the posterior coxae are wholly yellow; the posterior femora are nearly all black excepting a little yellow above near base and a short oblique yellow stripe interiorly near apex; also exteriorly, a round yellow spot near the ventral edge of distal two thirds. Also, three yellow areas, petiole and base of abdomen, three (some-times five or six) narrow stripes around abdomen in the lateral aspect and about central, the tarsi, distal third of posterior tibiae yellowish white, cephalic tibiae, most of interior of intermediate tibiae and knees; a small spot on lateral margin of pronotum (dorso-laterad), a smaller one in the lateral aspect of the axilla (only present or visible in one specimen), the lateral margin of the parapsides excepting caudad; the margin of the eyes in the cephalic aspect. If six stripes on abdomen, the last three are dorsal, some of them short and broad. Antennal scape yellow beneath and laterally. In the direct dorsal aspect, the yellowish markings on the thorax resemble an X with the point of crossing of the lines erased and with the cephalic arms longer than the caudal ones. Wings smoky and nearly as in *Trismicra* noted above in regard to venation and ciliation. Venation brown black as are also the antennae.

Thorax densely punctured and bearing, with the head, very short yellowish pile. Ocelli in a very slightly curved line, the lateral ones distant from the eye margin; along the ventral margin of the posterior femur from its distal end are four teeth, decreasing in size proximad but the first shorter, broader and brownish; also following them, three minute black teeth and at apex of base an acute toothlike prolongation. Metathorax with no teeth; scutellum emarginate behind at meson. Tibial spur of intermediate legs distinct. Pronotum dilated laterad.

Antennae 13-jointed, normal; scape long, cylindrical; pedicel much shorter than the proximal funicle joints; the latter one and a half times longer than wide, the joints shortening distad, the last joint subquadrate; first two club-joints wider than long, the third slightly the longest, obtusely conical. One ring-joint. Pubescence of antennae moderately dense, yellowish, the hairs short and somewhat flattened.

(From two specimens, the same magnification).

Male: — Unknown.

Described from two female specimens, minutien mounted and labelled "Paraguay (San Bernardino), K. Fiebrig. S. V. 4 and 8, II, 5776".

Habitat: South America — Paraguay (San Bernardino).

Types: Katalogue No. 31944, Zool. Museum, Berlin, 2 ♀'s, on minutien pins plus female antenna in xylol-balsam, 1 slide.

Tribe Dirhinini.

Dirrhinoidea new genus.

Agreeing with *Dirhinus* Dalman but the antennae only 11-jointed, the fore wing maculate with smoky brown; moreover, the pedicel is longer than the proximal joint of the antennal funicle.

Normal position.

Female: — Head flattened, the eyes bulging from each side, the vertex and face on each side prolonged cephalad into a toothlike horn which guard the antennae; ocelli in an equilateral triangle in the center of the vertex, all much nearer to each other than either is to the eye margins; margins of the occipital foraminal impression laterad, acute. Antennal scrobes forming a short inverted Y. Antennae inserted slightly ventrad of an imaginary line drawn between the ventral ends of the eyes, distinctly below the middle of the face, 11-jointed — scape, pedicel, 7 funicle joints and a 2-jointed club, the latter not distinctly differentiated, the flagellum clavate, the pedicel much longer than the proximal funicle joint which is slightly longer than wide and less than a half the length of the first funicle joint; funicle joints after the second, gradually widening and shortening. Pronotum distinct, moderately long yet transverse; parapsidal furrows complete; scutellum small, rounded, unarmed. Metathorax flat, nearly as long as the mesothorax, with lateral carinae and a short, acute, toothlike prolongation on each lateral margin cephalad of the middle. Abdomen petiolate, the petiole short, wider than long and together with the second abdominal segment at base, longitudinally striate (finer striae on segment 2). Abdomen ovate, small, normal for the family, not much larger than the caudal femora and very much shorter than the thorax; the second segment very long, comprising four-fifths of the abdomen's surface, the remaining segments exceedingly short, segment three twice the length of the others which are concealed within one another; ovipositor not exerted.

