

# AUSTRALIAN HYMENOPTERA CHALCIDOIDEA—IV. SUPPLEMENT.<sup>1</sup>

BY A. A. GIRAULT.

MAGNIFICATION as previously. See these Memoirs, II, pp. 140-296.

FAMILY EULOPHIDÆ.

SUBFAMILY ENTEDONINÆ.

TRIBE ENTEDONINI.

GENUS PLEUROTROPOPSEUS Girault.

## 1. PLEUROTROPOPSEUS PURPUREUS Girault.

The propodeal median carina is not very strong and has a weak sulcus on each side of it. The V-shaped lateral carina is deeply sulcated mesad along its complete mesal arm; the apex of the V is at the caudo-lateral angle of propodeum and the lateral arm forms the carinated lateral margin of propodeum. The minute spiracle is just a little caudad of cephalic margin and at the mesal edge of the groove; therefore, the latter and the carina forming its lateral edge are laterad of the spiracle and thus no true lateral carinæ are present. Axillæ nearly cephalad of scutellum, the parapsidal furrows only two thirds complete from cephalad and like sutures. Thorax faintly scaly, the parapsides mostly smooth but with long wrinkles caudo-mesad, scaly like the scutum cephalo-laterad. Abdomen subsessile. Tips of tibiæ whitish. Type re-examined.

GENUS APLEUROTROPIS Girault.

## 1. APLEUROTROPIS VIRIDIS Girault.

The parapsidal furrows (or more properly caudo-mesal parapsidal impressions) are wide and shallow, abruptly narrowing cephalad, subglabrous. Axillæ barely advanced. Propodeum nearly smooth. Petiole distinctly longer than wide. Postmarginal vein nearly *thrice* the length of the stigmal. Pronotum glabrous, its cephalic margin with a line of coarse foveæ across it, its neck shagreened. Segment 2 of abdomen short. Venation pale brown. From the type.

NEODEROSTENUS new genus.

For diagnosis, see *antea*, p. 144.

## 1. NEODEROSTENUS AUSTRALIENSIS new species. Female. Genotype.

Length, 1.10 mm. Abdomen coppery blue. Propodeum smoother than rest of the thorax. Petiole of abdomen short. Postmarginal vein subequal to stigmal, both short. Club terminating in a rather long stout seta; funicle 1 longer than the pedicel, a little shorter than 2 or 3, somewhat longer than wide. Flagellum narrowing distad. Mandibles tridentate. Hind wings short, pointed where widest with about seven lines of discal cilia. Spot on fore wing large. Propodeum much wider than long. Middle tibial spur long and slender, the hind one short. (For rest of description, see place cited.)

From a female captured in jungle, May 15, 1913.

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<sup>1</sup> For additions, see Part XIV.

## GENUS PLEUROTROPOMYIA Girault.

## 1. PLEUROTROPOMYIA LACTEICOXA new species.

*Female*:—Length, 0.85 mm.

Like the genotype but much less robust and the petiole and the coxæ are white also. The median groove of scutum is shorter, along distal third (along distal half in the genotype). The antennæ in both species are much alike. Mandibles 4-dentate. Hind tibial spur a little long and stout, as long as the first tarsal joint of hind legs which, however, is not especially long. Compared with type of *grotiusi*.

*Male*:—Not known.

Described from one female captured by sweeping along edge of jungle, June 3, 1913.

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2475, Queensland Museum, Brisbane, the above specimen on a tag, the head and hind tibiæ on a slide.

## 2. PLEUROTROPOMYIA ÆNEOSCUTELLUM new species.

*Female*:—Length, 1.75 mm.

Almost exactly similar to the genotype but more brassy especially the scutellum and the segments of the abdomen after the second are longer, 3 and 4 for instance when combined as long as 2 (somewhat shorter in *grotiusi*); also in these abdominal segments, the single transverse row of pubescence is along the cephalic margin in *grotiusi* but here it is central or across the middle. Both species bear a distinct spiracular sulcus which originates just cephalo-laterad of the minute spiracle; the axillæ in both and the triangular caudo-mesal corner of each parapside are glabrous, also the postscutellum. The sulcus along meson of scutum in each is about half the length of the scutum from caudad. Segment 7 of abdomen in both next longest after 2 which occupies about a fourth of the surface. Hind tibial spur rather long and stout. Compared with type of genotype.

*Male*:—Not known.

Described from two females captured by sweeping in forest, November 5, 1913.

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2476, Queensland Museum, Brisbane, one of the above specimens on a tag (minus head).

## GENUS PLEUROTROPPOPSIS Girault.

In *antea*, p. 154, table of genera, line 13, *maculipennis* should read *maculatipennis*.

In the genotype the pronotum appears double owing to an obtuse cross-ridge a little beyond middle; it is glabrous but with a row of long setæ from small setigerous punctures, the setæ reclined and directed caudad over the scutum; this row of setigerous punctures is cephalad of the cross-ridge. The wedge-shaped caudal part of each parapsidal furrow is glabrous. Scutum with a few of the very long setæ and one from about the middle of the wedge of the parapsidal furrow. Axillæ barely advanced, glabrous. Lateral margin of scutellum carinated, forming a narrow groove just inside of the carina. From the type.

## GENUS HORISMENOIDES Girault.

*Female*:—With the form of the proctotrypoid genus *Hadronotus* but the abdomen still broader. Venation, antennæ and mandibles as in *Amestocharis* Girault; ring-joints distinct. Parapsidal furrows short but distinct, cephalad only; scutum with a complete, conspicuous median sulcus. Scutellum simple, its cephalic margin triangularly advanced, the axillæ obtuse-conically advanced into the scutum, wholly cephalad of the scutellum. Propodeum very short, with a median carina which is paired, apparently; lateral carinæ apparently present, curved.

Petiole very short, the abdomen flat, broadly ovate, the second segment longest, occupying about a third of the surface. Hind tibial spur small, single. Pronotum transverse-linear, distinctly narrower than the mesonotum.

*Male*:—Not known.

*Type*: The following species.

### 1. HORISMENOIDES SULFUREIVENTRIS Girault.

*Female*:—Length, 1 mm. Short and compact.

Metallic purple, the abdomen and legs lemon or sulphur yellow, the wings hyaline, the head and thorax highly polished like the surface of tar; ocelli in a triangle, the lateral ones distinctly over their own diameter from the eyes which are naked. Scutellum at latero-cephalic corner with a series of short, oblique, more or less parallel striæ as if the corner was wrinkled; these are just caudad of the axillæ. Petiole of abdomen, scape except above, pedicel and second (last) funicle joint purplish; rest of antenna pale lemon yellow; funicle 2 slightly longer than 1, somewhat longer than wide, shorter than the pedicel, longer than the first two club joints (separately); terminal spur of club distinct but not as long as the third (distal) joint, which bears it. Antennæ inserted below the middle of the face.

Described from four females captured by sweeping in a jungle pocket, November 16, 1913.

*Habitat*: Gordonvale (Cairns), Queensland.

*Types*: No. Hy 2477, Queensland Museum, Brisbane, three of the above on a tag and two heads, two hind tibiæ on a slide.

A female at Cooktown, Queensland, jungle, March 3, 1914 (A. P. Dodd).

In the original description, *antea*, p. 153, footnote, line 1, *axillæ advanced cephalad of scutum* should read *axillæ advanced wholly cephalad of scutellum*.

### GENUS AMESTOCHARIS Girault.

The species *goondiensis* is the genotype.

### 1. AMESTOCHARIS NYMPHA Girault.

*Antea*, p. 148, in the original description, it is stated that funicle 2 is barely longer than 3 and not tapering at apex as much as in *concoloripes*. Funicles 1 and 2 are meant, respectively.

#### A. AMESTOCHARIS NYMPHA PERSIMILIS new variety.

*Female*:—Length, 1.20 mm.

Exactly similar to *nympha* but the first funicle joint is as in *concoloripes*, that is, tapers toward apex and is plainly longer than the second (the two are subequal in *nympha*), the mandibles are somewhat broader. Otherwise, I cannot distinguish between them. Both varieties bear broad fore wings. The parapsidal furrows are represented by mere depressions caudad in both.

*Male*:—Not known.

Described from one female captured by sweeping in virgin jungle (or else from a window), December 30, 1911.

*Habitat*: Yungaburra, Queensland.

*Type*: No. Hy 2478, Queensland Museum, Brisbane, the above specimen on a tag, the head and hind legs on a slide.

Later, two females were found from Proserpine, Queensland, captured by sweeping the dry bed of the Proserpine River, November 3, 1912. The vertex was nearly smooth, the face lined polygonally.

**2. AMESTOCHARIS CARINISCUTUM** new species.

*Female*:—Length, 1.30 mm.

Characterised by bearing on distal part of scutum a distinct median carina, the surrounding surface glabrous and sunk below the level of the rest. Also by having only the tibiae and tarsi white or yellowish white. Dark metallic green, the abdomen blue, the wings hyaline. Scape white; pedicel subequal to funicle 2 which is a little shorter than funicle 1 which is cylindrical oval, somewhat longer than wide; club longer than the funicle, its first joint subequal to funicle 1, its terminal joint with a long stout terminal spine or projection. Club well defined. Hind tibial spur long and stout, single. Second segment of abdomen occupying two thirds of the surface. Eyes occupying most of the cheeks, the antennae inserted on a level with their ventral ends, near the mouth. Mandibles with two acute teeth. Vertex glabrous, the face concave. Pronotum glabrous; scutum coarsely polygonally scaly, at distal third or more abruptly glabrous and with a median carina; a large isolated seta on each side of this carina about the center of the subquadrate glabrous area on each side (the area is between the parapsidal furrows, extending to their cephalic ends, the furrows being abbreviated, not half the length of the scutum). Scutellum with long, coarse polygons. Second abdominal segment and propodeum glabrous. Regular polygons on scutellum around mesal apex.

Described from one female caught by sweeping a jungle-lined forest streamlet, June 14, 1913 (A. P. Dodd).

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2479, Queensland Museum, Brisbane, the specimen on a tag, head on a slide.

**3. AMESTOCHARIS GOONDIENSIS** Girault.

A female at Gordonvale, Queensland, April 16, 1913 from jungle. The cephalic femur is subconcolorous.

**4. AMESTOCHARIS SULCATUS** new species.

Hind tibial spurs long and stout. Dorsal abdomen distad of segment 2 with very few setae, these isolated.

Similar to *goondiensis* with the type of which I have compared it but differing in being rosaceous coppery, the abdomen very dark green, the abdominal petiole is distinctly shorter and stouter, barely longer than wide (in the genotype a half longer than wide), the elongate fovea or median sulcus at base of scutellum is somewhat longer (four times longer than wide) and on the propodeum there is a distinct, short, oblique carina running from the carinated caudal margin a short distance laterad of meson running meso-cephalad across the corner and turning abruptly mesad to the nearer arm of the median carina. Cephalic femora all white. Axillae glabrous in both species. Club with a stout curved terminal spine. Pedicel shorter than either funicle joint, the latter narrowing cephalad, a half longer than wide, subequal, longer than the club joints; the latter each somewhat longer than wide, the club slightly longer than the funicle. Petiole shagreened. Meso-caudal end of parapside glabrous. Cephalic margin of pronotum with rather long setae, each widely separated.

From one female caught in jungle, May 4, 1914 (A. P. Dodd).

*Habitat*: Tweed Heads (Tweed River), New South Wales.

*Type*: No. Hy 2480, Queensland Museum, Brisbane, the specimen on a tag; head and hind tibia on a slide.

## GENUS ENTEDONELLA Girault.

**1. ENTEDONELLA MAGNIFICA** Girault and Dodd.

Length, 3 mm. Brilliant metallic purple; coxae concolorous, antennae (except scape) concolorous; rest of legs and antennal scape bright golden yellow. Segment 2 of abdomen equal to a fifth of the surface, the petiole quadrate, the abdomen short and stout. Funicle 1 distinctly longer than pedicel, nearly twice as long as wide; 2 and 3 subequal, shorter than 1,

no longer than pedicel, club as long as funicle 1; first club joint the longer, as long as last funicle joint. Hind tibial spur long and stout. Distal club joint with a nipple. First ring-joint large. Parapsidal furrows complete. Propodeum glabrous. Sulcus on each side of median carina with carinated lateral margins. No lateral carinae.

*Habitat*: Croydon, Queensland. November 30, 1908 (S. W. Fulton). No. 20.

*Type*: In the National Museum, Melbourne. A female on a tag, the head and hind legs on a slide.

A large sulcus near lateral margin of propodeum contains the spiracle. It is incomplete and enlarges cephalad.

#### GENUS PELOROTELOPSELLA Girault.

This genus is in a wrong place in the table of genera previously. See following.

#### 1. PELOROTELOPSELLA ALBIGENU new species of A. P. Dodd.

*Female*:—Length, 2 mm.

Very similar to the type species, *genu* Girault, but the thorax is more coarsely punctate, the abdomen is distinctly longer than its greatest width (barely so in *genu*), the second segment occupying less than a fourth of the surface, its caudal margin somewhat convex (quite straight in *genu*).

From two females caught by sweeping in forest, February 19, 1914 (A. P. Dodd).

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2482, Queensland Museum, Brisbane, one specimen on a tag, the head on a slide.

The lateral sulcus of propodeum in *genu* is foveate and originates just mesad of the spiracle.

#### GENUS PSEUDACRIAS Girault.

#### 1. PSEUDACRIAS QUINQUECARINATUS new species.

*Female*:—Length, 1.50 mm.

Meson of propodeum plainly tricarinate. Head and thorax brilliant reddish coppery, the abdomen black, its second segment occupying half of the surface. Proximal three tarsal joints white. Separated from *micans* and *quadricarinatus* by bearing one more propodeal carina, from *chalybs* by having the second abdominal segment distinctly longer and the pedicel is not much shorter than funicle 1; from *salvus* it differs in general coloration, being metallic—the pronotum is sculptured in that species and the scaly sculpture of the scutum is polygonal, not forming diamonds as in this species. Thus, closest to *aeneus* but that species has the pronotum finely reticulated (smooth here, no sculpture visible at same magnification but the face of the pronotum is polygonally scaly, distinctly so) and the fore wings are distinctly broader yet broad in this species. In this new species, the scutellum laterad longitudinally striate, smoother along the meson, the striae not numerous and anastomosing only at long intervals. No distinct polygonal sculpture on scutellum. Mandibles bidentate. Abdomen polished, the petiole opaque. The second club joint is longer than in *aeneus*, the antennae slightly less stout. Head beneath antennae smooth or nearly. Petiole longer than wide.

From one female caught by sweeping jungle, Kuranda, May 14, 1913 (A. P. Dodd).

*Habitat*: Kuranda and Babinda, Queensland.

*Type*: No. Hy 2483, Queensland Museum, Brisbane, the specimen on a tag, head on a slide (Kuranda).

Several females were reared from cockroach eggcases from jungle, Babinda, Queensland, February, 1914. The color of the thorax varies from brilliant rosaceous to rather dark green (A. P. Dodd).

**2. PSEUDACRIAS CHALYBS** Girault.

*Antea*, p. 150, most of the generic diagnosis (exceptionally) refers to this species and not to the genotype which was included later.

Pronotum polished except along cephalic margin; there is a broad smooth path down the meson of scutellum but laterad on this sclerite there are long polygons formed by reticulation. Abdominal petiole a little wider than long.

**3. PSEUDACRIAS SALVUS** new species.

*Female*.—Length, 1.25 mm.

Black, the wings hyaline, the tips of the tibiae and the tarsi white; segment 2 of abdomen occupying about half the surface, the abdomen slender, flat. Propodeum tricarinate at the meson. Pro- and mesonotum polygonally reticulated, the scutellum longitudinally striate. Cephalic half of parapsidal furrows obsolete or nearly, caudad plainly indicated by depressions just mesad of each axilla. Joints 2 and 3 of funicle plainly wider than long, the first club joint slightly so, funicle 1 globular. Antennae wholly black. Abdomen dorsad finely reticulated. Mandibles with two distinct outer teeth. Spur on club prominent.

*Male*.—Unknown.

Described from one female captured from the foliage of an imported citron tree in a clearing near the jungle, October 29, 1912.

*Habitat*: Babinda, Queensland.

*Type*: No. Hy 3458, Queensland Museum, Brisbane, the above specimen on a tag.

**ENTEDONOMYIA** new genus.

*Female*.—Head normal, the vertex broad, the antennae 9-jointed with two ring-joints, the club solid, the funicle 4-jointed, the joints petiolate. Pronotum distinct, transverse, the parapsidal furrows complete. The scutellum simple, the propodeum with lateral carinae and two median carinae which diverge somewhat and which are rather widely separated. Post-marginal and stigmal veins very short. Petiole of abdomen distinctly longer than wide, the second abdominal segment occupying about half the surface, the others short. Hind tibial spur single, long and stout.

*Male*.—Not known.

**1. ENTEDONOMYIA PLATONI** new species. Genotype.

*Female*.—Length, 1.15 mm.

Dark metallic green, the abdomen blue, the wings hyaline; tibiae and tarsi pale yellowish. Second abdominal segment and propodeum glabrous; rest of abdomen scaly, the petiole densely so. Thorax coarsely polygonally scaly, a small triangular area at meson of base of scutellum glabrous; on each side of this there is an appearance of longitudinal converging striation which distad farther gives way to the scaliness. Scutum with long yellowish hairs (six or so). Pedicel small, oval, much smaller than any of the funicle joints, of which the first is longest, somewhat longer than wide, stout, 4 a little wider than long, somewhat longer than the pedicel.

From one female caught by sweeping in jungle, May 20, 1913.

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2484, Queensland Museum, Brisbane, the specimen on a tag; head and hind leg on a slide.

“A female sweeping in forest near Cairns, December 24, 1911 (A.A.G.). Parapsidal furrows distinct.” (A. P. Dodd.)

## EPENTEDON new genus.

*Female*:—Head a little wider than long, the antennæ inserted below the middle, 10-jointed, three ring and funicle joints, the distal joint of club terminating in the usual distinct spine. Mandibles bidentate. Propodeum distinctly tricarinate, the median carina bounded on each side by a sulcus whose lateral margin is carinated, forming three converging carinæ on the propodeum; lateral carinæ present. Scutellum simple. Second segment of abdomen occupying a third of the surface, the others much shorter. Parapsidal furrows complete, deep and distinct, narrowing cephalad. Pronotum transverse. Petiole of abdomen somewhat longer than wide. Marginal vein nearly twice the length of the submarginal, the postmarginal vein elongate, over twice the length of the sessile but long-elliptical stigmal, about a third the length of the long marginal. Hind tibial spur normal. Like *Pelorotelopsella* Girault but the postmarginal vein elongate, three ring-joints, lateral carinæ present. Like *Pleurotroppopsis* but the median carina of propodeum is bounded by sulci.

*Male*:—Not known.

## 1. EPENTEDON UNNOTIPENNIS new species. Genotype.

*Female*:—Length, 1.70 mm.

Metallic blue-green, rather dark, the wings hyaline but with a rather large, ovate smoky brown spot appended from the knob of the stigmal vein and extending across the wing nearly to caudal margin but most distinct as a round spot under the stigma. Legs yellowish brown, the coxæ concolorous, the antennæ wholly concolorous; second ring-joint very short, the others large; funicle 1 longest, 3 a little larger than the pedicel, oval, shorter than 1. Second tooth of mandible truncate mesad.

From one female reared from fleshy galls on gum, March 20, 1911 (F. P. Spry).

*Habitat*: Melbourne, Victoria.

*Type*:—In the National Museum, Melbourne, the above specimen on a tag, the head on a slide.

## DEROSTENOIDES new genus.

*Female*:—Like *Neoderostenus* Girault but the propodeum with a curved lateral carina whose mesal side is deeply sulcated. Mandibles strongly bidentate, the inner edge of the inner (mesal) tooth with five or six fine teeth like the inner teeth in the mandibles of many Elachertini. Meson of propodeum polished, convexed. Antennæ with two ring-joints, the club 2-jointed, the antennæ 9-jointed, inserted somewhat below the middle of the face. Segment 2 of abdomen occupying about a fourth of the surface, longest, the petiole short. Postmarginal and stigmal veins short, subequal. Parapsidal furrows complete, extraordinarily thin, the scutum cephalad declivous, the *pronotum absent* (not visible from above but the suture between the pro- and mesothorax is on the neck). Hind tibial spur normal. Axillæ advanced barely at all.

*Male*:—Not known.

## 1. DEROSTENOIDES NEGLECTUS new species. Genotype.

*Female*:—Length, 0.80 mm.

Dark metallic green, the wings stained rather deeply, the legs, scape and pedicel reddish brown (coxæ metallic), the pedicel suffused with dusky. Thorax nearly black, with polygonal reticulation, the lines not raised, somewhat coarser on the scutellum which has a smooth spot centrally at base. Funicle joints more or less globular and subequal, the second a little the largest. Inner margin of first tooth of mandible minutely, slightly serrate. Pedicel longer than funicle 1.

Described from one female collected by Mr. A. M. Lea.

*Habitat*: Cairns District, Queensland.

*Type*: No. Hy 2185, Queensland Museum, Brisbane, the above specimen on a tag, the head on a slide.

The genus is allied with *Pelorotelopsella*.

## ZAOMMOMENTEDON new genus.

*Female*:—In my table of genera runs to *Pleurotropomyia* Girault from which it differs in bearing a complete, distinct median sulcus on the scutellum in addition to one along distal two thirds of scutum. Also the eyes occupy near the whole side of the head, the antennæ inserted far down near the mouth, the scrobes short, forming a triangle but continued to the cephalic ocellus in the form of a long sulcus. Eyes hairy, rather coarse, not reaching to base of mandible. Postmarginal and stigmal veins unequal, the former longer, subelongate, the latter a little longer than usual, the marginal vein very long. Hind tibial spur normal. Propodeum with distinct lateral carinæ only, these joining along caudal margin, the spiracle minute, round. Lateral carina at base (cephalad) forking, a short branch running latero-caudad, mesad of the spiracle and a complete, narrow sulcus just laterad of spiracle. A pair of rather widely separated median carinæ indicated at apex of propodeum by short spurs from the carinated caudal margin. Abdominal petiole slender, longer than the hind coxæ. Second segment of abdomen short, somewhat longer than the others; scutellum long. Mandibles 6-dentate! Axillæ barely advanced.

*Male*:—Not known.

## 1. ZAOMMOMENTEDON MANDIBULARIS new species. Genotype.

*Female*:—Length, 1 mm.

Metallic blue-green, the wings hyaline, the legs (except hind coxæ, other coxæ not plainly seen) and scape pure white. Pronotum, propodeum, extreme meso-caudal angles of parapside and apex of scutellum glabrous, the pronotum with a line of fovea across cephalic edge. Head and rest of thorax polygonally lined, the lines not raised. Hind wings with about seven lines of discal cilia where broadest. Funicle joints oval, 1 a little the longest, the pedicel still smaller. Terminal seta of club short, distinct.

From one female caught in jungle, January 18, 1914 (A. P. Dodd).

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2486, Queensland Museum, Brisbane, the specimen on a tag, the head on a slide.

## NEOPSEUDACRIAS new genus of A. P. Dodd.

*Female*:—Agreeing with *Pseudacrias* Girault but there are only two ring-joints, the hind tibial spur is not stout, the second abdominal segment occupies fully two thirds of the surface. Propodeum with a pair of diverging median carinæ and true lateral carinæ. Antennæ 9-jointed, the funicle 3, the club 2-jointed.

*Male*:—Not known.

## 1. NEOPSEUDACRIAS SPLENDIDUS new species of A. P. Dodd. Genotype.

*Female*:—Length, 1.75 mm.

Dark metallic green, the abdomen darker, the propodeum coppery, the coxæ concolorous; rest of legs and anteunal scape intense lemon yellow, rest of antennæ black. Wings hyaline, the stigmal and postmarginal veins very short. Thorax finely reticulate, the reticulation in raised lines, the center and apex of scutellum smooth. Propodeum smooth. Petiole short and stout, the abdomen stout, conic-ovate. Pedicel shorter than any of the funicle joints, which are much longer than wide, the first slightly the longest, the first club joint subequal to funicle 3 and longer than 2 which terminates in a short spine. Mandibles bidentate, the teeth acute.

From one female caught by sweeping foliage in jungle, May 19, 1913 (A. P. Dodd).

*Habitat*: Kuranda, Queensland.

*Type*: No. Hy 2487, Queensland Museum, Brisbane, the specimen on a tag, the head and a hind leg on a slide.



## OMPHALENTEDON new genus.

*Female*:—Like *Mestocharis* Foerster but the antennæ with three ring-joints.

## 1. OMPHALENTEDON LONGUS new species. Genotype.

*Female*:—Length, 1.50 mm. Abdomen conical, somewhat longer than the thorax.

Dark metallic ænous green, the broad fore wings hyaline, the legs (except cephalic coxæ) and the scape white. Petiole of abdomen brownish, wider than long. Thorax very coarsely polygonally reticulate, the lines raised, finer on cephalic scutum, the pronotum scaly. Propodeum glabrous, strongly tricarinate. Abdomen glabrous, hairy distad of segment 2 which occupies somewhat less than a fourth of the surface. Postmarginal and stigmal veins short, subequal. Hind tibial spur normal. Parapsidal furrows along caudal half, obtuse. Axillæ much advanced but only about half projects cephalad of scutellum. Pronotum transverse-linear. Marginal vein twice the length of the submarginal. Pedicel subequal to funicle 1 which is one and a half times longer than wide, slightly longer than 2, 3 still shorter; terminal spine of club distinct, long. Club 1 subquadrate. Mandibles acutely bidentate.

*Male*:—Not known.

Described from one female captured in jungle, May 29, 1914.

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2488, Queensland Museum, Brisbane, the specimen on a tag; head and hind leg on a slide.

## MESTOCHAROMYIA new genus.

Genotype, *Mestocharis lividus* Girault. Includes *Mestocharis veterosus* and *silvensis*. Each species bears a paired median carina on the propodeum; *lividus* has a middle short one at base, also *silvensis* but the short carina is longer and split. In *veterosus*, the short third middle carina is absent, the propodeum at meson with two separated carinæ. Types re-examined.

## ENTEDONOPSEUS new genus.

*Female*:—Agreeing in every particular with *Entedonomyia* Girault except that the antennæ bear three ring-joints and the two median carinæ of propodeum are close together, diverging only at apex.

## 1. ENTEDONOPSEUS TRICOLORIPES new species. Genotype.

*Female*:—Length, 1.65 mm.

Agrees with the description of the genotype of *Entedonomyia* except that it is more robust, the abdomen distad of segment 2 is coppery, the tibiæ are metallic blue, orange at tip, the tarsi white, their distal joint black. Also the hairs on scutum are black, funicles 2-4 are quadrate and subequal, each much larger than the pedicel, 1 only slightly longer than wide. Club distinctly longer than any of the funicle joints. Type antennæ of *Entedonomyia* compared.

From one female taken from foliage of jungle plants, May 13, 1914 (A. P. Dodd).

*Habitat*: Chindera (Tweed River), New South Wales.

*Type*: No. Hy 2489, Queensland Museum, Brisbane, the specimen on a tag; head and a caudal tibia on a slide.

## PARAHORISMENUS new genus.

*Female*:—Like *Horismenus* Walker but the antennæ with two ring-joints, the first large, distinct, the second moderately short yet longer than usual. Propodeum with a median carina bounded by sulci whose lateral margin is not distinctly carinated. Also in the mesal area a curved carina on each side of the meson but some distance from the median carina yet meeting

the latter at caudal end, the pair forming an oblate sphere whose axis is the median carina; this carina originates cephalad some distance from the median carina and is thin there and more or less broken. True lateral carina present but running oppositely, thus caudo-laterad; the latter carina is narrowly connected with the curved carina of the mesal area by a cross-carina at about cephalic third. Spiracle minute, round. Scutellum with a foveate median groove, terminating at apex as a carina. Parapsidal furrows complete. Pronotum transverse linear. Caudal tibial spur single, normal. Postmarginal vein twice the length of the very small stigmal. Axillæ only very slightly advanced. Abdomen (in death) with its dorsal surface applied to the dorsal surface of the thorax. Scutum shorter than the scutellum, wider than long.

**1. PARAHORISMENUS SPISSIPUNCTATUS** new species. Genotype.

*Female*:—Length, 1.70 mm.

Dark metallic blue, the thorax with a trace of coppery; proximal three tarsal joints white; fore wings deeply smoky from base distad nearly to apex of marginal vein, distad the infumation suffused, not clearly delimited; hind wings smoky for nearly proximal two thirds. Marginal vein about twice the length of the submarginal. Scape slender, longest; pedicel rather long, subequal to funicle 3; funicle 1 longest of the flagellum, nearly twice longer than wide, rather stout, slightly longer than 2; club 1 longer than 2, the latter with a distinct terminal spine. Caudal and intermediate tibia with stiff bristles dorsad. Abdomen flat, dorsal aspect rounded oval, segment 2 longest, occupying somewhat less than half the surface. Abdomen and propodeum glabrous, the head and thorax umbilicately punctate, the parapsides finely shagreened except along all margins. Parapsidal furrows foveate. Petiole very short, wider than long, glabrous. Hind coxa glabrous. Mandibles with at least two outer acute teeth. Thorax covered with rather thick black-brown pilosity. Punctures on head smaller and less dense.

From one female caught in jungle, May 3, 1914 (A. P. Dodd).

*Habitat*: Tweed Heads (Tweed River), New South Wales (*see below*).

*Type*: No. Hy 2490, Queensland Museum, Brisbane, the specimen on a tag; head and a caudal leg on a slide.

Also one female, Grafton (Clarence River), New South Wales, June 3, 1914 (A. P. Dodd).

**HORISMENELLA** new genus.

*Female*:—In my table of genera runs to *Pleurotropopscus* Girault but differs in having the postmarginal vein elongate; the lateral carina of propodeum is not V-shaped but entire and a short curved carina just mesad of spiracle originates laterad of the cephalic end of the lateral carina. The median groove of scutum is along distal two thirds or somewhat more. Caudal tibial spur long, stout and curved, longer than the first tarsal joint of caudal legs. Postmarginal vein over thrice the length of the stigmal, the latter subsessile; marginal vein over twice the length of the submarginal. Otherwise the same as originally described for the named genus. Segment 2 of abdomen occupying a little less than a fourth of the surface, over twice the length of 3; strigils absent. Three ring-joints; really runs to *Pleurotropomyia*.

**1. HORISMENELLA CLARIVIRIDIS** new species. Genotype.

*Female*:—Length, 1.90 mm.

Bright metallic green, the abdomen dark blue except segments 2 and 3; legs, scape and abdominal petiole silvery white, the coxæ and petiole suffused with orange. Fore wings with an obscure dusky spot in the center of the blade opposite the stigmal vein. Funicle 1 longest, 2 and 3 each shortening a little, 3 longer than the pedicel, over twice longer than wide, longer than club 1; club 2 somewhat shorter than the pedicel, with a distinct but not very long

terminal spine. Pedicel longer than wide. Frons broad, cheeks short, mandibles tridentate. Petiole of abdomen nearly as long as the hind coxæ. Segments 2 and 3 of abdomen smooth, naked, 4 and 5 each with two rows of minute setigerous punctures, 6 and 7 each with about five rows of them. Thorax coarsely scaly, axillæ finely so; caudo-mesal half of parapsides sunken (or the representative of the parapsidal furrow) and subglabrous and with a minute fovea a little cephalo-laterad of the middle of its mesocephalic margin; this fovea also somewhat before the caudal end of the parapsidal furrows and it gives origin to a very long and slender yellowish seta. Parapsidal furrows mere sutures, distinct, abbreviated caudad, curving off before pronotum, the latter glabrous and with a row of punctures along its cephalic margin; these punctures give rise to isolated, very long bristles. Propodeum glabrous. Postscutellum very much smoother than scutellum.

From two females caught by sweeping at 1,000 feet, forest, May 17, 1914 (A. P. Dodd).

*Habitat*: Upper Tweed River, New South Wales.

*Type*: No. Hy 2491, Queensland Museum, Brisbane, one of the specimens on a tag; head, fore legs and a hind tibia with type slide of *Omphalentedon longus* Girault.

## 2. HORISMENELLA VARICOXA new species.

*Female*:—Length, 1.68 mm.

Differs from the genotype in having the last two pairs of coxæ concolorous, the hind femur a little dusky above at proximal half, the abdominal petiole yellowish brown, the wings hyaline, the median groove of scutum somewhat shorter, funicle 3 is only somewhat longer than wide, subequal to the pedicel and to 2, somewhat shorter than 1 and the general coloration is less bright, darker. Compared with type of genotype. Scape metallic at tip above.

From two females caught in forest, June, 1914 (A. P. Dodd).

*Habitat*: Burnett Heads, Southern Queensland.

*Type*: No. Hy 2492, Queensland Museum, Brisbane, two females on a tag, two heads and a hind tibia on a slide.

The median carina in this genus is a little divided cephalad.

In the table of genera, *antea*, p. 153, it should be noted that *Peloroteloopsella* should be included with *Mestocharoides*, since there are no lateral carinæ on the propodeum; lateral sulci replace the carinæ. Same place, 153, line 6 from bottom *carinæ* should read *carina*. In *Horismenus antiopa*, the lateral and caudal margins of propodeum are strongly carinate, the reticulation of the thorax raised, segment 2 of abdomen glabrous.

## TRIBE PEDIOBIINI.

In the table of genera, *antea*, p. 156, last line of section I, *two* should read *true*; last line of section III, *nigriviridis* equals *nigriviridis* Girault.

## BÆOENTEDON new genus.

*Female*:—Form as in *Horismenoides* Girault. Antennæ inserted below the middle of the face, 6-jointed with two ring-joints, the club solid, one funicle joint. Parapsidal furrows not indicated. Scutellum simple. Abdomen short and broad, from dorsal aspect rounded, as wide as the thorax and somewhat shorter, the thorax convex. Venation as in the Omphalini, the stigmal vein very long, the marginal not quite as short as the submarginal. Pronotum not visible from above, the propodeum short, broad, apparently noncarinate, the spiracle minute. Abdomen sessile. Mandibles acute. Hind tibial spur normal.

*Male*:—Unknown.

**1. BÆOENTEDON PEGULICORNIS** new species. Genotype.

*Female*:—Length, 0.80 mm.

Dark metallic purple, the wings hyaline, the abdomen pale honey yellow, darker along distal half, there with several faintly indicated still darker and narrow cross-stripes. Distal half of tibiae, the antennae, the tarsi and hind legs beyond proximal half of femora white or yellowish white. Thorax coarsely polygonally reticulated, the lines not raised. Club conically produced at apex into a spine, conic-ovate, longer than the long pedicel, the funicle joint urnshaped, a little longer than wide, distinctly shorter than the pedicel. Scape slender. Ring-joints large and distinct, purple; pedicel purple at base.

Described from one female captured in jungle, December 31, 1911.

*Habitat*: Malanda, Queensland.

*Type*: No. *Hy* 2493, Queensland Museum, Brisbane, the specimen on a tag, the head on a slide with the type appendages of *Pseudacrias quadricarinatus* Girault.

## TRIBE TETRACAMPINI.

## GENUS TETRACAMPE Foerster.

**1. TETRACAMPE AUSTRALIENSIS** new species of Girault and A. P. Dodd.

*Female*:—Length, 1.50 mm.

Dark metallic green, the abdominal petiole, legs and antennal scape bright golden yellow, rest of antennae black. Fore wings hyaline; discal cilia not arranged in regular lines; marginal cilia not long; submarginal vein somewhat broken; marginal vein as long as submarginal, twice as long as postmarginal; stigmal vein with a small knob, short, one fifth as long as the marginal. Antennae inserted below middle of face; 12-jointed, 1 ring-joint, 6 funicle joints and a 3-jointed club; scape slender; pedicel larger than first funicle joint; funicle joints filiform, first a little the longest, two thirds longer than wide; club scarcely wider than funicle, as long as last two funicle joints united, the joints about subequal. Posterior tibiae with one apical spur; tarsi 5-jointed. Mesopleura without sutures. Pronotum rather large. Scutum with distinct parapsidal furrows. Scutellum with a rather faint cross-suture. Pronotum, scutum and scutellum with very fine polygonal scaly sculpture. Propodeum rather short, glabrous, with a median carina and several irregular lateral carinae. Abdominal petiole as long as the hind coxae; abdominal segments not excised at meson of caudal margin; suture between second and third segments deep; second segment longest, equal to one fifth of surface. Mandibles bidentate.

From one female caught by sweeping in forest, August 7, 1913 (A.A.G.).

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. *Hy* 2494, Queensland Museum, Brisbane, the specimen on a tag, the head and posterior legs on a slide.

## TETRACAMPOIDES new genus of A. P. Dodd.

*Female*:—Head normal; antennae inserted near the mouth border, 12-jointed with one ring-joint and a 3-jointed club; funicle joints wider than long. Pronotum distinctly separated; scutum with deep complete parapsidal furrows; scutellum simple; propodeum with a tooth laterad at the middle, not short, with a distinct median and fainter lateral carinae. Axillae not advanced. Marginal vein as long as the submarginal, many times length of stigmal, the postmarginal twice as long as the stigmal, the latter of moderate length. Hind tibiae with two apical spurs. Mandibles bidentate. Abdomen sessile, gently convex above and beneath, second segment occupying over half of surface. Resembling the Entedonini in many respects.\*

*Male*:—Not known.

\* The number of tarsal joints is not stated, but there are doubtless five.

**1. TETRACAMPOIDES SETOSUS** new species of A. P. Dodd. Genotype.

*Female*.—Length, 1.75 mm.

Dark metallic blue, the coxæ and femora concolorous, the scutellum and base of abdomen brighter, the tibiæ and tarsi white, the antennæ wholly black. Thorax with exceedingly fine scaly sculpture and long whitish pubescence, the propodeum quite smooth. Abdomen with second segment smooth, the rest with sculpture and pubescence like the thorax. Wings hyaline. Scape moderately slender, the pedicel not long but as long as first two funicle joints combined; flagellum somewhat clavate, the funicle joints fully twice as wide as long; club with a terminal nipple, the club joints all much wider than long.

Described from one female caught in jungle, February 5, 1914 (A. P. Dodd).

*Habitat*: Babinda, Queensland.

*Type*: No. Hy 2495, Queensland Museum, Brisbane, the female on a tag; head on a slide.

The middle lateral tooth on propodeum is really the acute caudo-lateral angle of that region.—A. A. Girault.

**PLATYTETRACAMPE** new genus.

*Male*.—Form flattened, the vertex flat, the face much inclined ventro-caudad, the antennæ inserted at the mouth border, capitate, 11-jointed without ring-joints, the club 3-jointed, the six funicle joints annular, the distal two stalked. Pronotum rather large, the scutum wider than long, without a trace of furrows. Marginal vein longer than the submarginal but not very long, the postmarginal one half the length of stigmal, the latter slender but rather short. Mandibles bidentate. Scutellum simple. Tarsi 4-jointed. Abdomen rounded subquadrate, flat, with a very short petiole, all the segments short, transverse. Spiracle of propodeum minute, round. Propodeum with a rather stout transverse carina at cephalic third (in reality the caudal margin of the sunken postscutellum which continues laterad across the lateral part of the propodeum cephalad of the spiracle), at the meson with two carinæ which are curved and wide apart, with a narrow, rather obscure sulcus in the place of the lateral carinæ and an oblique, complete carina just laterad of the spiracle. Hind femur swollen just before tip. Hind tibial spur single.

*Female*.—Not known.

**1. PLATYTETRACAMPE FUNICULUS** new species. Genotype.

*Male*.—Length, 0.90 mm.

Black, shining; tarsi except first joint of hind tarsus and the funicle silvery white. Fore wing yellowish under the marginal vein (margin to margin, the infumation suffused). Pedicel over three fourths the length of the funicle, the joints of the latter rapidly widening distad, 6 largest. Club a little longer than the pedicel. Scape not enlarged. Distal club joint with a short nipple. Whole body scaly reticulate.