Fore wings maculate, without marginal ciliation, the marginal and submarginal veins long, subequal, the stigmal vein exceedingly short, barely visible yet about twice longer than its width, the postmarginal vein absent. Tarsi 5-jointed; tibial spurs single; strigal present. Posterior femora armed beneath with a ridge of uniform, short, black teeth like those of a comb, the teeth numerous and close set. Body closely punctate, the punctures setigerous, the body thus clothed with recumbent, stiff pubescence.

Male: Unknown.

Type: The following species.

1. *Dirrhinoidea maculata* new species.

Female: — Length, 4.0 mm. Moderate in size for the subfamily. General color black, the head and thorax with decumbent golden pubescence, which is not conspicuous; abdomen shining; legs

brown but the tarsi of the cephalic legs are yellowish; coxae concolorous with the body. Posterior wings hyaline. Fore wings stained with brownish throughout but several distinct, rather large, oval elar spaces are defined. Venation and tegulae brown. Head, pro- and mesonotum densely punctate, the punctures round and sharply defined; metathorax with conspicuous longitudinal carinae and smaller and more numerous transverse ones, the former five in number counting the middle, median one which is compound, that is, at first consisting of a large cephalic half-portion shaped exactly like a lower case Greek letter Phi, then followed by a short median stalk, which supports a fork, the stalk and the fork resembling closely the Greek letter gamma of the lower case. The next carinae, the true lateral carinae, are only regular at one place cephalad while the next at the lateral margin run only from the acute prolongation of the thorax. The outline of the five striae at the base of the second abdominal (first body) segment form a rectangle, which is longer than wide. The second abdominal segment distad, and the others are minutely, densely punctate and hairy. The coxae are similarly sculptured, or nearly.

Ciliation of the disk of wings fine and normal, that of the caudal wings, however, not dense; caudal wings with marginal cilia along the caudal margin composed of short uniform cilia which are subcapitate. Extreme apex of posterior wing obtuse.

Antennae regularly clavate, the club not differentiated distinctly. Scape long, subobclavate, as long as the combined lengths of the pedicel and first four funicle joints; pedicel longer than any of the funicle or club joints; funicle 1 wider than long; 2 longest; 3 a fourth shorter than 2, over twice the length of 1; others shortening and widening distad; 4 and 5 subequal, slightly wider than long; 6 and 7 subequal, much wider than long; 8 or proximal club joint still slightly wider and shorter; distal club joint conical, twice the length of the preceding joint. Pubescence arranged in regular lines of which there are three on the distal club joint; no terminal spur on the latter.

(From one specimen, similarly magnified.)

Male: — Unknown.

Described from a single female, minutien mounted and labelled „Paraguay (San Bernardino). 19. V. K. Fiebrig. S. V.”

Habitat: Paraguay (San Bernardino).

Type: Katalogue No. 31945, Zool. Museum, Berlin, 1 ♀, minutien mounted (plus two slides bearing antennae.)

Family Perilampidae.

Genus *Perilampus* Latreille.

1. *Perilampus americanus* new species.

A specimen as follows.

Female: — Length, 3.85 mm. Robust, moderately large for the genus.

Agrees with the original description of *paraguayensis* but the general body color is deep metallic prussian blue, verging to purple, greenish at the vertex and over most of the head, sides and undersides of the thorax and abdomen and the legs. The ocelli are closer together, the distance between them less than the distance between the margins of the eye and each lateral ocellus. The caudal half of the abdomen is pubescent with greyish hairs (dorsal aspect). Scutellum with a small bidentate plate.

(From a single specimen, the same magnification).

Male: — Unknown.

From a single female specimen on a minuten pin, labelled „Paraguay (San Bernardino), K. Fiebrig. S. V. 4193.”

Habitat: Paraguay — San Bernardino.

Type: Katalogue No. 31946, Zool. Museum, Berlin, 1 ♀ minuten mounted plus female antenna on a slide in xylol-balsam.

Although so differently colored, I am dubious concerning the validity of this species, since it clearly agrees with *paraguayensis* in structure, with the possible exception of the relative position of the ocelli. I have very little faith in the specific value of metallic coloration, especially in this case, since the same portions of the body are colored. Were the color pattern different, it would be another question.

2. *Perilampus minutus* n. sp.

Female:— Length, 1.80 to 2.15 mm.; small for the genus.

Black, opaque, the venation and antennal flagellum (excluding pedicel), including the ring-joint, pale brown; knees, tips of tibiae and the tarsi straw yellow; wings hyaline. A little metallic blue on legs and under sides of body. Whole of the mesothorax densely punctate, the punctures moderate in coarseness, the abdomen smooth and shining (excluding pubescence), the vertex with very fine pin-point punctures, the punctures very much smaller and finer than those of the mesonotum and changing to fine transverse striation in the occiput; ocelli in a triangle, the cephalic ocellus in the cephalic aspect, within the apex of the scrobicular impression; the lateral ocelli separated more from each other than each is from the respective eye margin; mesial margin of each parapside, bordering the parapsidal furrow, very finely polygonally sculptured. Lateral threefourths of the axillae depressed, shining, very finely, longitudinally striate, bordered laterad by a distinct longitudinal sulcus (dorsal aspect); the mesal fourth of the axilla punctured like the rest of the thoracic notum. Scutellum terminating in a bilobed rimmed margin. Very close, fine greyish yellow pubescence on thorax and vertex, more scattered along the caudal half or more of the abdomen and denser on the flagellum and ventral portions of the face, but never dense and conspicuous through a hand-lens. Metanotum on each of side of meson nearly smooth, finely reticulated, a distinct median carina

present, not margined by sulci; cephalic and caudal margins of the metathorax guarded by a carinated sulcus, divided more or less irregularly by short longitudinal carinae.

Wings densely ciliate, the marginal cilia very short, the caudal ones of the caudal wings more dense and somewhat longer than the same cilia of the fore wing; marginal vein over a fourth longer than the submarginal which is about twice the length of the stigmal vein. The latter is short but with a distinct neck.

Antennae as in the preceding species. Pedicel slightly longer than first funicle joint, which is subquadrate; funicle joints widening distad, the last distinctly wider than long. Flagellum regularly clavate.

(From 9 specimens, the same magnification).

Male:— Unknown.

Described from nine female specimens, all minutien mounted and labelled „Paraguay (San Bernardino). K. Fiebrig S. V. 4506” (eight specimens) and the ninth the same without the number but instead „H. 15. VI.”

Habitat: Paraguay (San Bernardino).

Types: Katalogue No. 31947, Zool. Museum, Berlin, six females, minutien mounted plus one slide bearing a pair of female antennae (including the ninth specimen bearing the date). **Cotypes.**— Cotype No. 15273, United States National Museum, Washington. D. C., three females on minutien mounts.

3. *Perilampus nigriviridis* new species.

Female:— Length, 3 mm.; moderately small for the genus to moderate. Opaque black, the posterior margin of the pronotum, the parapsides and vertex coppery or aeneous, the sides of the thorax either metallic bluish mixed with purplish or metallic greenish, the face glinting metallic greenness, the abdomen shining black verging to metallic greenness, the occiput black, the antennae black, the club becoming brownish, the scape with metallic greenness; ocelli ruby red, the eyes very dark garnet; coxae and all femora bright metallic green; cephalic tibiae, excepting a short streak of metallic green exteriorly near base, distal half of intermediate tibia and tip of caudal tibiae, the knees and tarsi straw yellow; remaining portions of the tibiae named, metallic green. Wings hyaline, the venation yellowish brown.

Ocelli from direct dorsal aspect in a straight line, yet the cephalic ocellus is in the cephalic aspect correctly, being within the apex of the scrobicular cavity; the lateral ocelli are over their own width from the eye margin; the scrobicular cavity is deep, its margins acute. Scrobes obscure. Thoracic notum densely rugoso-punctate as in *americanus*, the vertex finely, transversely lined, the shining mesal margin of each parapside nearly smooth, longitudinally wrinkled posteriorly; lateral half of the axilla impressed, shining and with longitudinal carinae, about four or

five. Scutellum conical, its lateral margin posteriorly acute, the edge preceded by a prominent sulcus, the sclerite terminating caudad in a short bidentate plate, each tooth nearly a lobe, obtuse and broad for a tooth. Metathorax about as in *minutus* as also the ciliation of the wings and the proportionate lengths of the veins, only the postmarginal vein slightly longer. The marginal cilia of both wings are alike, however. Longitudinal striae margin the eyes in the cephalic aspect; ventrad of the insertion of the antennae, the face is punctured, the punctures shallow. Pubescence white, nearly as in *minutus*.