From one male caught by sweeping in jungle, December 2, 1913 (A. P. Dodd).

*Habitat*: Kuranda, Queensland.

*Type*: No. Hy 2496, Queensland Museum, Brisbane, the specimen on a tag; head, pair of wings, middle legs and a hind leg on a slide.

## TRIBE OMPHALINI.

## GENUS EUDERUS Walker.

**1. EUDERUS MESTOR** (Walker). Female.

“Sp. 5. Eul. Mestor. Fem. *Viridis, antennæ nigræ, abdominis discus cupreus, pedes virides, tarsi albidī, alæ limpidæ.*

“*Viridis: oculi et ocelli rufi: antennæ nigræ; articuli 1<sup>us</sup> et 2<sup>us</sup> virides: abdominis discus cupreus: pedes virides; trochanteres piceī; genua fulva; tarsi albidī, apice piceī; protarsi fulvi, apice fusci: alæ limpidæ; squamulæ piceæ; nervi proalis fusci, metalis fulvi.* (Corp. long. lin. 1½; alar. lin. 1¾.)

“March; King George's Sound, Australia.

“*Fem.*—Corpus longum, angustum, nitens, scitissime squameum, parce hirtum: thorax fusiformis, parum convexus: prothorax bene determinatus, transversus, antice angustus: mesothoracis scutum longitudine paullo latius; parapsidum suturæ vix conspicuæ; scutellum breviovatum: metathorax sat magnus, transversus, lævis: petiolus brevissimus: abdomen longiovatum, læve, supra depressum, subtus basi carinatum, apice acuminatum, thorace paullo latius vix longius: pedes simplices, subæquales.”

## GENUS SECODES Girault.

## 1. SECODES CAPENSIS new species.

*Female*:—Length, 0.85 mm., excluding ovipositor.

Propodeum longer laterad. Postmarginal vein a little longer than the stigmal. Funicle joints wider than long. Abdomen ovate, a little longer than the thorax. See *antea*, p. 160. Taken in forest, December 27, 1912. *Antea*, p. 160, line 3, *tibiæ* should read *tarsi*.

## GENUS OMPHALOMORPHA Girault.

## 1. OMPHALOMORPHA FRATER new species.

*Female*:—Length, 1.25 mm.

Similar to *viridis* but the ovipositor and valves exerted for a third the length of the abdomen; the propodeum is as in *repercussa*.

From one female captured in forest.

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2497, Queensland Museum, Brisbane, the female on a tag, head on a slide.

## 2. OMPHALOMORPHA REPERCUSSA Girault.

The scutellum (from laterad) overhangs the propodeum, the latter shortening at the meson but the median carina is distinct and of some length.

## GENUS RHICNOPELTELLA Girault.

The abdomen is not depressed. Synonym: *Elachertetrastichus* Girault.

## 1. RHICNOPELTELLA ACUMINATA new species.

*Female*:—Length, 1 mm.

Like *consobrinus* Girault but slender, the abdomen conic-ovate, longer than the rest of the body. Tibiæ yellow. Antennæ wholly concolorous, the pedicel as long as the funicle, about four times longer than funicle 3; ring-joints equal, each about half the length of funicle 1 which is about half the length of funicle 2 which is nearly as long as 3. Postmarginal vein shorter than the stigmal. Third tooth of mandible distinctly shorter than the other two which are subequal.

From one female captured in forest, February 17, 1913.

*Habitat*: Seymour (Ingham), Queensland.

*Type*: No. Hy 2498, Queensland Museum, Brisbane, the specimen on a tag; head, hind tibia and fore wing on a slide.

## 2. RHICNOPELTELLA FLAVIPES Girault.

The scape is concolorous at distal third only, the pedicel wholly concolorous; rest of antenna more or less yellowish white. Type re-examined. The following new variety was reared from galls on Eucalyptus, October, 1913 at Gordonvale, Queensland.

## A. RHICNOPELTELLA FLAVIPES BINOTATA new variety.

*Female*:—Like the typical form in all details but all of the underside of the abdomen except at base, the tip above and a spot on each side just before the tip dull golden yellow.

*Types*: No. Hy 2499, Queensland Museum, Brisbane, two females on a tag.

**3. RHICNOPELTELLA MULTIFASCIATA** new species.

*Female*:—Length, 1.35 mm.

Dark coppery green, the wings hyaline, the legs pale golden yellow except the coxæ; antennæ concolorous with legs except scape above and the entire pedicel which are metallic green. Thus very much like *flavipes binotata* except the darker general color and that the entire abdomen is dull golden yellow crossed by five coppery green stripes, the first at base and longest (caudo-cephalad), the fifth near apex and more or less interrupted at the meson. Prepectus dull yellow. Otherwise the same. Both are very finely densely punctate. Funicles 1 and 2 subequal in length, 2 wider, both like ring-joints; funicle 3 distinctly shorter than the pedicel, much wider than long, thrice or more longer than 2.

From one female caught January 23, 1913 in forest.

*Habitat*: Townsville, Queensland.

*Type*: No. Hy 2500, Queensland Museum, Brisbane, the specimen on a tag, the head on a slide.

**4. (ELACHERTETRASTICHUS) RHICNOPELTELLA ÆNEIPES** (Girault).

Compared with type of *immaculatipennis*.

Differs from the genotype in having cephalic tibiæ wholly yellowish white, not concolorous just below knee for some distance. Club not shortened or enlarged and obliquely truncate as in *flavipes* but as in the genotype, *i.e.*, much longer than wide, distinctly longer than the funicle. There are four "ring-joints." Antennæ brown, scape and pedicel black or very dark metallic. Joint 7 of antennæ nearly a half shorter than 8.

**5. (ELACHERTETRASTICHUS) RHICNOPELTELLA HEGELI** new name.<sup>3</sup>

*Elachertetrastichus purpureus* Girault.

A distinct species, the four ring-joints of the antennæ abruptly separated from the two subequal funicle joints. Club as in *æneipes* but no longer than the funicle. Spot on hind tibia very obscure.

**6. RHICNOPELTELLA NUBILIPENNIS** new species.

*Female*:—Length, 1.75 mm.

Dark metallic green, the wings lightly infuscated from bend of submarginal vein distad to apex; legs golden yellow except coxæ and the hind femur. Antennæ fuscous, the scape beneath pale. Club not enlarged, conic-ovate, not quite as long as the funicle (including ring-joints). Three distinct subequal ring-joints, the fourth joint after pedicel also ring-like but distinctly larger than the three preceding, about a third the length of the next joint; last two joints of funicle (the two distinct funicle joints) unequal, the first quadrate, a little over half the length of the pedicel, the distal a little wider than long, barely shorter than the preceding. Pedicel elongate. Abdomen conic-ovate. Postmarginal vein distinct, shorter than the stigmal which is a little over half the length of the marginal. Same as other species in sculpture and allied with *filia*.

From many females from the National Museum, Victoria.

*Habitat*: Melbourne, Victoria.

*Types*: In the National Museum, Melbourne, four females on a card, a head on a slide.

The dorsal and ventral margins of cephalic femur more or less dusky. From galls on gum, March.

<sup>3</sup> G. W. F. Hegel.

## GENUS BRACHYCHRYSOCHARELLA Girault.

1. **BRACHYCHRYSOCHARELLA BELLA** new species.

*Female*:—Length, 0.95 mm.

Differs from *dubia* in having the front and middle femora black also and the hind tibia and middle one, the latter just below the knees only; also, the fore wing is distinctly narrower and more densely ciliate discally. From *globa* in having the antennæ all pale, the hind tibiæ concolorous and the distinctly narrower fore wing. Marginal vein much shorter than the submarginal. Mandibles bidentate. Fore wings with about nineteen lines of short discal cilia.

From one female captured by sweeping in forest, January 4, 1913.

*Habitat*: Capeville (Pentland), Queensland.

*Types*: No. Hy 2502, Queensland Museum, Brisbane, two females on a slide with an *Euryischia*.

## GENUS RHICNOPELTOMYIA Girault.

1. **RHICNOPELTOMYIA VOLTAIREI** new species.

*Female*:—Length, 1.50 mm.

Intense golden, the fore wings with an obscure blotch from apex of the stigmal vein. Caudal margin of pronotum very narrowly across meson and the entire scutum except extreme cephalo-lateral corner, dark metallic green, the funicle and club dusky black, the base of abdomen above with a rather large, rounded metallic blue spot on each side of meson, both connected across meson forming more or less of a cross-stripe; cephalic margin of propodeum narrowly metallic green. Abdomen with four (usually visible as three, the distal one fainter), narrow, complete, cross-stripes on middle, remote from base or apex, the distal three each curved shortly cephalad at meson, 2 and 3 close together, midway between 1 and 4. Tip of valves of ovipositor black. Thorax finely scaly, the propodeum very finely so, noncarinate, the scutum very coarsely scaly. Marginal fringes of fore wing short; postmarginal and stigmal veins more or less subequal. Caudal wings broad, with about ten lines of discal cilia where broadest. Scutellum with the usual long seta on each side a little distad of middle. Mandibles tridentate. Club well defined, with a distinct terminal spine which is nearly as long as the joint which bears it; pedicel stout, long, nearly two thirds longer than wide; funicle 2 somewhat longer than 1, somewhat shorter than the pedicel, stout, plainly longer than wide. Flagellum tapering.

From one female captured in forest, April 27, 1914.

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2503, Queensland Museum, Brisbane, the specimen on a slide with type of *Chrysocharomyia bicolorithorax*.

A second female same place, May 18, 1914.

2. **RHICNOPELTOMYIA DOUGLASSI** Girault.

A female at Gordonvale, Queensland, April, 1913. The head is yellow below antennæ; a long narrow sclerite between the latter and up the face and which is narrowly margined with yellow; also a convex suture just beneath vertex on the face, which is also yellow. The third tooth of mandible is not broad, merely shorter. The ventral half of abdomen is more or less yellowish and faint cross-stripes are visible above. Postmarginal vein a little longer than the stigmal. The type body has been remounted onto the type slide.

The type has been compared with that of *Achrysocharella olympus* Girault and differs from the latter in having the propodeum short and glabrous at meson and the fore wings are smaller. In *olympus*, the propodeum is distinctly, finely reticulated.



## GENUS SECODELLA Girault.

The submarginal vein in this genus is broken (statements to contrary notwithstanding).  
Removed from Elachertini.

## 1. SECODELLA DIVERSIPENNIS new species.

*Female*:—Length, about 1.75 mm.

Differs from all the species in having the postmarginal vein a little shorter than the stigmal and the lines of ciliation on the fore wing are less distinct. Dark metallic blue, the abdomen dark æneous green, the abdomen ventrad suffused with brownish. Scape yellowish brown, the proximal three tarsal joints whitish. Funicle joints all somewhat wider than long, the last two a little the longest; pedicel longer than funicle 1.

From one female captured by sweeping in forest, February 16, 1912 (A. M. Lea and A.A.G.).

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2505, Queensland Museum, Brisbane, the specimen on a tag; head and a pair of wings on a slide.

## 2. SECODELLA PULCHRA ACUMINATA new variety.

*Female*:—Length, 2.75 mm., excluding ovipositor which is extruded for a third the length of the abdomen.

Like *pulchra* Girault but the abdomen still longer. In both there is a distinct stylus from apex of the abdomen which is not quite as long as the extruded portion of the ovipositor. In *lineata*, this stylus is very short and the ovipositor valves are very slightly extruded (same in *rufiscapus*, *diversipennis* and *ænea*).

From one female captured November 19, 1913 (H. Hacker).

*Habitat*: Brisbane, Queensland.

*Type*: No. Hy 2506, Queensland Museum, Brisbane, the specimen on a tag.

## 3. SECODELLA ZENEA new species of Girault and A. P. Dodd.

*Female*:—Length, 2.60 mm.

Like *lineata* Girault but the first joint of the funicle is longest, one third longer than wide, 2-4 gradually shortening, 4 plainly wider than long. Abdomen a little longer than the head and thorax united.

From one female captured by sweeping in forest, July 24, 1913 (A.A.G.).

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2507, Queensland Museum, Brisbane, the specimen on a tag, the head on a slide.

## OMPHALOMORPHELLA new genus of Girault and A. P. Dodd.

Like *Omphalomorpha* but the mandibles bidentate, the fore wings densely and normally ciliate, the ring-joints large and distinct, the postmarginal vein very long and slender, somewhat longer than the marginal, over twice the length of the long stigmal. Pedicel elongate. Marginal vein somewhat over half the length of the submarginal which is distinctly broken. Propodeum with a ridge-like median carina. Abdomen depressed, from dorsal aspect rounded-ovate. The male is the same but the abdomen with straight lateral margins, longer than wide.

## 1. OMPHALOMORPHELLA AURIPES Girault. Male, female. Genotype.

*Length*, 2.70 mm.

Bright æneous green, the wings lightly stained throughout, the coxæ concolorous, the legs rich golden yellow, also the scape except above at tip; rest of antenna black. Pedicel nearly as long as the next four joints taken together, about twice the length of either joint 3 or 4 of funicle which are largest but distinctly wider than long; scape slender. Hind femur

compressed. Head and thorax very densely, finely polygonally scaly or shagreened, the thorax with some scattered thimble punctures. A line of foveæ across cephalic edge of propodeum, the latter shining but with faint scale-like sculpture which is not quite as distinct as that of the abdomen.

*Habitat*: Melbourne, Victoria. Galls on *Eucalyptus*. Four males, six females, September 11.<sup>4</sup>

*Type*: In the National Museum, Melbourne, two pairs on a card, a slide with a male antenna and female head, wings and hind legs.

## 2. OMPHALOMORPHELLA BICOLOR new species.

*Female*:—Length, 0.80 mm.

Antennæ inserted a little below the middle of the face, 11-jointed with two ring-joints, the club 3-jointed and with a distinct terminal spine, the flagellum rather strongly clavate, the second ring-joint very large, nearly as large as funicle 1 yet distinctly shorter; first ring-joint very short. Mandibles with two equal acute teeth, small. Scutellum simple. Propodeum with a median carina but no others, short at meson, finely scaly. Thorax polygonally reticulated, the lines indented. Marginal vein longer than in the genotype, a little longer than the submarginal (not distinctly shorter as in *auripes*), distinctly longer than the elongate postmarginal which is twice the length of the stigmal. Hind tibial spur single, small.

Black, the wings subhyaline, the abdomen yellowish brown, pale yellow across base and with about five obscure dusky cross-stripes. Legs concolorous with abdomen, the coxæ dark, subconcolorous. Tibiæ and tarsi pallid, also the scape; rest of antenna black. Funicles 1 and 2 wider than long, small, 2 a little longer; 3 and 4 each abruptly enlarging, 4 large and globular, yet a little shorter than the pedicel; 3 distinctly wider than long. Funicle 3 twice the size of 1.

From one female captured in jungle, November 15, 1913 (A. P. Dodd).

*Habitat*: Harvey's Creek (Cairns), Queensland.

*Type*: No. Hy 2508, Queensland Museum, Brisbane, the specimen on a tag; head and hind tibiæ on a slide.

### GENUS OMPHALOMOMYIA Girault.

The genus bears four ring-joints.

## 1. OMPHALOMOMYIA LIVIDICAPUT Girault.

A female, forest, Gordonvale, Queensland, May 8, 1914. Second ring-joint of the four very short, the others rather large. Funicle 3 at least half the length of the long pedicel, 1 somewhat longer than wide. In this second female the parapsides were not washed with purple. Propodeum scaly, with a carina just laterad of the spiracle. Wings subhyaline. Type re-examined but not the type antennæ.

### GENUS CHRYSOCHARIS Foerster.

## 1. CHRYSOCHARIS DUMASI new species.

*Female*:—Length, about 1.30 mm.

Very similar to *Achrysocharoides sarcophagus* Girault except that the scutellum is simple and the hind femur and proximal half of hind tibia are concolorous with the body, the fore femur and tibia slightly washed with dusky. The scape is wholly concolorous and as deeply colored as the rest of the antenna. Hind wing short, acutely pointed. Marginal fringes of the fore wing short. Funicle 3 barely longer than the pedicel, a little the shortest, 1 broad, a little the longest of the funicle; club 2-jointed. Hind wing where widest (apex of

<sup>4</sup> Labels indefinite. The numbers were 64 and 7. The dates were 9.11 and 4.11 which may mean November 4 and 9, September 11 and April 11 or September and April, 1911.

venation) with about seven lines of discal cilia, the caudal marginal cilia much longer than the marginal cilia of the fore wing but much shorter than the greatest width of the hind wing. Mandibles bidentate but a third minute tooth is indicated within but is much shorter. Post-marginal vein a little shorter than stigmal. One ring-joint. Parapsidal furrows complete.

From one female captured by sweeping in forest, January 7, 1913.

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2509, Queensland Museum, Brisbane, the specimen on a slide.

Dedicated to Alexandre Dumas, père.

#### CHRYSOCHARELLA nomen nudum.

This genus heretofore has been poorly characterised. Its antennæ are rather short, subcompressed, clavate, the club casually appearing 4-jointed, since the second funicle joint is more or less closely attached to the club. In the genotype, the parapsidal furrows are only cephalad, the axillæ advanced but not very much so. The shape of the antennal flagellum is the characteristic of the genus. See *antea*, p. 169. Later, I find the group the same as *Achrysocharella* through connecting forms. See *Achrysocharella*.

#### 1. CHRYSOCHARELLA PULCHRA new species. Referred to *Neochrysocharella* Dodd.

Length, about 1 mm. Abdomen finely scaly like the thorax. Fore wings broad, pyriform. *Antea*, p. 169. The parapsidal furrows are distinct only for a short distance cephalad. Type re-examined.

Described from one female captured July 14, 1912. Type specimen on a tag, the head on a slide.

#### 2. ACHRYSOCHARELLA NIVEIPES new species.

*Female*:—Length, 0.80 mm.

Dark metallic green, the antennæ and legs silvery white; last club joint dusky; fore wing with an obscure stain from the stigmal knob. Coxæ white, the hind one partly metallic outwardly. Terminal spur of club distinct; funicle joint 1 shorter than the pedicel; next two joints wider than long. Body uniformly sculptured, scaly. Mandibles bidentate.

*Male*:—Unknown.

Described from two females captured in forest, November 1, 1913 and from a window, December 25, 1913.

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2510, Queensland Museum, Brisbane, the first specimen on a slide.

#### 3. ACHRYSOCHARELLA ASHMEADI new species.

*Female*:—Length, 0.75 mm.

Similar in most respects to *niveipes*, but the mark on the fore wing is more distinct, being a suffused dusky cross-stripe from the stigmal vein and distal part of marginal (in *niveipes* an obscure patch from the stigmal vein), those wings are distinctly narrower with longer marginal fringes (about 14 lines of discal cilia where broadest, the longest marginal cilia nearly a third of the greatest width; in *niveipes* about 19 lines, the longest marginal cilia about a fourth the greatest width). The funicle joint 1 is subquadrate. Very distinct from *Neochrysocharella fasciipennis* which bears a distinct wing marking, the fore wings broad, with about 30 lines of discal cilia, the marginal cilia short, not a ninth of the greatest wing width. Besides, the legs in that species are distinctly colored, also the antennæ. The hind wings in *fasciipennis* are twice or more the size of those in *ashmeadi*. Mandibles bidentate.

From one female captured in forest, January 7, 1914.

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2511, Queensland Museum, Brisbane, the specimen on a slide.

**4. ACHRYSOCHARELLA ALBIFEMUR** new species.

*Female*:—Length, 1 mm.

Dark aeneous green, the wings hyaline, the legs and antennæ white except the coxæ. Funicle 1 cupshaped, the club compressed, with a distinct nipple. Differs from *niveipes* Girault in having the funicle joint 1 cupshaped, longer than wide, not somewhat wider than long as in that species; also the hyaline wings which bear little or no discal ciliation, appearing quite naked. Mandibles bidentate. Marginal fringes normal.

From one female caught by sweeping in forest, January 4, 1913.

*Habitat*: Capeville (Pentland), Queensland.

*Type*: No. Hy 2512, Queensland Museum, Brisbane, the specimen on a slide.

<sup>s</sup> **5. CHRYSOCHARELLA FASCIATIPENNIS** Girault is referred to

*Neochrysocharella* Dodd.

GENUS ACHRYSOCHAROIDES Girault.

The scutellum in this genus is simple or practically so.

**1. ACHRYSOCHAROIDES SARCOPHAGUS** (Girault).

This species is associated with *Asympiesiella nelsonensis* Girault and *Mestocharoides cyaneus* (Girault) in galls on a forest bush. Postmarginal vein a third longer than the stigmal. Marginal cilia of fore wing short. Eyes pubescent. Body polygonally reticulated, the vertex nearly smooth. Distal club joint with a terminal spine. Propodeum smooth, noncarinate, the spiracle small. Length, 1.35 mm. December.

“Several specimens reared in February with *Asympiesiella nelsonensis*. Hyperparasite. The scape is white. The conspicuous fovea mentioned as being on the scutellum is an irregular circular depression formed of five contiguous punctures. There is a similar depression formed by three punctures at distal two thirds of scutum and directly cephalad of the depression on the scutellum and in a line with it.”—A. P. Dodd.

The depression on scutellum is nearer to the meson than the isolated seta caudad.

**1. ACHRYSOCHAROIDES PULCHELLUS** new species.

*Female*:—Length, 0.65 mm.

Scutellum simple; stigmal vein as long as the postmarginal. Wings hyaline. Brilliant metallic green, the clypeal region, scape, legs, all except dorsal part of pedicel, sides of thorax (except centrally) and abdomen, lemon yellow, the abdomen at distal half with more or less distinct cross-stripes of metallic green (dorsad). Thorax polygonally reticulated, the lines not raised. Mandibles tridentate, the teeth acute. Funicle and club black; funicle 1 a little the longest of the three, one and two thirds times longer than its width, longer than the pedicel. Second club joint terminating in a long spine, the club joints nearly as long as those of the funicle. Parapsidal furrows complete.

*Male*:—Unknown.

Described from one female captured by sweeping in the forest, July 1, 1913 (A.P.D.).

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2513, Queensland Museum, Brisbane, the foregoing female on a tag, the head on a slide.

<sup>s</sup> See a few pages beyond for other species.

## GENUS ACHRYSOCHARIS Girault.

Differs from *Closterocerus* Westwood in having filiform antennæ; funicle 2-jointed, club 3-jointed; wings usually hyaline. Similar to *Chrysocharis* Foerster but the postmarginal vein slightly shorter than the stigmal and the club is 3-jointed. Third club joint terminating in a spine-like seta; pedicel subequal to or longer than the moderately long cylindrical funicle joints, the single ring-joint minute. Parapsidal furrows distinct only for cephalic two thirds, sometimes complete. Propodeum very short, its spiracle minute, round, the carinæ absent. Yellow marked with brilliant metallic green or all green. Abdomen long conic-ovate, pointed.

**1. ACHRYSOCHARIS MAGNIFICA** Girault. Female. Genotype.

Length, 1.75 mm.

Pale cadmium yellow marked with deep metallic green as follows:—Head except face ventrad of the antennal bulbs; pronotum, all of mesoscutum except latero-caudal halves of each parapside, base of abdomen in the dorsal aspect, the propodeum except laterad, a narrow line down the median line of the scutellum for about proximal two thirds and the cephalic third of the axillæ. A dark round spot dorsal aspect on each side of the abdomen about the middle, the space between them darkened (across the meson). Tip of abdomen dusky. Scape pale, the antennæ yellow. Legs whitish, including the coxæ. Body densely polygonally reticulated, the mesoscutum more roughly, being almost punctate. A more or less obscure brownish area laterad of the scutellum, cephalad of propodeal spiracle. Pedicel subequal in length to proximal funicle joint, proximal club joint distinctly longer than wide. Tip of ovipositor valves black.

Captured December 3, 1912, Gordonvale, Queensland.

*Type*: A female on a tag (minus head).

Proximal club joint distinctly longer than wide, not as originally stated. For the variety *varicolor*, see later.

**2. ACHRYSOCHARIS PULCHRA** Girault.

Length, 1.90 mm.

Like the typical species but the metallic green on the scutellum does not form a straight line down the median line but is much broader and ovate in shape, variable in size; the metallic green stripe across the base of abdomen is longer and the tip of the abdomen dark metallic. Moreover, the pedicel is longer, longer than the proximal funicle joint, the proximal club joint shorter but still longer than wide. Same color pattern as *magnifica*. Hind wings with about 10 lines of discal cilia, broad.

Captured with *magnifica*.

*Habitat*: Gordonvale (Cairns), Queensland.

*Types*: Two females on tags.

**3. ACHRYSOCHARIS GRANDIS** Girault. Female.

Length, 2 mm.

Like *pulchra* but whole thorax metallic green; abdomen only slightly so at extreme tip; somewhat distad of middle there is a round dot near each lateral margin. Like the other two species. Fore wings very broad, pyriform, the apex subtruncate but not differing from those of the others.

Captured September 3, 1912.

The metallic green median line of scutellum is as in the genotype and is outlined by being shiny and coarsely scaly, the rest of the scutellum opaque and nearly smooth.

*Type*: A female on a slide.

**4. ACHRYSOCHARIS MACULATIPENNIS** Girault.

Length, 1.20 mm.

Wholly metallic green and punctate including most of the abdomen; propodeum blue; legs white, the coxæ darker; antennæ dusky yellowish, pedicel over twice the length of funicle 1, which is subglobose; wings hyaline but in the fore wing there is a subelliptical stained area from the knob of the stigmal vein. Like the other species but with no yellow on the body and the abdomen shorter, wings less broad, more rounded at apex and moderately coarsely ciliated. The stigmal vein is longer. Posterior femur more or less dusky. Second funicle joint nearly twice the size of first but shorter than the pedicel which is long and obconic.

Captured September 3, 1913.

*Type*: A female with type of *grandis*.

**5. ACHRYSOCHARIS BIFASCIATUS** Girault.

Length, 0.85 mm.

Golden yellow; pronotum and cephalic half of scutum, metallic green; propodeum, a spot in center of scutellum, one across apex of each axilla, a smaller, round dot on each axilla caudad of middle, near the scutellum, dusky, while two adjacent stripes across about the middle of the abdomen, black; apex of each parapside metallic green; tips of ovipositor valves black; fore wing with an obscure broad clouded stripe across it from about the stigmal vein. First funicle joint subequal to the pedicel, funicle 2 longest of the flagellum, the first club not much shorter than it.

Captured May 11, 1913.

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: A female on a slide.

**6. ACHRYSOCHARIS LEIBNITZI** Girault.

Length, 0.85 mm.

Like *Closterocerus saintpierrei* but at once distinguished because the antennæ are not compressed fusiform, the legs are white except blackish coxæ; wings unifasciate, the fascia only about half complete (from stigmal knob). Pedicel longer than any of the following joints, those of funicle ovate. Antennæ black. Mandibles tridentate.

*Type*: A female on a slide.

**7. ACHRYSOCHARIS TRIFASCIATA** Girault.

One female, Cooktown, Queensland, forest, March 1, 1914 (A. P. Dodd); a female, Gordonvale, Queensland, April 9, 1914.

**8. ACHRYSOCHARIS QUINQUEDENTATA** new species.

*Female*:—Length, 0.90 mm.

Dark metallic blue, the legs (except caudal coxæ and femora), scape and pedicel white, rest of antennæ dusky pallid. Thorax scaly reticulate, the propodeum glabrous, noncarinate; abdomen with a short, white petiole. Fore wings slender, hyaline, unique in that they bear a conspicuous, rather broad black stripe across from about *proximal half* of marginal vein and the marginal cilia are about a third of the greatest wing width. Distal tarsal joint subelongate. Mandibles with three large, somewhat spreading, outer teeth and two minute inner ones. Flagellum tapering, the two funicle joints subequal, longest, distinctly longer than the stout pedicel; first club joint barely shorter than the preceding joint, 3 subequal to the pedicel, with a distinct, rather long terminal spine. Flagellum with scattered

long hairs from pustules (in a whorl proximad on funicle 1). Caudal wings acuminate, with only about four lines of sparse discal cilia, the caudal marginal cilia nearly as long as those of the fore wing. Parapsidal furrows complete. Funicle 1 somewhat over twice longer than wide.

From one female captured in jungle, June 3, 1914.

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2514, Queensland Museum, Brisbane, the specimen on a slide.

#### 9. *ACHRYSOCHARIS CLARISCUTELLUM OCCIDENTALIS* new variety.

*Female*:—Length, 1 mm.

Similar to the typical form with the type of which I have compared it but smaller, the scutellum less sculptured, the sculpture distinct only around the lateral margins narrowly (not broadly distinct there as in the type form), the fore wings bear about six lines less of discal cilia and the two funicle joints are shorter, only slightly longer than wide. Otherwise the same. In both forms, the scape is white for a little over proximal half.

From one female captured in forest, April 14, 1914 (A. P. Dodd).

*Habitat*: Cloncurry, Queensland.

*Type*: No. Hy 2515, Queensland Museum, Brisbane, the specimen on a slide.

#### 10. *ACHRYSOCHARIS ATRIPES* new species.

*Female*:—Length, 1.25 mm.

Very similar to the type specimen of *nigripes* but differing markedly in the wings as follows: The fore wings are slenderer, their discal ciliation less dense (only about 17 lines across the widest part; in *nigripes* about double that number), the stigmal vein shorter; the hind wings are acutely pointed, obtusely so in *nigripes*. The cephalic tibia is yellowish at distal half. Marginal vein longer than the submarginal in both species. The antennæ in *atripes* are somewhat more compact than in *nigripes*. Abdomen conic-ovate, longer than the rest of the body. Scape curved, all of antenna concolorous, the mandibles tridentate.

*Male*:—Unknown.

Described from one female captured by sweeping in forest, December 4, 1913.

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 3459, Queensland Museum, Brisbane, the above specimen on a slide.

#### 11. *ACHRYSOCHARIS VARICOLOR* Girault.

*Achrysocharis magnifica varicolor* Girault.

*Female*:—Length, 1.75 mm. Abdomen pointed conic, longer than the rest of the body.

Like *magnifica* Girault but the scutellum and axillæ without metallic green, also the propodeum. Extreme tip of abdomen slightly colored and the base of abdomen with a narrow cross-stripe of metallic (a half or more shorter than in *pulchra* for instance, or in *magnifica*). The general coloration is very pale yellow.

*Male*:—Unknown.

Described from four females reared from cecidomyiid galls on *Careya australis*, December, 1912 (A. P. Dodd).

*Habitat*: Gordonvale (Cairns), Queensland.

*Types*: No. Hy 3459, Queensland Museum, Brisbane, three of the foregoing females on a tag together.

**12. ACHRYSOCHARIS MAYRI** new species.

*Female*:—Length, 1.20 mm.

Like *magnifica* but smaller and the axillæ and the propodeum (except at immediate meson) are yellow; the meson of scutellum is metallic only to middle from base and the tip of the abdomen is somewhat more broadly metallic but not as much as with *pulchra*. Funicle 2 longer than 1 which is subequal to the pedicel. Mandibles with a weak third tooth. Hind wings with a half dozen lines of discal cilia where widest. Fore wings subtruncate at apex. Scutum roughly scaly. Parapsidal furrows about half complete. Green stripe across base of abdomen distinctly abbreviated laterad. Two marginal spots of abdomen more obscurely joined.

From one female labelled "10.10.13. Sweeping forest. G. F. Hill."

*Habitat*: Port Darwin, Northern Territory.

*Type*: No. Hy 2516, Queensland Museum, Brisbane, the specimen on a slide.

Dedicated to Gustav Mayr.

**13. ACHRYSOCHARIS NOVIMACULATIPENNIS** new species.

*Female*:—Length, 0.80 mm.

Exactly similar to *maculatipennis* except that the spot on the fore wing extends all the way across the blade and all the femora are dusky, also the tibiæ just below the knees. The first club joint is a little shorter while the second funicle joint is subquadrate. Mandibles tridentate, the third tooth much shorter than the other two.

From one female captured by sweeping edges of jungle, January 15, 1914 (A. P. Dodd).

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2517, Queensland Museum, Brisbane, the specimen on a slide.

This species differs from *Achrysocharella dubia* Girault in having the cross-stripe of fore wing uniform, not accented under the stigmal vein and the fore wings are narrower.

**14. ACHRYSOCHARIS ZAOMMOMORPHA** new species.

*Female*:—Length, 1.80 mm.

With the habitus of *Zaommomyiella*. Dark metallic blue green, the abdomen dull brown except within broadly across base, the wings hyaline, the legs (except coxæ) and scape, pallid dusky. Rest of antenna black. Pedicel longer than any of the following joints. Funicle 1 shortest of the flagellum (except distal club joint), about half the length of the pedicel, longer than wide; funicle 2 and club 1 subequal, much longer than wide, each a fourth shorter than the pedicel. Club 3 with its body conic-ovate and subequal in length to the terminal spine which is prominent. Scape dusky toward tip. Mandibles short, tridentate, the two inner teeth paired, shallowly separated, the outer tooth stouter and deeply, broadly separated from the others. Parapsidal furrows complete. Pronotum mesad glabrous rather broadly. Scutum coarsely reticulated, the lines raised; scutellum finer, mesad with the lines longitudinal, there the polygons elongate. Propodeum subglabrous, with a short neck which is brown and several irregular carinæ along the meson (a pair of separated median carinæ and a half carina from caudad laterad of these, apparently). Apex of scutellum mesad smooth. Postmarginal vein longer than the short stigmal, the marginal very long, the fore wings very broad. Abdomen conic-ovate, longer than the rest of the body, its proximal fifth dark metallic green. Axillæ barely advanced. Caudal-mesal corner of each parapside glabrous broadly. Propodeum with a semicircular half lateral carina from caudad and a complete sulcus just laterad of spiracle.



Allied with *grandis* but the abdomen is much darker and differently colored, the postmarginal vein is longer than the stigmal, the terminal spine of antennæ is longer, the fore wings more rounded at apex, the head wholly concolorous.

From two females captured by sweeping virgin jungle, December 31, 1911.

*Habitat*: Malanda, Queensland.

*Type*: No. Hy 2518, Queensland Museum, Brisbane, one of the specimens on a tag, the head on a slide.

#### 15. *ACHRYSOCHARIS LONGUS* new species.

*Female*:—Length, 1.65 mm. With the habitus of *Zaomomyiella*. Characterized by having the abdomen conical, somewhat longer than the rest of the body.

Dark brassy green, the abdomen very dark blue, lighter at base, the wings hyaline; knees, tibiæ and tarsi and the terminal spine of club, white. Parapsidal furrows curving off laterad before reaching pronotum. Mandibles with three acute teeth. First ring-joint white. Pedicel subequal to funicle 1 which is a little longer than 2, the latter oval, a little longer than wide; terminal spine of club as long as club 3. Scape wholly black, also distal tarsal joint. Whole body finely, densely scaly. Propodeum without true carinæ, short at the meson. Postmarginal vein a little shorter than the stigmal, the marginal very long. Fore wings broad, subtruncate at apex.

From one female caught in a mangrove swamp, May 14, 1914 (A. P. Dodd).

*Habitat*: Chindera (Tweed River), New South Wales.

*Type*: No. Hy 2519, Queensland Museum, Brisbane, the specimen on a tag, the head on a slide.

#### GENUS *ACHRYSOCHARELLA* Girault.

The species grouped under the naked name *Chrysocharella* belong here.

#### 1. *ACHRYSOCHARELLA ZENEA* Girault.

Genotype of *Neochrysocharella* described later. Preoccupied by *Chrysocharella ænea*. *A. ænea* is *A. ænella* new name.

#### 2. *ACHRYSOCHARELLA PULCHRELLA* new species.

*Female*:—Length, 2.10 mm. Long, the abdomen nearly twice the length of the thorax. Probably referable to *Neochrysocharella*.

Very similar to *Achrysocharis pulchra* Girault but the scutellum is all metallic green except the lateral and distal margins and only the caudal third of each parapside is orange yellow. Also the dorsal aspect of each axilla is metallic green and the central spot on dorsal abdomen forms a second cross-stripe (in *pulchra* and *magnifica* the spot is not large and the stripe proximad of it more obscure but it seems to be present constantly). Apex of abdomen more broadly black or dark metallic (about distal fifth). Propodeum dark metallic green. Legs and scape white. A rather broad dark metallic stripe down venter of abdomen on each side of median line and there are various metallic markings on thoracic venter. Scutum coarsely scaly, scutellum finely, longitudinally lineolated, propodeum smooth, noncarinate, scaly laterad of spiracle. Axillæ advanced. Parapsidal furrows half complete from cephalo-lateral angle of scutum. Mandibles bidentate. Distal third of scape and flagellum dusky black. Pedicel slightly longer than funicle 2 which is longest of the funicle and club, nearing twice longer than wide. Club 1 somewhat longer than funicle 1, all club joints longer than wide. Terminal spine distinct.

From one female caught in forest uplands, May 3, 1914 (A. P. Dodd).

*Habitat*: Tweed Heads (Tweed River), New South Wales.

*Type*: No. Hy 2520, Queensland Museum, Brisbane, the female on a tag; head on a slide with type *Achrysocharis quinquedentatus* Girault.

**3. ACHRYSOCHARELLA MACKAYENSIS** new species.

*Female*:—Length, 0.80 mm.

Æneous green, bright, the wings hyaline, the legs white except coxæ which are more or less metallic; antennæ dusky yellow, the funicle joints quadrate, 1 a little longer, the pedicel a little longer than funicle 1; terminal spine of club distinct. Mandibles tridentate. Pedicel dusky, the scape white. Closest to *olympus* but the antennæ are lighter in color, the funicle joints distinctly shorter, the postmarginal vein is as long as the stigmal (distinctly shorter in *olympus*) and the fore wings are distinctly smaller. Propodeum without a median carina in both species.

*Male*:—Not known.

Described from one female taken by sweeping lantana and other vegetation in a field near town, October 21, 1911.

*Habitat*: Mackay, Queensland.

*Type*: No. Hy 2521, Queensland Museum, Brisbane, the above specimen on a tag, the head on a slide.

**4. ACHRYSOCHARELLA QUINQUEFASCIATA** new species.

*Female*:—Length, 1.10 mm.

Dark æneous, the wings hyaline, the legs and abdomen pale yellow, the latter with about five brownish black stripes across between base and apex, the latter also dusky. Postmarginal vein somewhat longer than the stigmal, long. Thorax finely, polygonally lined. Abdomen longer than the rest of the body, conic-ovate. Hind coxa metallic laterad. Mandibles long and slender, as in *Paromphale flavicarpus*. Marginal vein somewhat longer than the submarginal. Fore wing where widest with about 20 lines of discal cilia. Scape and pedicel pale, the latter somewhat dusky above; rest of antenna sooty. Funicle 1 largest, longest and widest, distinctly longer than the pedicel, about one and a half times longer than wide; pedicel next longest of the flagellum, a little wider than funicle 1, a little longer than funicle 2, which is a little longer than club 1; the latter a fourth longer than wide and subequal to club 2; terminal spine distinct.

*Male*:—Not known.

Described from one female taken by sweeping in jungle (500 feet), February 5, 1912.

*Habitat*: Normanby (Cooktown), Queensland.

*Type*: No. Hy 2522, Queensland Museum, Brisbane, the fore-described female on a slide.

**5. ACHRYSOCHARELLA AURICORPUS** new species of Girault and A. P. Dodd.

*Female*:—Length, 0.85 mm.

Deep golden yellow, the wings hyaline, the body unmarked save extreme tip of abdomen and caudal margin of propodeum at meson; legs and venation pale. Mandibles tridentate. Antennæ dusky pallid, the terminal spur distinct, the second funicle joint quadrate, somewhat shorter than the first.

*Male*:—Not known.

Described from one female captured by sweeping in forest, December 10, 1913 (A.A.G.).