Antennae as in the preceding species. Pedicel not half the size of the proximal funicle joint which is subquadrate; next two joints subequal, a fifth or fourth shorter, wider than long; remaining joints gradually shortening distad, the last shortest; distal club joint shortest of the club, the two others subequal and wider than long though not very much so.

(From two specimens, the same magnification.)

Male:— Unknown.

Described from two female specimens minutien mounted and labelled „Paraguay. San Bernardino. K. Fiebrig. S. V.” and „2. 7”, „30. 6. 6352” respectively.

Habitat: San Bernardino, Paraguay.

Types: Katalogue No. 31948, Zool. Museum, Berlin, the two specimens as noted above, plus a pair of antennae in xylol-balsam, one slide.

Diagnosis of the Paraguayan Species of *Perilampus* Latreille, Females.

The following species occur in Paraguay and may be identified with the aid of the diagnosis given herewith; *paraguayensis*, *americanus*, *minutus* and *nigriviridis*.

Wings hyaline, species punctate on thorax.

I. Species opaque black with very little or no metallic coloration dorsad and laterad. Vertex with fine pin punctures. Small.

Venation and flagellum (excluding pedicel) pale brown; knees, tips of the tibiae and tarsi straw yellow; a little metallic blue on legs and ventral aspect of the body. A small species *minutus* Girault.

II. Species metallic greenish or bluish for the most part. Vertex finely transversely striate. Usual in size for the genus. Metallic green, tinged with aeneous and bluish.

Antennae blackish, distad brownish; femora metallic blue-green; caudal tibiae mostly brown; ocelli as far distant each from the other as a lateral one is distant from its respective eye margin. Apex of scutellum with two barely perceptible teeth *paraguayensis* Girault. Metallic blue verging to purple, tinged with greenish.

Scutellum with a bidentate plate; ocelli close together, less distant from each other than a lateral ocellus is from its respective eye margin; under parts of the body and the head more or less green; colored otherwise as in *paraguayensis*:
americanus Girault.

Black with metallic colors, the vertex and parapsides aeneous, the sides of the thorax metallic bluish to purplish, the abdomen verging to metallic greenish; antennae black, the club tinged with brownish; cephalic tibiae nearly all yellowish; scutellum bilobed at apex. *nigriviridis* Girault.

Family **Miscogasteridae.**

Subfamily **Lelapinae.**

Genus *Lelaps* Haliday. *)

1. *Lelaps paraguayensis* new species.

Female:— Length, 3 mm.

Dark metallic green, the abdomen shining black; legs straw yellow, except the dusky or subfuscous femora and cephalic tibia at proximal half, and the coxae; antennae dusky black, the scape, pedicel, single ring-joint, the 3-jointed club contrasting, lemon yellow, the long first funicle joint the same but suffused somewhat with dusky. Ocelli and eyes dark garnet. Ovipositor fuscous. Stylus concolorous with abdomen. Fore wings hyaline but with a small subrescent smoky brown dash from the bend of the submarginal vein extending about half-way across the wing; a second conspicuous conical (apex of the cone pointing proximad) band across the wing at the stigmal vein, crossing the latter to the postmarginal vein at the costal margin; this band is divided longitudinally at its caudal two-thirds by a narrow curved white line and its base or distal margin is slightly concaved; it is followed by a white, rather narrow, slightly concaved white band which in turn is followed by a slightly broader but nearly similar smoky brown band; the wing from this band distad (or the apex) is hyaline. Venation smoky brown.