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2523, Queensland Museum, Brisbane, the above specimen on a slide.

**6. ACHRYSOCHARELLA MULTIDENTATA** new species.

*Female*:—Length, 1.15 mm. Slender. Characterized by bearing 5-dentate mandibles, the three inner teeth small.

Orange yellow, the vertex and proximal third of abdomen dark metallic blue; rest of abdomen except a small whitish area across just before apex, metallic coppery. Legs and scape orange yellow; rest of antennæ black. Dorsal thorax washed with metallic cyanous,

the scutellum and postscutellum metallic cyaneus. Scutum with four long, black bristles, one in each corner, the scutellum with two, one on each side near lateral margin about center from base. Thorax coarsely scaly reticulate. Fore wings hyaline but with a distinct, broad, blackish stripe across from a little over distal third of marginal vein and the whole of the proximal side of the stigmal. Propodeum glabrous, washed with metallic blue, without carinæ. Abdomen with a short yellow petiole, slender, acute at apex, somewhat longer than the thorax. Postmarginal vein slightly shorter than the stigmal. Marginal fringes of fore wing where longest a little less than a fourth the greatest wing width. Marginal vein along cephalic margin with long, slender bristles. Cheeks short but distinct. Flagellum tapering, the funicle joints stout, somewhat longer than wide, 2 a little longer than 1; terminal spine distinct, rather long. Pedicel a little shorter than funicle 1. Axillæ not advanced. Caudal marginal cilia of hind wing somewhat shorter than the greatest width of the blade yet moderate in length. Fore wings with about 20, caudal wings with about 6 lines of discal cilia where widest. Club joints 1 and 2 each twice longer than wide, longest of the flagellum.

From one female captured by sweeping in jungle, May 30, 1914.

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2524, Queensland Museum, Brisbane, the specimen on a tag.

#### 7. *ACHRYSOCHARELLA GLABRISCUTELLUM* new species.

*Female*:—Length, 1.30 mm.

Like *Achrysocharis clariscutellum occidentalis* but larger and the antennæ and wings as in the typical form of that variety. Venation yellow; the stigmal vein black and with a fuscous dash from its apex. Pedicel very long, as long as the funicle. Agrees in every particular with *clariscutellum clariscutellum* except the sculpture of the scutellum and the generic character. Scutum finely punctate. Compared with type of *clariscutellum clariscutellum* whose antennæ bear but one ring-joint. Legs white except coxæ. Probably a variety of *clariscutellum* (if so that species belongs here).

From one female caught in forest, June, 1914 (A. P. Dodd).

*Habitat*: Burnett Heads, Southern Queensland.

*Type*: No. Hy 2525, Queensland Museum, Brisbane, the specimen on a slide.

#### 8. *ACHRYSOCHARELLA VARICLAVA* new species.

*Female*:—Length, 0.80 mm.

Differing from *dubia* in the following particulars only: The distal two club joints are black (the distal joint in *dubia*), the posterior wings are narrower, with only five lines of discal cilia where widest (seven in *dubia*) and the fore wings are more slender, about 20 lines of cilia where widest (about 26 in *dubia*). Also the caudal coxæ are entirely concolorous and the caudal femur bears a distinct blackish blotch dorsad at proximal third. Compared with type of *dubia*.

From one female caught in forest, May 12, 1914 (A. P. Dodd).

*Habitat*: Chindera, New South Wales.

*Type*: No. Hy 2526, Queensland Museum, Brisbane, the specimen on a slide.

*Chrysocharella anea* differs from *Chrysocharella consobrinus* in having the first two pairs of tibiae yellowish white, the scape blackish only at tip and otherwise as described. Cephalic tibiae yellow in *consobrinus*, the middle tibiae so at distal half. In its original description, line 4, *more yellowish* should read *less yellowish*. The species *anea* differs from *Achrysocharis atripes* in that the latter has the scape all concolorous, the antennæ distinctly less compact, both funicle joints not wider than long, the first smaller than the second as in *anea*; the stigmal vein in *atripes* is distinctly shorter, subsessile, the postmarginal barely developed; the

wings in *atripes* also distinctly narrower and the legs differ in color. The species *consobrinus* differs from *atripes* much as does *ænea*. In *atripes*, the mandibles are bidentate.

*Chrysocharella niveipes* differs markedly from *Achrysocharis maculatipennis* in the compact antennæ, funicles 1 and 2 subequal, distinctly wider than long. In *C. fasciatipennis*, the first two pairs of legs are all white or practically so except coxæ.

*Achrysocharella dubia* has broad fore wings with short marginal fringes (about 30 lines of discal cilia), the hind coxæ are white except at base, the pedicel above dusky. Funicle 1 quadrate, 2 somewhat longer than wide. Mandibles tridentate. Pedicel longest of the flagellum.

#### CHRYSOCHAROMYIA new genus of A. P. Dodd.

Like *Achrysocharoides* Girault but the antennæ with three ring-joints.

*Type*: The following species (*elongata*).

#### 1. CHRYSOCHAROMYIA ELONGATA new species.

*Female*:—Length, 1.75 mm. Long and slender.

Brilliant metallic coppery green; abdomen golden yellow, green at its base laterad and with five dusky cross-stripes across from basal fifth to two thirds the length, the first and last stripes partly obliterated; tip of abdomen black; eyes garnet; legs and antennal scape very pale yellow, the pedicel darker, rest of antennæ black. Mandibles tridentate, the teeth acute. Funicle 1 longer than pedicel, 3 barely two thirds the length of 1; club a little longer than funicle 1; first club joint as long as preceding joint, a little longer than the second; flagellum with rather sparse, long thin hairs. Wings hyaline, scarcely reaching apex of abdomen; venation yellow, the postmarginal vein somewhat longer than the stigmal. Abdomen conic-ovate, elongate, fully twice as long as the thorax. Thorax with fine scaly reticulation, the lines not raised, the propodeum smooth, with a short median carina.

From one female captured by sweeping in forest, January 27, 1913.

*Habitat*: Magnetic Island (near Townsville), Queensland.

*Type*: No. Hy 2527, Queensland Museum, Brisbane, the female on a tag, the head on a slide.

Later, a female from Brisbane, March 10, 1913 (H. Hacker).

#### 2. CHRYSOCHAROMYIA MANDIBULARIS new species.

*Female*:—Length, 1.15 mm. Slender.

Dark metallic green, the legs, abdomen and scape pale yellow, the abdomen washed lightly with metallic, which forms about four subdusky cross-stripes. The valves of ovipositor metallic and tip of abdomen. Antennæ with funicle 1 a little shorter and stouter than 2 which is one and two third times longer than its width, much longer than the pedicel which is subequal to the slender third club joint whose terminal seta is distinctly shorter than itself; club 1 a little longer than 2, subequal to funicle 1 but slenderer, the body of club 3 distinctly shorter than club 1. Mandibles 7-dentate, the four inner teeth comblike. Postmarginal vein elongate, nearly twice the length of the moderate stigmal, the marginal very long, the submarginal distinctly broken. Flagellum black. Scutellum except along the meson and caudad, the propodeum and the axillæ suffused with brown. Parapsidal furrows apparently but half complete from caudad. Sculpture, fine polygons. Propodeum with a faint median carina, subglabrous. Fore wings with a more or less rounded stain under stigmal vein and distal end of marginal. Abdomen with a short petiole.

From one female captured in jungle, January 17, 1914 (A. P. Dodd).

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2528, Queensland Museum, Brisbane, the female on a tag, head on a slide.

**3. CHRYSOCHAROMYIA DODDI** new species.

*Female*:—Length, 1.10 mm.

Dark metallic purple, the wings hyaline, the abdomen, legs and antennæ pale honey yellow, the abdomen with four pairs of purplish marginal dots, the fifth pair subobsolete, the dots from base to distal two thirds. Thorax scaly reticulate, the lines not raised, the parapsidal furrows complete, distinct; scutum with a small fovea at meson of caudal margin. Postmarginal vein much longer than the stigmal. Abdomen subpetiolate. Mandibles distinctly tridentate. Funicle joints all somewhat longer than the pedicel, 2 a little the longest, about twice its own width, 1 wider than it; the two club joints a little shorter than the funicle joints. Tip of ovipositor black.

From one female captured in jungle. Named for A. P. Dodd.

*Habitat*: Gordonvale, Queensland.

*Type*: No. Hy 2529, Queensland Museum, Brisbane, the female on a slide with type of *Chrysocharella albifemur* Girault.

**4. CHRYSOCHAROMYIA CYANEICORPUS** new species.

*Female*:—Length, 1.58 mm.

Dark metallic blue with greenish reflections, the fore wings uniformly, moderately lightly embrowned from proximal third of marginal vein to apex; legs yellowish brown except cephalic coxa, which is concolorous. Scape and pedicel colored like the legs but rest of antennæ black. Pedicel a little dusky, distinctly much shorter than any of the funicle joints which are long, subequal, each about thrice or more longer than wide, longer than the club joints; club with a distinct, conspicuous terminal seta; flagellum tapering. Mandibles 6-dentate, tridentate in the usual way, then with three comb-like teeth along the mesal oblique truncation of the third tooth. Base of abdomen brilliant green. Face gently wrinkled; vertex polished; thorax scaly reticulated, the scutellum with a more or less distinct median sulcus at proximal fourth. Propodeum faintly scaly, abdomen a little more plainly so. Parapsidal furrows extremely narrow at cephalic fourth, otherwise normal, complete, deep. Abdomen with a transverse petiole which is yellow, the second segment occupying only a fifth of the surface. Axillæ only slightly advanced. Propodeum bicarinate, the median carina absent. Postmarginal vein somewhat longer than the stigmal, the latter short.

From one female caught with *doddi*.

*Habitat*: Gordonvale, Queensland.

*Type*: No. Hy 2530, Queensland Museum, Brisbane, the specimen on a tag, the head on a slide.

**5. CHRYSOCHAROMYIA INÆREA** new species.

*Female*:—Length, 1.10 mm.

Bright golden yellow, the wings hyaline; funicle 1 dusky, club dusky black. Abdomen patterned with black dorsad as follows: Two short dusky transverse dashes across meson just out from base, side by side, followed at regular intervals by two narrow complete black cross-bands, each with a short transverse dash at meson just caudad; then at the next interval (at about distal two thirds) two short dashes across meson side by side (that is near together, cephalo-caudad); then a complete cross-stripe without a dash caudad of it; this distal stripe is at a little over distal three fourths. Tip of valves of ovipositor black. Propodeum with a short median carina. Thorax scaly. Postmarginal vein subequal to stigmal, the marginal long. Mandibles strongly tridentate. Funicle joints short, 1 subequal to pedicel, a little longer than wide, 2 and 3 subquadrate. Club with a short nipple, the first joint longer than the second, subquadrate.

From one female labelled "Forest, 10-10-13. G. F. Hill."

*Habitat*: Port Darwin, Northern Territory.

*Type*: No. Hy 2531, Queensland Museum, Brisbane, the specimen on a tag, head on a slide.

**6. CHRYSOCHAROMYIA VARINOTATA** new species.

*Female*:—Length, 1.60 mm. Allied with *inærea*.

Pale honey or golden yellow, the mesothorax orange yellow, the wings hyaline. Occipital margin of vertex, median line of scutellum broadly and clavately (the narrow end caudad), apex of abdomen and valves of ovipositor, pronotum except a golden round spot at caudal margin at lateral margin, parapsidal furrows and cephalic margin of scutum, axillæ, median line of scutum narrowly and propodeum except at caudal margin near lateral margin, blue-black. Abdomen with five complete cross-stripes of black between base and apex and at the interval of a stripe a short transverse dash across meson between stripes 3 and 4. Propodeum with a short, complete median carina. Mandibles strongly tridentate. Scape pale yellow, dusky black above at proximal two thirds and at tip; rest of antenna black. Vertex subdusky. Funicle 1 thickened and a little longer than 2 or 3, the latter nearly twice longer than wide, somewhat longer than the pedicel. Distal club joint shortest of the flagellum, its terminal spine short, stout, distinct. Thorax scaly. Abdomen slender, conic-ovate.

From one female caught at 1,000 feet, forest, Upper Tweed River, May 17, 1914 (A. P. Dodd).

*Habitat*: Tweed River, New South Wales.

*Type*: No. Hy 2532, Queensland Museum, Brisbane, the specimen on a tag with type of *inærea*, head on slide with type *Achrysocharella variclava* Girault.

**7. CHRYSOCHAROMYIA BICOLORITHORAX** new species.

*Female*:—Length, 1.10 mm.

Agrees with the description of *elongata* Girault, but the face below the antennæ and sides and venter of thorax also golden yellow, the abdomen is shorter, the postmarginal vein shorter, only slightly longer than the stigmal; also funicle 2 is slightly the longest joint of the funicle and the terminal spine of the club is decidedly longer, distinctly over half the length of distal club joint (less than that in *elongata*). The mandibles are smaller. Caudal wings acute, with about five lines of sparse cilia where broadest. Thorax reticulated, the parapsidal furrows complete. Longest marginal fringes of fore wing somewhat less than a fourth of the greatest width, a little shorter than the caudal fringes of the hind wing. Pedicel subequal to funicle 1, which is distinctly longer than wide and a little shorter than either of the first two club joints. Differs from *Achrysocharella quinquefasciata* in bearing distinctly longer marginal fringes on the fore wing, the mandibles, colour of head and thorax, longer terminal spine of club, shorter funicle 1, and so on. Compared with types of the two species mentioned.

From one female captured by sweeping in forest, April 24, 1914.

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2533, Queensland Museum, Brisbane, the specimen on a slide.

**PSEUDOSECODES** new genus of Girault and A. P. Dodd.

*Female*:—Agreeing with *Secodella* Girault but the propodeum has a short median carina and the antennæ are different. Antennæ 11-jointed, two ring-joints, five distinct funicle joints and a 2-jointed club, the apical joint with a terminal spur. Posterior tibiæ with one spur.

**1. PSEUDOSECODES SPLENDIDUS** new species. Genotype.

*Female*:—Length, 3.10 mm.

Dark metallic blue-green, the legs (except the three proximal joints of all the tarsi which are pale straw yellow) concolorous; antennæ concolorous but the scape is reddish.

Propodeum short, scaly. Wings hyaline, the discal ciliation arranged as in *Secodella*. Marginal vein nearly as long as the submarginal, stigmal short, postmarginal two and a half

times the length of stigmal. Pedicel distinctly shorter than funicle 1, 2 distinctly longer than 1, 3 subequal to 2, 4 shorter than 3, 5 shorter than 4, subequal to 1 which is about twice as long as wide; club somewhat longer than funicle 2, the first club joint as long as funicle 5, longer than the second club joint.

From one female captured by sweeping in jungle, October 19, 1913 (A. P. Dodd).

*Habitat*: Harvey's Creek (Cairns), Queensland.

*Type*: No. Hy 2534, Queensland Museum, Brisbane, the specimen on a tag, the head and posterior legs on a slide.

#### NEOCHRYSOCHARELLA new genus of A. P. Dodd.

*Female*:—Like *Achrysocharella* Girault but the parapsidal furrows are incomplete, only barely indicated anteriorly (deep, distinct and complete in *Achrysocharella*) and the propodeum bears a median carina and the axillæ are much advanced.

*Type*: *Achrysocharella ænea* Girault.

#### 1. NEOCHRYSOCHARELLA ÆNELLA (Girault).

“Dark metallic green, coxæ concolorous, femora concolorous; tibiæ and tarsi bright golden yellow, also the antennal scape; rest of antennæ dusky black. Fore wings broad; hyaline, marginal vein longer than the submarginal, stigmal vein short, the postmarginal no longer than the stigmal. Club rather loosely jointed, tapering and with a short terminal spur. Thorax with scaly reticulation, the reticulation in raised lines, the propodeum nearly smooth. Abdomen conic-ovate, somewhat longer and wider than the thorax. Mandibles tridentate, the inner tooth truncate. With the habitus of the *Pediobiini* and the venation of the *Entedonini*.

“From a female sweeping in jungle, type locality, January 15, 1914 (A. P. Dodd).”—  
A. P. Dodd.

*Chrysocharella pulchra* and *fasciatipennis* belong here and probably *Achrysocharella pulchrella*.

#### ENCYRTOMPHALE new genus.

*Female*:—Form small, like a small mirine encyrtid, the abdomen short, acute. Antennæ 8-jointed with a long cylindrical solid club equal in length to the rest of the flagellum; pedicel large, oval, nearly as long as the funicle and much wider; one thick ring-joint which is distinctly narrower than the funicle; four funicle joints of which the first two are like large ring-joints being much wider than long, the distal over twice their length yet still wider than long. Mandibles bidentate, the inner tooth obtuse. Hind tibial spurs single. Marginal vein short, not twice the length of the stigmal and much shorter than the submarginal, the postmarginal absent. Parapsidal furrows complete, the scutellum simple. Marginal fringes of fore wing rather longer than usual, the discal cilia normal but scattered and like minute dots.

#### 1. ENCYRTOMPHALE PARVULICORPUS new species. Genotype.

*Female*:—Length, 0.48 mm.

Dark metallic green, the legs (except hind femur and tibiæ broadly at middle and hind coxa), scape and pedicel pale yellow; rest of antenna black. Wings hyaline. Funicle 1 a little shorter than 2, 3 a little shorter than 4. Club without a terminal nipple.

From one female captured by sweeping in forest, January 4, 1913.

*Habitat*: Capeville (Pentland), Queensland.

*Type*: No. Hy 2535, Queensland Museum, Brisbane, the female on a slide.

## PARASECODELLA new genus.

*Female*:—In my table of genera running to *Omphalomorpha* Girault but differing in having the venation as in the Entedonini, that is, the marginal vein long and slender (but here no longer than the long submarginal), the postmarginal barely developed, much shorter than the stigmal which is very short, subsessile. Fore wings with distinct normal discal ciliation, which, however, though rather dense, is minute. Propodeum longer, quite as in the Elachertini, the median carina distinct, no others. Funicle filiform, the club enlarged, in relation to the funicle somewhat as in *Polynema* but not quite as enlarged. Otherwise very similar to *Omphalomorpha*. Abdomen conic-ovate but no longer than the rest of the body. Mandibles tridentate. Hind tibial spur single.

## 1. PARASECODELLA DICKENSI new species. Genotype.

*Female*:—Length, 1.10 mm.

Deep black with a purplish lustre, the scape except above near tip and first three tarsal joints white; also knees and tips of tibiae. Thorax (except propodeum) finely polygonally scaly; propodeum smooth, no sculpture; wings hyaline. Pedicel somewhat longer than funicle 1 which is longest, one third longer than wide, funicle 4 shortest, globular oval, a little longer than wide; club with a distinct terminal nipple, the two first joints subquadrate.

From one female captured in forest, February 16, 1912 (A. M. Lea and A.A.G.).

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2536, Queensland Museum, Brisbane, the specimen on a tag; hind leg, a fore wing and a head on a slide.

Dedicated to Charles Dickens.

## EPOMPHALE new genus.

*Female*:—Like *Achrysocharis* Girault but the club is 2-jointed, the antennæ 7-jointed. Marginal vein much longer than the submarginal, the postmarginal barely developed. Form small.

## 1. EPOMPHALE AURIVENTRIS new species. Genotype.

*Female*:—Length, 0.70 mm.

Metallic purple, the thorax with very fine sculpture somewhat as in the Tetrastichini, the legs and abdomen golden yellow, the latter with two distinct cross-stripes of black close together at distal third and indications of a third stripe just proximad of the others. Antennæ pallid, without a distinct terminal seta but with several long but colorless lateral apical setæ. Pedicel longer than either funicle joint both of which are distinctly longer than wide but not long, 2 a little longer than 1; club slender, conic ovate, longer than the funicle, divided near middle. Wings hyaline, the fore wing slender (about 15 lines of discal cilia where widest), its marginal cilia moderately long, the longest about a third the greatest wing width or somewhat less. Hind wings acuminate, where widest with about three lines of discal cilia, the caudal marginal fringes a little longer than the longest marginal cilia of the fore wing. Discal cilia of the latter caudo-proximad bounded by a convex line of cilia.

From one female captured by sweeping secondary forest growths, January 8, 1914.

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2537, Queensland Museum, Brisbane, the female on a slide.

## PAROMPHALE new genus of Girault and A. P. Dodd.

*Female*:—Like *Achrysocharella* Girault but the antennal club only 2-jointed, the distal joint formed by a constriction which appears to be nonarticulated; it terminates in a nipple. Mandibles long, nearly twice longer than wide, with three very distinct, acute teeth. Pedicel



stout, subequal to the two funicle joints which are one and a half times longer than wide but shorter than the rather long, proximal joint of the club. Abdomen conic-ovate. Postmarginal vein long and slender, longer than the moderate stigmal. If the constriction of the club is nonarticulated, the antennæ are 6-jointed. Mandibular teeth spreading.

*Male*:—Not known.

*Type*: The following species.

### 1. *PAROMPHALE FLAVICORPUS* new species.

*Female*:—Length, 0.85 mm.

Dull honey yellow, the wings hyaline, the abdomen with three distinct cross-stripes of black, the first longest. Thorax reticulated, the lines not raised. Antennæ with scattered, long, fine hairs. Marginal vein longer than the submarginal, the latter distinctly broken. Propodeum with a faint median carina, fuscous. Tip of abdomen black. Fore wings with about twenty-four lines of discal cilia where broadest.

Described from one female captured by sweeping at the base of Pyramid Mountain, forest, February 13, 1912. One antenna bore but a single funicle joint, the club correspondingly longer but otherwise as described (A.A.G.).

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 3460, Queensland Museum, Brisbane, the above specimen on a slide.

### *CLOSTEROMPHALE* new genus of Girault and A. P. Dodd.

*Female*:—Form slender. Antennæ inserted below the middle of the face, 8-jointed, two ring, four funicle joints, the club solid, not enlarged. Mandibles tridentate. Scutellum simple, the parapsidal furrows complete. Marginal vein longer than the submarginal, the postmarginal and stigmal veins of moderate length, the former longer; marginal vein long; wings infuscated. Abdomen conic-ovate, longer than the rest of the body. Propodeum short at meson, with a weak carina there, the surface reticulated. Hind tibial spur short, single.

*Type*: The following species.

### 1. *CLOSTEROMPHALE BILINEATA* new species.

*Female*:—Length, 1.05 mm.

Dark metallic green, the abdomen bronze coppery, the head spotted with coppery and the scutum and scutellum with a distinct, rather broad coppery stripe down each side of meson (from pronotum to apex of scutellum). Legs and antennæ concolorous but funicle 3, knees, a band around tibiae just before tip, the tarsi and both ends of the scape, yellowish white. Thorax densely scaly. Funicle joints subquadrate; club over half the length of the funicle, the pedicel barely longer than the funicle joints taken separately; scape moderately long. Fore wing with two conspicuous blotches of sooty, one from apex of stigmal vein, the other from near base (proximal end) of the marginal, the distal blotch the larger, rounded, extending nearly across the blade, the proximal one more elliptical, also extending nearly across, the space between them suffused with sooty except just under the marginal vein.

*Male*:—Not known.

Described from one female captured by sweeping in the jungle, December 2, 1913 (A. P. Dodd).

*Habitat*: Kuranda, Queensland.

*Type*: No. Hy 3461, Queensland Museum, Brisbane, the foregoing female on a tag; hind legs and head on a slide.

## GENUS CLOSTEROCERUS Westwood.

## 1. CLOSTEROCERUS SAINTPIERREI Girault.

*Antea*, p. 157, line 5 of the description, *two areas* should read *two arms*.

## 2. CLOSTEROCERUS ZANGWILLI Girault.

*Antea*, p. 158, line 5 of the description, *margin* should read *apex*.

## 3. CLOSTEROCERUS WESTWOODI new species.

*Female*:—Length, 1.30 mm.

Dark metallic green, the abdomen, head and legs dark blue, the tarsi and first two tibiae whitish. Parapsidal furrows distinct but cephalad near the pronotum turned off rather abruptly laterad not reaching the pronotum. Agrees otherwise with *mirus* but the bands of the fore wing are blacker, the apical one covers nearly the whole of the apical edge of the wing while the proximal blotch is replaced by a distinct loop or hook-shaped black marking which leaves the marginal vein a little distad of its middle, runs a rather short distance disto-caudad and then curves rather sharply at right angles to the caudal margin running diffusely along this proximad over half way to base. Scutellum longer and less rounded at apex than as with *mirus*. Mandibles tridentate. First two tibiae dusky just below knees.

From one female caught in jungle, May 2, 1914 (A. P. Dodd).

*Habitat*: Tweed Heads (Tweed River), New South Wales.

*Type*: No. *Hy* 2538, Queensland Museum, Brisbane, the specimen on a slide.

Dedicated to John Obadiah Westwood.

## 4. CLOSTEROCERUS ROSTANDI new species.

*Female*:—Length, 1.20 mm.

Bright metallic green, the abdomen except at base above, legs and the antennae dark blue, the tarsi white. Parapsidal furrows curving off before reaching pronotum, the thorax densely scaly. Postmarginal vein as long as the stigmal. Characterized by the fore wing which is without stripes, only with a distinct black substigmal spot which, however, nearly reaches caudal margin opposite but fades rapidly from the middle of the wing, the latter broad. Mandibles bidentate. Funicle joints subequal, subquadrate, larger than the club joints taken separately. Terminal spur of club distinct. Hind wings with about 11 lines of discal cilia where widest.

From one female caught May 30, 1914, in forest (A. P. Dodd).

*Habitat*: Maclean (Clarence River), New South Wales.

*Type*: No. *Hy* 2539, Queensland Museum, Brisbane, the specimen on a slide with slide type of *Parahorismenus spissipunctatus* Girault.

Dedicated to Edmond Rostand.

## 5. CLOSTEROCERUS CURTISI new species.

*Female*:—Length, 1.25 mm. A most beautiful species.

Agrees with the description of *westwoodi* but the propodeum is also blue. Wings like those of *westwoodi* but the second band is distinctly caret-shaped, the apex of the caret jointed distinctly along center of blade to the middle of the apical or third cross-stripe, forming more or less distinctly the letter K. Also the first caret-shaped band is exactly similar to that of

*westwoodi* but it also is distinctly joined to the middle stripe by a short oblique band from its apex to the middle of the dorsal arm of that stripe. Hind tibial spurs single in both species.

What appeared to be the male was similar.

From one female caught on forest uplands, May 3, 1914 (A. P. Dodd).

*Habitat*: Tweed Heads (Tweed River), New South Wales.

*Type*: No. *Hy* 2540, Queensland Museum, Brisbane, the specimen on a slide with type *westwoodi*.

Respectfully dedicated to George William Curtis.

OMPHALOMORPHOIDES new genus of A. P. Dodd.

Like *Omphalomorphella* but the postmarginal vein not developed.

**1. OMPHALOMORPHOIDES VIOLESCENS** new species of A. P. Dodd. Genotype.

*Female*:—Length, 3.75 mm.

Brilliant metallic purple, the coxæ concolorous, rest of legs intense lemon yellow; antennæ black.

Antennæ 11-jointed, two ring, four funicle, three club joints; pedicel long, fully twice as long as greatest width, ring-joints large (forming a transition between ring and funicle joints), funicle and club joints transverse, the flagellum clavate. Mandibles bidentate. Scutum large, the scutellum also large, both densely reticulately scaly and with a few scattered punctures. Scutellum simple. Propodeum short, without carinæ, finely scaly. Abdomen sessile, short and broad, second segment slightly the longest. Wings long, hyaline.

Described from two females in the collections of the Macleay Museum and labelled "Sydney, N.S.W."

*Habitat*: Sydney, New South Wales.

*Type*: No. Hymenoptera 10b, Macleay Museum, Sydney University, two females on a tag; head and hind legs on a slide.

One hind tibial spur, deep complete parapsidal furrows, submarginal vein broken, marginal shorter than submarginal, stigmal very long, nearly as long as the marginal, post-marginal not developed; discal ciliation normal.

GENUS ZAOMMOMYIELLA Girault.

In this genus, the cheeks are very short yet distinct, the eye not quite extending to the mandibles.

**1. ZAOMMOMYIELLA OCULATA** (Girault).

One female was captured in jungle at Babinda, Q., February 11, 1914 (A. P. Dodd). The terminal spine of club is as long as joint 3. The abdomen has three dusky cross-stripes distad of the broad blue basal band. The oral area is yellow. Funicle 1 longest of the flagellum, subequal to pedicel.

**2. ZAOMMOMYIELLA ABNORMIS** Girault.

The vertex and sides of thorax are reddish brown. Type re-examined.

**3. ZAOMMOMYIELLA TINTINNABULUM** new species.

*Female*:—Length, 1.80 mm.

Similar to *oculata* Girault but on dorsal abdomen there is one broader metallic blue and three narrower dusky stripes distad of the broad basal stripe (only three narrow dusky stripes in *oculata*); the first or metallic of these stripes is deeply excised at meson from cephalic

edge (nearly divided) and is close to the basal stripe. Also, the scape is broader, the pedicel subelongate, somewhat longer than funicle 2. Otherwise identical. Types compared.

From one female caught in jungle, June 25, 1914.

*Habitat*: Gordonvale, Queensland.

*Type*: No. *Hy* 2541, Queensland Museum, Brisbane, the specimen on a tag with type of *persimilis*; head on a slide with types of *persimilis* and *sol*.

#### 4. ZAOMMOMYIELLA PERSIMILIS new species.

*Female*:—Length, 1.80 mm.

Very similar to *oculata* but stouter, the axillæ are metallic blue, there are four dusky stripes on abdomen distad of the broad basal stripe, the scutellum is more distinctly punctate rather than scaly and its sculpture is denser; the first tooth of mandibles is distinctly larger than the inner two, which are paired and equal (in *oculata* the first two teeth are subequal, the third a little stouter, none paired) and the pedicel is subelongate, somewhat longer than funicle 2, which is next longest of the flagellum. The scape is yellow in both species. Club 1 longest of the three. Compared with type of *oculata*.

From one female caught in jungle, May 2, 1914 (A. P. Dodd).

*Habitat*: Tweed Heads (Tweed River), New South Wales.

*Type*: No. *Hy* 2542, Queensland Museum, Brisbane, the specimen on a tag; head on a slide.

#### 5. ZAOMMOMYIELLA SOL new species.

*Female*:—Length, 1.30 mm.

Wholly grass green, the abdomen coppery except across base, the face rosaceous brassy. Legs white except the dark metallic coxæ and the black dorsal edges of all femora. Antennæ as in *persimilis*. Fore wing with a distinct fuscous cross-stripe from the small stigmal vein and distal fourth of the long marginal, the stripe rather broad, slightly curved and at cephalic half accented so as to form a square area more distinct than the caudal part, which is rather faint. Oral area orange yellow. Mandibles as in *persimilis*. Parapsidal furrows complete, rather broad, shallow, narrowing cephalad. Thorax coarsely densely punctate, the punctures flattened out on the scutellum. Propodeum glabrous, noncarinate. Segment 2 of abdomen glabrous, 3 mostly so, the rest scaly. Differs from *abnormis* in being wholly metallic (except the oral area narrowly), the femora black above, in having a distinctly shorter abdomen, smaller infuscated area on the fore wing, and this area forming a more or less distinct stripe and the punctures of the scutellum flattened or very shallow. The propodeum has several sunken cavities laterad and on each side of meson (but broadly separated) a narrow rather obscure carina from caudad, abbreviated cephalad.

Described from one female taken by sweeping jungle, May 2, 1914 (A. P. Dodd).

*Habitat*: Tweed Heads (Tweed River), New South Wales.

*Type*: No. *Hy* 2543, Queensland Museum, Brisbane, the specimen on a tag; head on a slide with type head of *Zaommomyiella persimilis*.

#### PARZAOMMOMYIA new genus.

*Female*:—Like *Zaommomyiella* Girault but the antennæ bear three ring-joints and the scutum and scutellum with a complete median sulcus. The abdomen is subelongate, slender, distinctly longer than the rest of the body. Marginal vein very long, over twice the length of the submarginal, the postmarginal nearly thrice the length of the rather short stigmal. Occiput very concave, the face subconvex. Axillæ only advanced a very little, the parapsidal furrows complete. Mandibles tridentate, the third tooth truncate. Cheeks very short but distinct. Pronotum not visible from above.

**1. PARZAOMMYIA TENUICORPUS** new species. Genotype.

*Female*:—Length, 2.65 mm.

Bronzy green, the abdomen dark coppery, blue at base, the fore wings slightly uniformly infuscated throughout, the legs white, the cephalic coxæ dark metallic, the knees and tarsi yellowish brown, also most of femora. Scape yellowish brown except at tip dorsad, the distal two club joints silvery white, rest of antenna black. Funicle 1 a little longer than 2, two and a half times longer than wide, over twice the length of the pedicel; joints 1 and 2 of club and funicle 2 subequal, club 3 much shorter, subequal to the pedicel, with a short terminal spine. Club rapidly narrowing distad. Thorax conspicuously scaly reticulate, the lines not raised. Propodeum short at meson, with median and lateral carinæ, the spiracle small, round, the lateral carina with foveæ along its mesal side.

From one female caught in jungle, June 25, 1914.

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2544, Queensland Museum, the specimen on a tag, the head on a slide with type *Entedonomphale margiscutum* Girault.

**ENTEDONOMPHALE** new genus.

*Female*:—Form small, slender. Characterised by the antennæ which are 6-jointed with one very short ring-joint, the club solid. Postmarginal vein absent or nearly, the stigmal normal. Propodeum noncarinate. Parapsidal furrows complete, the thorax otherwise simple. Club armed at apex with three or four rather stout spines from the edges. Antennæ inserted somewhat below the middle of the face. Fore wings naked.

**1. ENTEDONOMPHALE MARGISCUTUM** new species. Genotype.

*Female*:—Length, 0.63 mm.

Dark metallic green and finely scaly, the lateral margins of scutum orange yellow; scape, all tibiae and tarsi and the cephalic femur, white; knees white. Antennæ black. Scape narrowing distinctly distad, the pedicel larger than either funicle joint of which 2 is globular, 1 slightly longer than wide. Club stout, oval, as long as the funicle. Mandibles absent. Fore wings with a substigmal spot (on the stigmal vein and not large) and with a large dusky cloud from apex of stigmal vein across to caudal margin and extending suffusedly proximad and distad. Marginal vein long, somewhat longer than the submarginal. Marginal cilia of fore wing short, the discal cilia absent. A yellow spot on vertex against the eye margin.

From one female caught by sweeping mangrove and other bushes on the bank of Tweed River, May 14, 1914 (A. P. Dodd).

*Habitat*: Chindera, New South Wales.

*Type*: No. Hy 2545, Queensland Museum, Brisbane, the specimen on a slide.

On page 177, *antea*, line 6, *caudad* should read *cephalad*; for line 31, the words *eyes normal* should be substituted. On page 178, line 5, *tridentate* should read *bidentate*.

SUBFAMILY TETRASTICHINÆ.

TRIBE TETRASTICHINI.

It is quite likely that some of the genera described by me are merely old genera correctly described, since I find that *Melittobia* has three ring-joints and thus formerly has always been incorrectly diagnosed. In some species of those genera bearing a median groove on the scutum, this groove may be partially obliterated, but seems to be always distinctly indicated. A study of variation in the group is badly needed. The ring-joints cannot always be seen by using the present simple methods and to make their detection easier and quicker some method analogous to staining should be devised. The group is a difficult one and presents a curious case of parallel evolution.

## GENUS TETRASTICHUS Haliday.

Several of the species have been removed to *Necomphaloidella* and *Epitetrastichus* which see.

**1. TETRASTICHUS QUEENSLANDENSIS** Girault.

There is no lateral carina on propodeum, the latter short at meson. A row of punctures along lateral margin of scutum. Type re-examined.

**2. TETRASTICHUS ACUTIVENTRIS** (Girault).

*Asyntomosphyrum acutiventris* in *antea*.

Very similar to *poincarei* but the abdomen distinctly less stylate, the valves of the ovipositor extruded for a third of the length of that region. Also, the funicle joints are all globular and subequal, slightly longer than wide, subequal to the pedicel. Club with a short terminal spine, the third joint not distinctly separated. Antennæ pallid. Mandibles tridentate. A female at Gordonvale. Types re-examined.

**3. TETRASTICHUS SAINTPIERREI** Girault.

“One female, forest, Magnetic Island (Townsville), Queensland, January 27, 1913 (A.A.G.). The specimen agreed with the description of the species but funicle 1 was not longer than 2. Compared with type (except antenna of latter). Propodeum extremely short at meson. In this second female the antennæ are yellow-brown, the funicle joints subequal, each about a half longer than wide, the club almost as long as the two preceding joints united.” (A. P. Dodd).

**4. TETRASTICHUS UNICOLOR** new species of Girault and A. P. Dodd.

*Female*:—Length, 1.65 mm.

Bright metallic green; tibiae and tarsi pale straw yellow; femora suffused with metallic; antennæ black, the scape brown. Wings hyaline. Abdomen conic-ovate, a little longer than the head and thorax united. Funicle joints about subequal, each no longer than the pedicel and not twice as long as wide. Propodeum short; spiracle small, circular; lateral carinae absent; median carina broad, flat and short.

Described from one female caught by sweeping in forest, June 25, 1912 (A. A. Girault).

*Habitat*: North Queensland (Gordonvale, near Cairns).

*Type*: No. *Hy 2546*, Queensland Museum, Brisbane, the above specimen on a tag, an antenna on a slide.

**5. TETRASTICHUS LONGIPENNIS** new species of A. P. Dodd.

*Female*:—Length, 1.15 mm.

Yellow-brown, the sides of thorax, parapsidal furrows and postscutellum a little darker, the scutellum dark brown; legs and antennal scape lemon yellow; pedicel and ring-joints brown, rest of antennæ black; abdomen with five obscure dusky cross-stripes. Median groove of scutum complete and distinct. Scutellum rather short. Propodeum with a median carina. Abdomen pointed conic ovate. Wings long and broad, hyaline. Pedicel elongate, as long as third funicle joint; funicle joints very long, 1 distinctly the longest; club not much shorter than the funicle, the club joints of equal length; ring-joints not small.

From one female caught by sweeping jungle (800 feet), September 13, 1913 (A. P. Dodd).

*Habitat*: Kuranda, Queensland.

*Type*: No. *Hy 2547*, Queensland Museum, Brisbane, the specimen on a tag; head on a slide.

**6. TETRASTICHUS BICOLOR** new species.

For description see *antea*, p. 201. Described from one female from jungle, May 8, 1913 (A. P. Dodd). The type is on a tag, the head on a slide. The scape yellow, also postscutellum. No lateral carina on propodeum. Stigmal vein short. Mandibles tridentate, the third tooth obliquely truncate. Terminal joint of club with a small terminal nipple. Type re-examined.

**7. TETRASTICHUS NELSONENSIS** Girault.

*Antea*, p. 200, line 1 under this name *fasciatus* should read *novifasciatus*.

**8. TETRASTICHUS SEYMOURENSIS** new species.

*Female*:—Length, 1.62 mm. Robust; of the form of *Tetrastichodes multifasciatus* Girault.

Orange yellow, the scutellum and margins of scutum lemon yellow; upper occiput centrally, face of pronotum, propodeum, a dot at cephalic apex of parapsides and of axillæ and four broad stripes across the abdomen, black. First three stripes of abdomen thick (appearing composite) each with latero-caudal foot-like projections at margin, the first stripe with a very narrow stripe joined to it for most all of its cephalic margin but free near the lateral margins; stripe 4 small, straight along distal margin, its proximal margin convex. A minute transverse dot just before tip, tip of abdomen and tip of ovipositor valves black. Wings stained a little with yellowish. Funicle joints thick, 1 and 2 subequal, each about a fourth longer than wide, 3 distinctly shorter, a little longer than wide, subequal to the pedicel. Propodeum very short. Club ending in a small nipple.

From one female captured in forest, February 17, 1913.