Thorax roughened, half punctate, half rugose but the scutellum definitely longitudinally striate, the striae more distinct and regular distad. Face striate in different directions, cephalic half of pronotum transversely striate, the other half rugose or nearly longitudinally striate. Scutellum with a cross furrow before apex. Abdominal segments 5, 6 and 7 polygonally reticulated, some reticulation on segment 4 near base, but segments 2 and 3 smooth. Second abdominal segment long, over a third the length of the abdomen including the stylus, over twice the length of segments 3 and 4 combined, segment 3 shortest, transverse, only about half

*) The legal name of this genus is *Stenopistha* Strand 1910 (vide *Societas Entomologica* 25 p. 26). Strand.

the length of segment 4; segment 7, with its not long stylus, subequal in length with segment 2 (first body segment). Ovipositor distinctly exerted to a length equal to about two thirds the length of segment 7. In the direct dorsal aspect, immediately following the scutellum, there are on the metathorax across the median line, four large polygonal foveae arranged in the form of a cross; from the distal one, an acute median carina proceeds to the apex of the metathorax; the whole of the latter is foveolate and irregularly roughened. Axillae longitudinally striate. Proximal joint of posterior tarsi long, nearly as long as the next three joints combined.

Antennae 13-jointed, one ring-joint, 3-jointed club, slender. Scape long, cylindrical and slender, about as long as the first two funicle joints combined; pedicel long, obconic but not half the length of the long proximal funicle joint; funicle joints 2 and 3 subequal, each somewhat over half the length of the first joint each distinctly longer than the pedicel; joints 4 and 5 subequal, a third shorter; 6 and 7 shortening but 7 still distinctly longer than wide; club conic-ovate, its joints shortening distad, the first only slightly longer than wide, the second wider than long, the third conical. Pubescence of antenna distinct, soft, not long, some of the hairs broadened at base. Ocelli in a triangle, none near the eyes.

(From one specimen, the same magnification).

Male:— Unknown.

Described from a single specimen, minutien mounted, labelled „Paraguay, San Bernardino, V. 7. K. Fiebrig. S. V.”

Habitat: Paraguay (San Bernardino).

Type: Katalogue No. 31949, Zool. Museum, Berlin, the female above mentioned plus one slide bearing a posterior leg and antenna.

2. *Lelaps pulchra* new species.

Female:— Length, 3.1 mm.

Aeneous bronze or reddish pink, with a metallic bronzy tinge the head, excepting face below the antennae, aeneous black; apical three fourths of the scutellum, proximal half of the abdomen, pleura of mesothorax, tip of stylus, cephalic femora and coxae, a rather broad ring around distal half of intermediate tibiae and tips of distal tarsal joints black or brown black; legs, including coxae, otherwise white; antennae brown black, excepting the pale yellowish scape, pedicel, ring-joint, long first funicle joint and the club; distal funicle joint becoming pallid at apex; pedicel suffused with dusky. Proximal half or two thirds of the distal half of the abdomen brownish yellow, shading off into the blackish of the stylus. Fore wings hyaline, marked with faint sooty as follows: A small spot just under the curve of the submarginal vein and another more obscure and opposite at the caudal margin; a wedge-shaped line across the wing from the

base of the stigmal vein, changing angle caudad of its middle, the two arms unequal and interrupted by a narrow clear space just beyond its change of angle; and an irregular area near the apex, nearly shoeshaped, the base toward the hyaline apex. Venation greyish brown.

Face striate, ventrad with a number of scattered thimble punctures; scrobes visible only at base. Vertex polygonally sculptured. Ocelli in a triangle, distant from the eyes; thorax sculptured like the vertex, both bearing very long, stiff, black setae, scattered regularly; sculpture of axillae and scutellum tending toward longitudinal striation caudad; scutellum with a transverse, narrow groove at base of distal third. Metanotum with large foveae with carinated margins. Abdominal segments sculptured as in the preceding species. In the fore wing there is a short oblique naked area near the first small fuscous spot, just disto-caudad of it. The stigmal vein is not quite half the length of the postmarginal which is long.

Antennae 13-jointed, one ring-joint, three club-joints. The pedicel is slightly longer than the second funicle joint which is not quite half the length of the long proximal funicle joint, yet much more than twice longer than wide; funicle joint 3 is slightly shorter than 2, while 4 is a fourth shorter than 3; 5 is subequal to 4; 6 a fourth shorter than its preceding joint while 7 is still shorter, yet plainly longer than wide; club ovate, not enlarging, its joints shortening distad. Antennae pubescent. Lower half of face with short, white pubescence; stylus pubescent; ovipositor not exerted.

(From one specimen, the same magnification).

Male:— Unknown.

Described from a single female mounted on a minutien pin and labelled „Paraguay, San Bernardino, K. Fiebrig. S. V. 4. 6”.

Habitat: Paraguay (San Bernardino).

Type: Katalogue No. 31 950, Zool. Museum, Berlin, the above female, plus one slide (female antenna).

Family **Cleonymidae.**

Subfamily **Cleonyminae.**

Genus *Epistenia* Westwood.

1. *Epistenia americana* new species.

Female:— Length, 9.00 mm.

Extraordinarily brilliant metallic deep blue, with darker blue, purplish and light brilliant green in certain lights, especially the head is a resplendent green; also the deep blueness of the dorsal aspects of the thorax and abdomen with a coppery sheen at angled light but no distinct coppery markings as in the following species. Eyes light garnet. Wings posteriorly hyaline, the venation fuscous. Legs concolorous or metallic green, excepting the tarsi and all

of tibiae (excepting centrally, exteriorly) which are deep fuscous. Tip of abdomen black; exerted portion of ovipositor fuscous. Antenna black suffused with slight metallic greenness, the first funicle joint more so, the scape and pedicel distinctly metallic green and blue.

Whole body rather densely umbilicately punctate, the punctures largest on the scutellum, smallest on the first abdominal segment and next so on the vertex. The interspaces on the abdomen are glabrous but on the thorax each puncture is connected with its neighbours by short, radiating, narrow sulci or striae around all the margin, giving each puncture a puckered appearance. Lateral ocelli distant from the eye margin. Head bicornuted in front of the ocelli, the scrobicular cavity deep. Scutellum terminating in a rimmed plate whose apex is slightly flattened but not emarginate. Acuminate part of abdomen (distad of segment 5) clothed with dense, stiff hairs. Fifth abdominal segment longest of the first five (counting the petiole as segment 1). Postmarginal vein about three fourths the length of the marginal, the stigmal vein rather long but much shorter than the postmarginal. Discal ciliation of the fore wing dense. Ovipositor exerted for a short distance beyond apex of abdomen. Cephalic femora with a bifid tooth beneath near apex.

Antenna 11-jointed, no ring-joint. The pedicel long, subequal in length to the rather long distal club joint, slender, nearly twice the length of the proximal funicle joint; second joint of funicle longest, the joints after the fourth wider than long, the two proximal club joints subequal, neither half as long as the terminal joint; joints widening distad; second funicle joint subequal in length to the slender pedicel. Pubescence of antennae dense and matted, short, dark reddish.

(From one specimen, the same magnification.)

Male:— Not known.

Described from one minutien-mounted female labelled „Paraguay (San Bernardino). K. Fiebrig. S. V. II.”

Habitat: South America—San Bernardino, Paraguay.

Type: Katalogue No. 31951, Zool. Museum, Berlin, the above female, minutien (plus one slide, female antenna).

2. *Epistenia gemmata* new species.

Female:— Length, 7.25 mm.

The same as the preceding but the abdomen greener and the general color darker; the mesoscutum contrasts by being coppery. The legs are wholly fuscous or subrufous, excepting the concolorous coxae; the antennae are dark, the scape alone shewing very dark metallic green coloration.

Differs from *americana* in the following structural characters: The plate of the scutellum at apex is more mesial, more truncate

at apex and with a raised median carina; the body is shorter, the abdomen not so long; the excised tooth beneath near the apex of cephalic femur is single but there is another short blunt tooth nearly at the apex (also present in *americana* but flatter, convex); the stigmal vein differs in shape, being squarely truncate at apex; the second funicle joint of the antenna is not any longer than the third, distinctly shorter than the long pedicel and only about one and a half times longer than the first joint; the distal club joint is slightly shorter than the pedicel. Otherwise, as in *americana*.