*Habitat*: Seymour (Ingham), Queensland.

*Type*: No. Hy 2548, Queensland Museum, Brisbane, the specimen on a tag, the head on a slide.

**9. TETRASTICHUS BOSWELLI** new species.

*Female*:—Length, 0.80 mm., excluding ovipositor which is exerted for nearly two thirds the length of the abdomen. Slender.

Agrees with the description of *saintpierrei* but the abdomen, though acutely pointed, is not slenderly conical, not distinctly longer than the thorax and the ovipositor is distinctly extruded. Also the green of the body is darker and more coppery; the ovipositor is only a little extruded in *saintpierrei*. The propodeum is very short at the meson in both species, widening laterad; in *saintpierrei* there is no lateral carina but a fovea in its stead (this may be due to shrivelling). In *boswelli* there appear to be no carinæ on the short propodeum. Funicle joints 2 and 3 subequal, slightly longer than wide, 1 slightly longer than either. Club with a distinct terminal spine. Pedicel subequal to funicle 1. Antennæ pallid dusky. Mandibles with the two outer teeth acute, the inner blunt, distinctly wider than the others.

From one female caught by sweeping forest, January 8, 1913.

*Habitat*: Capeville (Pentland), Queensland.

*Type*: No. Hy 2549, Queensland Museum, Brisbane, the female on a tag.

In the table of species, *antea*, p. 205, line 6, *face* should read *occiput*. In the original description of *flavios*, the name was misspelt *flavio*. For other former species, see *Neomphaloidella* and *Epitetrastichus*.

GENUS SYNTOMOSPHYRUM Foerster.

**1. SYNTOMOSPHYRUM FLAVISCUTELLUM** Girault.

This species is a *Selitrichodes* which see.

GENUS MELITTOBIA Westwood.

**1. MELITTOBIA AUSTRALICA** Girault.

A widely distributed species in Eastern Australia. The male antennæ bear four funicle joints, the fourth joint a little smaller than the first; the eyes are absent. The antennæ of the female bear *three* short ring-joints. The abdomen is subpetiolate, the petiole distinct in the male yet short. Types re-examined. *Antea*, p. 205, under this heading, line 5, *stained* should read *starred*.

The following additional specimens have been seen: Many specimens reared from the larvæ of *Sceliphron lætum* at Gordonvale (Cairns), Queensland, January 20, 1914 and again in mid-February. Many females from the collections of the Queensland Museum at Brisbane, labelled "Reared from wasp's nest, Brisbane, November 17, 1913. H. Hacker. No. 22." The femora were darker in these specimens. One male, four females from the collections of the National Museum, Melbourne, labelled "Bred out of old pupa case of muddauber wasp. 20.12.07. Bred from pupa of ? *Pseudagena*. ♀ scarce, 200-l. F. P. Spry." The locality was near Melbourne, Victoria. Also a female captured by sweeping in forest, Gordonvale, April, 1914.

GENUS TETRASTICHODES Ashmead.

**1. TETRASTICHODES MORUM** Girault.

*Antea*, p. 207, line 8 is meaningless. The species was captured in forest, early January, 1913. The species belongs to *Selitrichodes* which see.

**2. TETRASTICHODES AUSTRALICUS** Girault.

A female at Gordonvale, Queensland, forest, April 16, 1913. *Antea*, p. 208, line 3, omit the word *round*.

**3. TETRASTICHODES (ZAGRAMMOSOMOIDES) MULTIFASCIATUS** new name.

*Tetrastichodes fasciatus* (Girault).

This species was once referred to *Tetrastichus* by mistake and has thus become confused with the species *fasciatus* Ashmead of that genus. *Tetrastichella fasciatella* Girault was described as *Tetrastichus fasciatus*. Accordingly, I propose the above name for this species.

**4. TETRASTICHODES MARGISCUTELLUM** new species.

*Female*:—Length, 1.35 mm.

Like *margiscutum* but only the inner grooves of scutellum are margined with pale yellowish, the head and femora black but the face about the mouth is yellow. Tegulæ dark; scutum not margined. Axillæ very narrowly so with yellowish (mesad and cephalad). Funicle 3 is only slightly shorter than the other two while all are much wider than long. Caudal margin of scutellum laterad of first groove narrowly yellow.

*Male*:—Not known.

Described from one female captured by sweeping in forest, November 7, 1912.

*Habitat*: Ayr, Queensland.

*Type*: No. Hy 2550, Queensland Museum, Brisbane, the above specimen on a tag, the head on a slide.



**5. TETRASTICHODES SECUS** new species.

*Female*:—Length, 1.20 mm.

Nearly exactly like *Syntomosphyrella acomata* Girault and Dodd but differing in coloration as follows: The whole of the propodeum is black and a little distad of middle of abdomen there are two cross-stripes of black. The axillæ are black for somewhat over cephalic half. Funicle, pedicel and mandibles as in the species named. Tegula and vicinity black. There may be a minute black dot on the shoulder and the scutum centrally may be more or less dusky. There may be a third and fourth stripe on the abdomen, one proximad, the other distad of the two lines and both interrupted at meson and a spot at base of scutellum.

*Male*:—Not known.

Described from four females reared from miscellaneous galls on Eucalyptus, October 9, 1913 (E. J. Girault).

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 3462, Queensland Museum, Brisbane, one female on a tag, the head on a slide.

**6. TETRASTICHODES INTENTATUS** new species of Girault and A. P. Dodd.

*Female*:—Length, 1 mm. Short and robust, the abdomen stout.

Brown; the wings hyaline; the abdomen with three broad black stripes across it, equidistant from each end, each stripe distinctly interrupted at the meson; legs and antennæ yellowish. Funicle joints subequal, each a little longer than wide. Mandibles tridentate. Head pale yellowish brown. Propodeum very short.

Described from one female caught by sweeping in forest, mainland, opposite Double Island, December 24, 1911 (A. A. Girault).

*Habitat*: Northern Queensland (near Cairns).

*Type*: No. Hy 2551, Queensland Museum, Brisbane, the above specimen on a tag.

**7. TETRASTICHODES AURIFLAVUS** new species.

*Female*:—Length, 1.80 mm. Form short and robust, the abdomen rounded.

Bright greenish or golden yellow, immaculate, but sometimes a subfuscous spot is present on pronotum, just cephalad of each parapsidal furrow and the abdomen has very faint indications of deeper yellow cross-stripes. Mandibles tridentate. Pedicel not elongate, but distinctly longer than first funicle joint which is somewhat longer than wide, distinctly longer than joints 2 and 3 which are subequal and somewhat wider than long. Club without a distinct terminal seta. Caudal margin of propodeum narrowly black. Scape somewhat compressed. First tarsal joint of hind legs shortest. Ocelli in a very flat triangle. Propodeum very short.

*Male*:—The same but the abdomen depressed.

Described from many specimens of each sex reared from miscellaneous galls on Eucalyptus, forest, October, 1913.

*Habitat*: Northern Queensland (Gordonvale, near Cairns).

*Types*: No. Hy 2552, Queensland Museum, Brisbane, one male, two females on a tag.

Ten females taken at random were examined for presence of the median sulcus on the scutum and in most cases it was found present, though absent in five females examined immediately after being taken from alcohol. However, in the ten dry females, the groove was never complete, was often oblique, often accompanied by lateral and unsymmetrical cracks and thus was most probably due to shrivelling. An examination for variation in the absence of this groove will have to be made from specimens as they are taken from alcohol. In one of these females, a dusky spot was present centrally at base of scutellum. There was no variation in the antennæ.

**8. TETRASTICHODES QUINQNIGRIMACULÆ** new species.

*Female*.—Length, 1.35 mm.

Honey yellow, the wings hyaline, the legs and antennæ concolorous. Face of pronotum, two round spots in centre of scutum, one at base of scutellum centrally, an elliptical oval spot filling the cephalic portion of each axilla and three narrow cross-stripes indicated from each side along proximal half of abdomen, black. Meson of abdomen sordid just beyond proximal half. Propodeum with a very short complete median carina. Post-marginal vein half the length of the stigmal. Mandibles tridentate. Distal club joint short, with a small terminal spur; scape compressed; pedicel rather long, distinctly longer than the second funicle joint which is somewhat longer than wide; funicle joints 1 and 3 subquadrate or 3 sometimes wider than long, none very unequal. Hind tibial spurs single.

*Male*.—Not known.

Described from one female reared from fleshy galls on gum, March 20, 1911 (F. P. Spry).

*Habitat*: Melbourne, Victoria.

*Type*: No. Hy 2553, Queensland Museum, Brisbane, the above specimen on a tag, the antenna and mandibles on a slide.

**9. TETRASTICHODES SUSURRUS** new species.

*Female*.—Length, 1.10 mm. Short, robust, the abdomen globular, the propodeum short.

Pale golden yellow, the wings hyaline, marked with dusky black as follows:—Two pairs of transverse marginal dots on abdomen out from base, followed by two complete cross-stripes (these thinning at meson), then a third thinner cross-stripe interrupted at the meson (at distal three fourths); propodeum; median line of scutellum not very broadly but uniformly; two subcontiguous wedgeshaped spots on cephalic half of scutum (reaching from cephalic margin to about middle, narrowly separated along meson), from these meson of scutum rather broadly (broader than meson of scutellum) to apex; apex (caudad) of each parapside; tegulae and the axillae except caudo-mesal end. Propodeum yellow at the spiracle and laterad of it, apparently noncarinate but with a carina laterad of spiracle. Antennæ dusky; scape short, compressed; pedicel much longer than any funicle joint; funicle joints subequal, somewhat wider than long; club wider than the funicle, without a distinct terminal spine. Mandibles tridentate. Fore wings broad.

From one female captured by sweeping forest, April 12, 1914.

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2554, Queensland Museum, Brisbane, the specimen on a tag; head on a slide.

GENUS APROSTOCETUS Girault.

**1. APROSTOCETUS KURANDENSIS** (Girault).

This is a species of *Neomphaloidella*.

**2. APROSTOCETUS IMPERIALIS** Girault.

The type is a female on a tag together with a slide. A female, Gordonvale, Queensland, forest, December 9, 1913. The club bears a distinct terminal spine. Mandibles bidentate, the second tooth truncate.

“One female, type locality, forest, December 4, 1913 (A.A.G.). The median groove of scutum was almost obliterated, visible at distal third only.” (A. P. Dodd.)

**3. APROSTOCETUS SEXGUTTATUS** Girault.

*Antea*, p. 213, line 11, *Epentastichus flavella* Girault is the species intended; line 8, 1913 should read 1912. This species belongs to *Epentastichus* which see.

**4. APROSTOCETUS OBSCURUS** Girault.

A female, jungle, Babinda, Queensland, February 13, 1914 (A. P. Dodd). Funicle 1 is only about one and a half times longer than wide. The pronotum is metallic bluish, perhaps.

**5. APROSTOCETUS IMAGO** new species.

*Female*:—Length, 1.25 mm. Short, stout, the propodeum very short, the abdomen stout. Almost exactly the image of *Tetrastichodes secus* Girault but stouter, greenish yellow, the pronotum broadly along meson is black; also the long scutum bears a distinct sulcus and is of the usual sculpture of the tribe (in *secus*, the scutum is very minutely, densely reticulate, scaly). There is no minute dot just mesad of tegula. Pedicel black above at base, subequal to funicle 2 which is longest, somewhat longer than wide; funicles 1 and 3 subequal, quadrate. Club with a distinct terminal spine. Outer tooth of mandible distinct, acute, the inner two shorter, acute. Compared with type of *secus*. Abdomen with two distinct stripes at middle.

From one female caught by miscellaneous sweeping, May 11, 1914 (A. P. Dodd).

*Habitat*: Murwillumbah, New South Wales.

*Type*: No. Hy 2555, Queensland Museum, Brisbane, the specimen on a tag, the head on a slide.

This species is remarkably like the *Tetrastichodes*. The third club joint is obliquely divided from the others.

**6. APROSTOCETUS PLATONI** new species.

*Female*:—Length, 1.20 mm.

Greenish yellow, the wings hyaline, the propodeum except caudad on each side of meson, ocellar area, most of axillæ, four to five spots on each side of abdomen, the space between the third and fourth occupied by a broad smoky cross-stripe (at middle of abdomen or nearly) and tegulæ, dusky black. Propodeum with a short median carina and several irregular carinæ near the spiracle. Scutellum laterad of second groove, blackish. Funicle joints 2 and 3 subequal, a little longer than 1 which is not much longer than wide; pedicel as long as funicle 2. Mandibles tridentate, the two outer teeth acute and longer. Distal club joint with its separating suture oblique, its terminal spine small but distinct.

*Male*:—Not known.

Described from two females reared from a miscellaneous collection of galls from forest trees, November 8, 1913.

*Habitat*: Gordonvale (Cairns), Queensland.

*Types*: No. Hy 3457, Queensland Museum, Brisbane, the above specimens on a slide.

The species is dedicated to the philosopher Plato.

**7. APROSTOCETUS TARSALIS** new species.

*Female*:—Length, 1.22 mm.

Dark metallic purple, the abdomen honey yellow margined rather narrowly with purple from base nearly to apex, dorsad with a mesal purple transverse spot tending to be a cross-stripe (faintly so from each side of the meson) at middle followed by a round spot on the next segment at meson. Coxæ and proximal third of femora concolorous; rest of legs and scape colored like the abdomen; pedicel and ring-joint suffused with yellowish. Funicle joints elongate, each distinctly much longer than the pedicel, 1 a little the longest, over twice longer than wide, not quite as long as the club, the latter with a distinct terminal spine. Pedicel only a third longer than wide at apex. Mandibles edentate, obtusely pointed; oral area orange yellow. Abdomen at base but very narrowly purple if at all. Propodeum distinctly

unicarinate (median), the caudal margin strongly carinate and a neck indicated, from each lateral end of which is a short piece of a lateral carina, thus this carina indicated from apex (caudad). Stigmal vein long. Allied with *tenuis*. Scape slender.

“First three tarsal joints very short, the fourth much enlarged, as long as the others, with a large swollen empodium, the claws large.” (A. P. Dodd.)

From one female captured by sweeping in jungle, May 5, 1914.

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. *Hy* 2556, Queensland Museum, Brisbane, the specimen on a tag; head and legs on a slide.

Another female was taken, January 29, 1914 in same place (A. P. Dodd).

#### 8. *APROSTOCETUS PURPUREIVARIUS* new species.

*Female*:—Length, 1 mm.

Similar to *viridiflavus* Girault but not only the pedicel at base and the distal club joint is purple black but the entire club is so and each funicle joint is distinctly blotched with purple at proximal half. Moreover, the terminal spine of club is longer and funicle 2 is distinctly the longest; funicle 1 subequal to the pedicel and somewhat shorter than 3. Propodeum with a weak median carina and no others.

One female captured by sweeping in jungle, March 6, 1914 (A. P. Dodd).

*Habitat*: Cooktown, Queensland.

*Type*: No. *Hy* 2557, Queensland Museum, Brisbane, the female on a tag, head on a slide.

#### 9. *APROSTOCETUS TENUIS* new species.

*Female*:—Length, 0.90 mm.

Colored somewhat like *margiventris* Girault but the legs and antennæ wholly pale lemon yellow, the coxæ blackish at base, the body is shining black, the distal sixth (tip) of abdomen and margins all around narrowly, black, the cross-stripes of black commencing just within the proximal half and three in number, not especially thin. The funicle is the same but either of the distal two joints is longer than the pedicel. Mandibles tridentate. Distal club joint dusky. Propodeum tricarinate, the median short but complete.

Described from female captured by sweeping in a jungle pocket, June 3, 1913 (A. P. Dodd).

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. *Hy* 2558, Queensland Museum, Brisbane, the above specimen on a tag, the head on a slide.

#### 10. *APROSTOCETUS FLAVOBASALIS* new species.

*Female*:—Length, 1.10 mm.

Coloured much like *imperialis* but dark æneous green, the venter of abdomen yellow only proximad and the yellow spot above near (not just at) base is of moderate size only; also the mandibles are quite different, bearing 3 distinct, acute teeth (in *imperialis*, only 2 teeth, the first short, obtusely pointed, the second broadly truncate); the distal funicle joint is longer, the pedicel somewhat shorter; funicle and club darker, blackish, the distal club joint whitish. Propodeum with a long, distinct median carina. Scape, pedicel and ring-joint lemon yellow like the legs. Sculpture of propodeum rougher than rest of thorax, the lateral carinæ not very distinct.

From one female caught by sweeping in jungle, May 20, 1913 (A. P. Dodd).

*Habitat*: Kuranda, Queensland.

*Type*: No. *Hy* 2559, Queensland Museum, Brisbane, the specimen on a tag, the head on a slide.

**11. APROSTOCETUS NECOPINATUS** new species.

*Female*:—Length, 1.10 mm.

Dark metallic purple, the wings hyaline, the antennæ, legs and abdomen, lemon yellow, the abdomen margined rather broadly along proximal two thirds with metallic purple, purple at tip (not broadly) and midway between end of marginal stripes and tip, with a distinct but narrow metallic purple cross-stripe. First coxæ concolorous. Pedicel and funicles 2 and 3 subequal, funicle 1 a little longer than either, one and a half times longer than wide. Mandibles somewhat as in *bilongifasciatus*, with 2 large, acute outer teeth and a minute acute inner one. An obscure stripe indicated between the end of the marginal stripes on abdomen. Compared with types of *bilongifasciatus* and *tenuis* and with those of *Scitrichodella meteora* and *S. purpureithorax* Girault.

From one female caught in jungle, January 17, 1914 (A. P. Dodd).

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2560, Queensland Museum, Brisbane, the female on a slide.

**12. APROSTOCETUS SALTENSIS** new species.

*Female*:—Length, 1.10 mm.

Dark metallic blue, the wings hyaline, the following parts golden yellow: Head, abdomen, antennæ, a little over distal fourth of scutum and lateral margins of same. Legs lemon yellow except the concolorous hind coxa. Abdomen from base with three pairs of small blue marginal spots (proximal half or somewhat less) followed by several transverse stripes on the distal half. Fore wing rather narrow (about 16 lines of cilia where widest), the stigmal vein short. Tip of abdomen colored. Funicle joints 2 and 3 subequal, barely shorter than 1 which is slightly longer than wide and subequal to the pedicel; club with only a slight terminal spine.

This species resembles somewhat *Ootetrastichus subfasciiventris* for which I mistook it but besides the obvious generic differences, there is more blue on the scutum, the valves of the ovipositor are not plainly extruded, the first funicle joint is short, there are only two complete abdominal stripes (as far as I could make out), the wings are shorter and so on.

From one female caught by sweeping in forest, December 24, 1912.

*Habitat*: Capeville (Pentland), Queensland.

*Type*: No. Hy 2561, Queensland Museum, Brisbane, the female on a slide.

**13. APROSTOCETUS BILONGIFASCIATUS** new species.

*Female*:—Length, 0.95 mm.

Like *tenuis* but metallic purplish black, the abdomen honey yellow margined down each side from base for about two thirds the way to tip, otherwise without markings, the valves distinctly extruded, purplish along their distal halves, the propodeum and postscutellum with a yellowish tinge; head yellowish brown. Propodeum with a distinct median carina, the lateral carinæ apparently absent. Mandibles tridentate, the two outer teeth well developed, acute. Funicle joints subequal, about two and a fifth times longer than wide, slightly shorter than the elongate pedicel. Antennæ filiform, the terminal nipple of club inconspicuous. Antennæ and legs pale yellow.

From one female captured by sweeping in forest, January 2, 1913 (A. P. Dodd).

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2562, Queensland Museum, Brisbane, the specimen on a tag, the head on a slide.

GENUS OOTETRASTICHELLA Girault.

**1. OOTETRASTICHELLA LONGIVENTRIS** Girault.

A female, jungle, Halifax (Ingham), Queensland, April 6, 1914 (A. P. Dodd). The head and thorax are practically dark metallic green, also the abdomen above. The club joints are well separated. Type re-examined.

GENUS OOTETRASTICHUS Perkins.<sup>6</sup>

Head (cephalic aspect) longer than wide, the genal suture long, deep.