(From one specimen, magnified to the same degree.)

Male: Unknown.

Described from one female specimen, minutien-mounted and labelled „Paraguay (San Bernardino). K. Fiebrig. S. V.” and „5984”.

Habitat: South America — San Bernardino (Paraguay).

Type: Katalogue No. 31 952, Zool. Museum, Berlin, the foregoing female on a minutien mount plus one slide (female antenna and posterior leg).

In this connection I should state that the two specimens of *Torymidae* mentioned at the beginning of my paper (Girault, 1911) on page 377 as being too mutilated for generic identification were undoubtedly members of the *Cleonymidae* and probably species of *Epistenia*.

Family **Encyrtidae**.

Subfamily **Eupelminae**.

Tribe **Eupelmini**.

Genus *Paraguaya* Girault.

1. *Paraguaya pulchripennis* Girault.

Two additional females labelled „Paraguay. San Bernardino, K. Fiebrig. S. V. 23. VI.” Returned to the Zoological Museum, Berlin.

The metallic color of the body is opaque or satiny, the sculpture is fine; the silvery ring at base of the abdominal venter sometimes shews on the dorsum at the same place; the abdomen is not always erect in dead specimens. Living specimens I have never seen. In some specimens, the bluish in places may be a mournful opaque black. The mesopleurum is very finely longitudinally striate, the striae not straight, becoming, cephalad, fine polygonal reticulation and bearing there a number of white tipped, recumbent but stiff hairs. The postmarginal vein is nearly twice the length of the stigmal.

Family **Eulophidae.**Subfamily **Entedoninae.**Tribe **Entedonini.**Genus *Horismenus* Walker.1. *Horismenus macrogaster* new species.

Female:— Length, 2 mm., more or less. Moderately large for the genus.

The same as *cyaneoviridis* Girault but differing in the following particulars: The long setigerous fovea at the caudolateral corner of the mesoscutellum is replaced by a short, foveate paired groove, bearing a very long seta caudad and rather irregular; it extends about halfway up the scutellum, and in reality the foveae are only the polygonal reticulations deepened; the metathoracic spiracle is elliptical, moderately large; the metathorax is distinctly roughened, with a scaly punctation, its median carina is smooth and metallic, acute, becoming wider and obtuse cephalad; the sulci on each side wide, roughened like the surfaces of the metathorax, bronze in color, acutely margined laterad, the median carina branching at right angles from each side before reaching the base of the segment, each branch going laterad for a length equal to the length of its median part, then at right angles running to the base of the segment; it thus forms a broad cross-sulcus across the dorsal aspect at base; this is roughened like the longitudinal sulci. The rightangled branch of the carina is difficult to detect from the direct dorsal aspect; the lateral, carinate margins of the sulci from that aspect are convex and are smoother than the median carina. Abdominal segments polygonally reticulated, the proximal two thirds or less of the long second segment smooth and shining, metallic green, its distal third darker like the other segments and very minutely punctate, each pin puncture bearing a very short minute seta; the hollow concavity at base just distad of the short petiole is reticulated. The margins of the polygonal reticulations of the thorax are raised lines, the areas not deep enough to form real punctures. The pubescence of the eyes is moderately long and soft; a few very long setae on the thorax. Vertex in the direct dorsal aspect with a subobtuse sulcus at the meson between the elliptical lateral ocelli; cephalic ocellus in the cephalic aspect or nearly.

(From seven specimens, the same magnification.)

Male:— Unknown.

Described from seven female specimens captured at San Bernardino, Paraguay by K. Fiebrig S. V. and each labelled „4535, 15. X.”

Habitat: Paraguay — San Bernardino.

Types: Katalogue No. 31 954, Zool. Museum, Berlin, 4 females, minutien mounted.

Cotypes— Cotype No. 15274, United States National Museum, Washington, D. C., the three remaining females. All specimens minutien-mounted.

Subfamily **Elachertinae**.

Elachertoidini new tribe.

Femal:— Hind tibiae with two spurs, neither long, unequal in length; pronotum rounded cephalad; tarsi five-jointed; antennae 13-jointed. This tribe is separated from the others by the five-jointed tarsi.

The following type genus.

Elachertoidea new genus.

Female:— Head normal, the ocelli in a flat triangle in the centre of the vertex, the lateral ocelli their own diameter from the eyes, the antennae inserted about in the middle of the face, distinctly above an imaginary line drawn between the ventral ends of the eyes, 13-jointed scape, pedicel, two ring-joints, six funicle joints and a three-jointed club, slenderly clavate, the pedicel short, much shorter than the first funicle joint. Pronotum rather long and conic; parapsidal furrows complete, distinct. Abdomen longer than the head and thorax combined, conic-ovate, the ovipositor not exerted. Body metallic and sculptured. Axillae well-advanced into the scapulae. Fore wings moderate in width, long, the submarginal vein unbroken, distinctly somewhat longer than the marginal, the postmarginal rather long, between a third and a half the length of the marginal, the stigmal vein short with a large bladder-shaped knob; fore wings two-banded; their discal cilia are moderately dense. Metathoracic spiracle rounded-elliptical, moderately large. Scutellum unarmed. Legs slender, the tibial spurs on first two pairs of legs are rather stout and long, the cephalic one forming a strigil; tibial spurs of caudal legs double, unequal, one about a third larger but the largest one not more than two thirds the size of the spur of first and second pairs of legs. All tarsi five-jointed, the proximal joint of each long and slender (shorter in cephalic legs), the fourth joint shortest; posterior femora slightly wider than the femora of the other legs. Wings with short marginal fringes.

Male:— Not known.

Type: The following species.

1. *Elachertoidea bifasciatipennis* new species.

Female:— Length, 2.00 mm.

Metallic bluish green, aeneous or coppery in places, especially along the dorsal aspect of the scutum and scutellum; eyes garnet; venation brownish yellow; fore wings hyaline with two rather broad, conspicuous smoky brown bands across them, the apical one broader, crossing the wing beneath the submarginal vein and

as wide as that vein is long; its margins are nearly straight. The proximal fascia crosses the wing from the base of the marginal vein; both bands are inclined slightly disto-caudad. Posterior wing hyaline, its discal ciliation somewhat sparser. Legs yellow. the coxae metallic greenish, the femora brownish. Scape pale yellowish brown, suffused more or less with dusky; pedicel and flagellum black and submetallic, excepting the distal two club joints, which are silvery white; ring-joints suffused more or less with pallid. Head and thorax lightly rugosopunctate, the sculpture nearly uniform (metanotum mostly smooth) but less rough on pronotum and head.

Antennae with the funicle joints all longer than wide, shortening distad, the first longest, nearly thrice longer than wide and at least two and quarter times longer than the pedicel; joint 2 of funicle a fourth shorter than 1, perhaps slightly longer than joint 3; joints 4—6 of funicle subequal, each slightly shorter than the one preceding, the sixth joint subequal to the basal club-joint; two remaining club-joints shortening, the distal one shortest, slightly larger than the pedicel and not terminating in a spinelike seta. Pubescence of antennae stiff, long setae, moderately dense and not erect.

(From a single specimen, the same magnification).

Male:— Unknown.

Described from a single female specimen minutien mounted, and labelled „Paraguay, San Bernardino. K. Fiebrig. S. V. 23. 6”.

Habitat: South America — Paraguay (San Bernardino).

Type: Katalogue No. 31 955, Zool. Museum, Berlin, the foregoing specimen (minus abdomen) on a minutien-mount; plus two slides (caudal leg and antenna; a cephalic and intermediate leg respectively).

Literature Referred to.

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- 1911. Girault, Alexandre Arsène. Zoologische Jahrbücher, Jena. Band einunddreißig, Heft 3, p. 377—406.

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Zeitschrift/Journal: [Archiv für Naturgeschichte](#)

Jahr/Year: 1912

Band/Volume: [78A_9](#)

Autor(en)/Author(s): Girault Alecandrè Arsène

Artikel/Article: [New Chalcidoid Genera and Species from Paraguay. 160-177](#)