1. OOTETRASTICHUS BEATUS Perkins.

Unfortunately, the marginal spots on the abdomen of this species are not definitely described.<sup>7</sup> The following apparent new varieties. *Antea*, p. 217, line 3, *dots* should read *spots*.

A. OOTETRASTICHUS BEATUS ANCEPS new variety. Female.

Golden yellow; quite as described for the typical form. The five marginal spots on abdomen are round, rather large and extend from near base to distal two thirds. Markings only slightly metallic. Characterized apparently by the rather large marginal spots on abdomen. General color fades after death to pale yellow.

From one female captured by sweeping in a weedy Chinese garden, November 3, 1912.

*Habitat*: Proserpine, Queensland. No type.

B. OOTETRASTICHUS BEATUS AFFINIS new variety of A. P. Dodd and A. A. Girault.

*Female*:—Length, 1.60 mm. Pale lemon yellow and agreeing with Perkins's description of *beatus beatus* except that the spots on the lateral margins of abdomen are not *spots* but transverse *dashes* (except a *dot* at base; four *transverse dashes*).

Described from one female captured by sweeping jungle along a forest streamlet, January 3, 1913 (A. P. Dodd).

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2563, Queensland Museum, Brisbane, the female on a tag, the head on a slide.

2. OOTETRASTICHUS LUSTRIS Girault.

This is the genotype of *Proceratoncurea* in the *Ceratoneurini*, described on a later page. *Antea*, p. 218, line 7 of the diagnosis *one* should read *are*.

3. OOTETRASTICHUS CONSIMILIS Girault.

A female, forest, type locality, April 9, 1914. The pronotum and propodeum have a purplish tinge. First three stripes of abdomen more distinct than the fourth, the third stripe a little distad of middle. The marginal black of abdomen is more or less broken. Propodeum scaly, with a median carina but no true lateral ones.

4. OOTETRASTICHUS SILVENSIS Girault.

This belongs to *Neotetrastichodes* which see.

5. OOTETRASTICHUS GUTTATUS Girault.

A female from forest, type locality, August 13 and December 14, 1913. The markings are dark metallic green. A dot on pronotum caudo-laterad. Propodeum on each side dusky. Fifth marginal spot on abdomen much smaller than the others. Mandibles tridentate. Valves of ovipositor shortly extruded. Funicles 2 and 3 subequal. Axillæ concolorous (soiled in the type). Stigmal vein long; wings slender. The large oval fuscous spot in center of abdomen at base absent (in the type due to débris). Allied with *fasciiventris*. Type re-examined.

<sup>6</sup> The species *fasciiventris* is common at Gordonvale, Queensland, from where it was described from specimens captured in December, 1912. The *type* is on a tag and slide.

<sup>7</sup> "Four or five pairs of marginal spots" which may mean four or five pairs (8-10) on each margin (16-20) or four or five on each side (8-10). I have taken it to mean four or five along each margin, since really paired marginal markings are rare (an example is *Grotiusiella multiguttata* described in part XIV). Also, the spots may be round, square, or and so forth.

6. OOTETRASTICHUS NYMPHA new species.

For diagnosis see *antea*, pp. 217-218. The species is here in the literature for the second time only. Immediate base of abdomen edged with metallic green. Flagellum dusky. Funicle 1 not as long as the club. One female, jungle, May 8, 1913 (A. P. Dodd). The type is on a slide.

7. **OOTETRASTICHUS GLORIOSUS** new species of Girault and A. P. Dodd.

*Female*.—Length, 2 mm.

*Female*.:—Length, 2 mm.  
Brilliant metallic purple; all legs intense lemon yellow; antennæ brownish yellow. Wings hyaline. Propodeum not very short, sculptured like the scutum and scutellum, with a median carina; spiracle small, circular, situated further caudad than is usual, with no carinae or grooves about it. Abdomen pointed ovate, no longer than the head and thorax united. First funicle joint distinctly longer than the pedicel, two and a half times as long as wide; second distinctly shorter than first, no longer than pedicel; third a little shorter than pedicel; club not much longer than first funicle joint; second club joint slightly longer than first.  
Found in forest. November 6, 1912 (A. A.

Described from one female caught by sweeping in forest, November 6, 1912 (A. A. Girault).

*Habitat*: Northern Queensland (Ayr, 50 miles south of Townsville).

*Habitat*: Northern Queensland (Ayr, 50 miles south of Townsville).  
*Type*: No. Hy 2564, Queensland Museum, Brisbane, the above specimen on a tag, the head on a slide.

head on a slide.

“ A female at Gordonvale, Q., forest, January 8, 1914. General color dark æneous; median carina of propodeum solid. Stigmal vein short, the marginal long. Club 1 distinct, shorter than 2. Antennæ darker than in the type specimen. Type compared.” (A.A.G.)

8. **OOTETRASTICHUS BRUNNEIVENTRIS** new species of Girault and A. P. Dodd.

*Female*.—Length, 1.60 mm.

*Female*.—Length, 1.60 mm.

Dark brown; pronotum, scutum and scutellum dark metallic coppery green; legs, including coxæ, pale straw yellow; antennæ wholly brownish yellow. Wings hyaline. Propodeum not short, sculptured like rest of thorax, with a distinct median carina; lateral carinæ absent. Spiracle situated against cephalic margin of propodeum. Abdomen no longer than the head and thorax united. First funicle joint two thirds longer than pedicel, fully four times as long as wide; 2 a little shorter than 1; 3 a little shorter than 2, but one half longer than pedicel; club much longer than first funicle joint, first club joint shorter than third funicle joint; second club joint longer than first, terminating in a spur.

Received for publication, December 31, 1911 (A. A.)

Described from one female caught by sweeping in jungle, December 31, 1911 (A. A. Girault).

*Habitat*: Northern Queensland (Yungaburra, 2,500 feet, near Cairns).

*Type:* No. *Hy* 2565, Queensland Museum, Brisbane, the above specimen on a tag, the head on a slide.

9. OOTETRASTICHUS SALTENSIS new species.

*Female*.—Length, 1.50 mm. Valves of ovipositor prominent distad but not exerted, the abdomen long.

the abdomen long.

Deep orange yellow and like *fasciiventris* Girault but the abdomen with three marginal spots the third pair connected transversely by a stripe across just distad of middle. First marginal spot well out from the base of abdomen. Cephalic half of each parapside metallic, the markings deep metallic purple. The marking on cephalic scutum is shorter and somewhat less cordate and it extends a short distance onto the pronotum. Propodeum wholly metallic, with a distinct median carina and no others. Tip of ovipositor

valves black. A long cuneate piece adjoining the axilla and distinctly caudad of it extending along each side of scutellum to the latter's middle is concolorous with the axilla. Funicle 3 longer than pedicel by a little.

From one female captured in forest, January 2, 1913 (A. P. Dodd).

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2566, Queensland Museum, Brisbane, the female on a tag.

**10. OOTETRASTICHUS SUBFASCIATIVENTRIS** new species.

*Female*:—Length, 1.17 mm.

Very similar to *fasciativentris* but the abdomen bears three cross-stripes (and an obscure fourth at apex) on somewhat over distal third, preceded by three marginal spots, the proximal pair at base; also the general coloration is golden yellow and the black valves of the ovipositor are distinctly extruded. Mandibles tridentate.

From one female captured in forest, January 14, 1912.

*Habitat*: Capeville (Pentland), Queensland.

*Type*: No. Hy 2567, Queensland Museum, Brisbane, the female on a slide.

**11. OOTETRASTICHUS SEPTEMGUTTATUS** new species.

*Female*:—Length, 1.20 mm.

Pale lemon yellow, the wings hyaline, the body marked with dark metallic green as follows: A subcordate marking on cephalic third of scutum, a diamond-shaped spot on lateral angle of pronotum, axillæ and a large area just latero-caudad of it, propodeum except along the meson, three wedgeshaped marginal spots on abdomen (increasing in size distad, the third at distal two thirds, their acute apices pointing mesad), a round spot at the meson at distal three fourths and opposite to this at the margin a very minute dot. Valves of ovipositor black. Funicle 1 distinctly much longer than 2 or 3 which are subequal and somewhat shorter than the pedicel. Mandibles tridentate. Stigmal vein long. Propodeum with a median carina and no others excepting a very narrow carina just laterad of the spiracle.

From one female captured by sweeping forest, March 28, 1914.

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2568, Queensland Museum, Brisbane, the specimen on a slide.

**12. OOTETRASTICHUS PULCHRINOTATUS** new species.

*Female*:—Length, 1.30 mm.

Bright golden yellow, the wings hyaline, the antennæ dusky black. Marked with dark metallic green as follows: A peltate area on face just ventrad of insertion of antennæ, ocellar area, pronotum, parapsides, axillæ, a subcordate area on cephalic scutum along about cephalic third and not reaching laterad to margins, scutellum between first grooves, distal two thirds of scutellum between first and second grooves, hind coxa and propodeum; abdomen with a spot at center of base, lateral margins from base a short distance, then five large marginal spots between end of lateral marginal green and apex, these spots in the shape of an elbow, parallel with and along the margin a short distance then proximad turned mesad a short distance, the mesal arm slight on first pair, increasing distad, long on fifth pair and approaching each other (as regards the fifth pair), forming an interrupted (at meson) cross-stripe. A narrow cross-stripe between fifth marginal spot and apex. Valves of ovipositor black at tip. Distal two funicle joints nearly equal, a little longer than the pedicel, 1 much longer, over twice longer than wide. Third tooth of mandible obliquely truncate. Propodeum with a median carina and, apparently, a lateral carina directly from spiracle. Distal half of mesopleurum metallic green.

From one female captured by sweeping forest, April, 20, 1914.

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2569, Queensland Museum, Brisbane, the female on a slide.



**13. OOTETRASTICHUS VIRIDICYANEUS** new species.

*Female*:—Length, 1.15 mm.

Metallic blue-green, the head sordid yellow, the basal third of abdomen suffused with whitish. Wings hyaline. Legs white except hind coxa and bases of others which are metallic. Antennæ whitish, suffused with dusky. Pedicel subelongate, dusky at base above, subequal to funicle 1 which is distinctly longer than 2; 3 slightly shorter than 2; funicle 1 shorter than the club, thrice its own width, not excessively long; funicle 2 somewhat less than twice longer than wide. Mandibles tridentate. Stigmal vein long. Upper occiput metallic.

From one female caught by sweeping miscellaneous vegetation, October 5, 1911.

*Habitat*: Roma, Queensland.

*Type*: No. Hy 2570, Queensland Museum, Brisbane, the specimen on a slide with type appendages of *Neomphaloidella semiflaviceps*.

**14. OOTETRASTICHUS QUADRIGUTTATIVENTRIS** new species.

*Female*:—Length, 1.30 mm.

Dark metallic blue-green, the wings hyaline; abdomen, head and legs golden yellow except hind coxa; abdomen marked with dark metallic green as follows: The whole ventral aspect, the whole dorsal aspect except proximal fourth and two rather large (wider than long) yellow spots longitudinally on each side of the meson in the distal half of proximal half; the yellow proximal fourth bears a narrow cross-stripe of greenish about distal three fourths and is margined with greenish to the cross-stripe but not broadly. Lateral aspect of abdomen golden yellow. A U-shaped green marking over the ocelli. Antennæ wholly dusky; funicle 1 a little shorter than the club, 3 a little shorter than the pedicel, somewhat longer than wide. A row of small punctures along caudal margin of pronotum. Mandibles tridentate. Propodeum just above coxa lemon yellow, also the tegulae. The narrow caudal apex of each parapside lemon yellow. Propodeum with a median carina only, scaly. Type re-examined.

From one female captured by sweeping forest, April 3, 1914.

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2571, Queensland Museum, Brisbane, the female on a tag; head on a slide.

A second female was captured a few days later in about the same place.

**15. OOTETRASTICHUS PURPUREICORPUS** new species.

*Female*:—Length, 1.65 mm. Compared with type of *gloriosus*.

Wholly dark metallic purple, the legs (including coxæ) white, the scape dusky pallid; rest of antenna black and like those of *sublustris* but the funicle joints all longer, 1 being as long as the club. Propodeum with a distinct median carina and no others but the lateral and caudal margins are carinated (apparently the same in *sublustris*). Abdomen somewhat acuminate toward tip. Closely allied with *sublustris* from which it differs in general coloration, in having the hind coxæ colored like the legs and funicle 1 as long as the club. In both species, the funicle joints gradually decrease in length. Similar in every respect to *gloriosus* but purple and the flagellum is black (not merely dusky), funicle 3 plainly twice longer than wide, plainly longer than the pedicel.

From one female caught in jungle, March 1, 1914.

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2572, Queensland Museum, Brisbane, the specimen on a tag; head on a slide.

In the table of species, *antea*, p. 221, line 10 of the table, *funicle 3* should read *club 2*.

GENUS TRICHAPOROIDEA Girault.

Synonym: *Aprostoceroloides* Girault.

**1. TRICHAPOROIDEA DECORA** Girault.

This species belongs to *Neotrichaporoides* Girault which see.

**2. TRICHAPOROIDEA DUBIA** Girault.

The type specimen was taken November 3, 1912.

**3. TRICHAPOROIDEA SPECIOSUS** (Girault). Genotype of *Aprostoceroloides*.

The median groove of scutum is absent. Type re-examined.

**4. TRICHAPOROIDEA MARGIVENTRIS** (Girault).

From *Aprostoceroloides*. Type re-examined. The marginal stripe of abdomen is dark metallic green. A second female taken in the type locality, November 7, 1913 bore two dots in a longitudinal line on meson of abdomen, distinctly distad of the apex of the marginal stripes. Median carina of propodeum long and thin.

**5. TRICHAPOROIDEA PARTICOLOR** new species.

*Female*:—Length, 1.20 mm. Slender.

Dark metallic green, the wings hyaline, the legs white, the hind coxa washed with metallic above; ventral half of head, propleura, prepectus, tegula, cephalic margin of mesopleurum, an ovate spot filling center of abdomen at base, meson of abdominal venter and sides of abdomen at proximal third, honey yellow. Propodeum coarsely scaly, with a distinct median carina, the sculpture nearly punctate, rougher than the rest of the thorax; caudal and lateral margins carinated. Funicle joints each shortening; 1 elongate, nearly as long as the club (three fourths its length), much longer than the pedicel which is somewhat shorter than joint 3 which is much longer than wide.

From one female caught November 3, 1912 on banks of the river. Jungle.

*Habitat*: Proserpine, Queensland.

*Type*: No. Hy 2573, Queensland Museum, Brisbane, the specimen on a tag, the antenna on a slide.

**6. TRICHAPOROIDEA RADIUS** new species.

*Female*:—The same as *eleganta* in stature and so forth but differing in the following particulars: The stripe down meson of pronotum is somewhat narrower, the scutum the same but the large green marking is obtusely conical there leaving distinctly more than the lateral margins yellow (the space between lateral margin of scutum and lateral margin of the green marking at cephalic margin is twice broader); the stripe down meson of scutellum is somewhat narrower, the spot on axillæ oval and thus smaller while the abdomen though similarly margined bears only three complete cross-stripes, one distad of ends of marginal stripes with a cephalic projection at meson (and slight ones at each margin), one joining the ends of the marginal stripes and one preceding this farther proximad; between this first stripe and base, two cross-stripes are slightly indicated by short projections mesad from each margin. Lateral margin of propodeum margined, the lateral carinæ absent, the median distinct.

In *eleganta*, the cephalic half (or nearly) of each parapside, except along lateral margin, is metallic green. In *radius*, the cephalic third of that sclerite is metallic green; the scape except at tip is yellowish; rest of antenna dusky black.

From one female captured by sweeping forest, March 30, 1914.

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2574, Queensland Museum, Brisbane, the specimen on a tag; head on a slide.

A female taken in forest, same locality, February 16, 1912 (A. M. Lea and A.A.G.) had no distinct stripes on abdomen but two stripes within the margined part were indicated from each side; the funicle and club were yellow not blackish. This new variety may take the name of *perfecta*. No type.

Both *eleganta* and *radius* bear a spot on latero-caudal angle of pronotum just cephalad of the green on the parapside. Types of both species compared.

#### 7. *TRICHAPOROIDELLA MAUPAUSSANTI* new species.

*Female*:—Length, 1.40 mm.

Dark metallic green, the wings hyaline, the legs, ventral third of head, center of propleurum, tegulae and abdomen except at distal third and lateral margins obscurely all round, dorsad, dull golden yellow; three dusky stripes on abdomen dorsad across the yellow proximal portion. Scape yellow except at tip above, the rest of antennae fuscous. Pedicel a little shorter than funicle 3, funicle 1 shorter than the club, nearly thrice longer than wide, longest. Pedicel long. Postscutellum brownish. Propodeum with median carina and no others, scaly. Scutum naked. Color of abdomen darkens rapidly after drying. Surface of propodeum not as rough as in *subaenea* whose scutum is also naked.

From one female caught in forest, January 23, 1913.

*Habitat*: Townsville, Queensland.

*Type*: No. Hy 2575, Queensland Museum, Brisbane, the specimen on a tag.

Dedicated to Guy de Maupaussant.

#### 8. *TRICHAPOROIDELLA PESSULUS* new species.

*Female*:—Length, 1.83 mm.

Very similar to the preceding but all of head except vertex and the sides and venter of thorax are golden yellow, the body is stouter and the three cross-stripes on abdomen are interrupted at meson, the third longest (cephalo-caudad); the lateral margin of abdomen is more distinctly margined dorsad. Postscutellum concolorous.

From one female caught January 23, 1913 sweeping forest.

*Habitat*: Townsville, Queensland.

*Type*: No. Hy 2576, Queensland Museum, Brisbane, the specimen on a tag with type of preceding species.

### GENUS TETRASTICHOMORPHIA Girault.

#### 1. *TETRASTICHOMORPHA FLAVA* Girault.

This species differs in color from *Neotrichaporoides uniguttatus* as described. The fore wing is large, the marginal vein long, much longer than the submarginal, the stigmal short. A dot at extreme caudo-lateral angle of the pronotum (*flava* only). There is a median carina on the propodeum in both species and no other carinae; both are large yet slender. Types re-examined.

The species *flava* measures 2.20 mm. Propodeal spiracle round. Funicle and club black; wings hyaline; tip of valves of ovipositor black; club terminating in a nipple. The type female was taken in forest, April 5, 1913.

**2. TETRASTICHOMORPHA ÆNEICORPUS** new species of Girault and A. P. Dodd.

*Female*:—Length, 1.65 mm.

Dark æneous green, the wings hyaline, the legs white except hind coxæ, the scape white except at tip; rest of antennæ black. A small triangle of lemon yellow just in front of cephalic ocellus. Propodeum with a distinct median carina and no others, the sculpture roughly polygonally scaly. Abdomen metallic blue. Median sulcus of scutum incomplete cephalad. Abdomen sculptured like the thorax, conic-ovate, a little longer than the rest of the body. Second ring-joint short, the pedicel long, a little shorter than the distal club joint which is about one and three fourths times longer than broad; first funicle joint subequal to the club, a fourth longer than the second, which is a little over twice longer than wide. Mandibles tridentate, but the third tooth emarginate and oblique at apex. Marginal vein longer than the submarginal, long, the stigmal short, with a short neck.

Described from one female caught by sweeping in the bed of a forest streamlet, December 4, 1913 (A. A. Girault).

*Habitat*: Northern Queensland (Gordonvale, near Cairns).

*Type*: No. Hy 3481, a female on a tag, the head on a slide.

GENUS SELITRICHODELLA Girault.

**1. SELITRICHODELLA MIRA** Girault.

The species measures about 1.15 mm. and is associated with a gall on the midrib of leaves of cockatoo apple. Posterior wings acutely pointed. The type specimens were reared December 15, 1912 and are together on a slide.

A female at Cairns, Queensland, by sweeping in forest, October 25, 1911. The proximal funicle joint is somewhat shorter than each of the other two. The scape is distinctly compressed, more so than with *meteora*, described next. It is more robust than *meteora*.

**2. SELITRICHODELLA METEORA** new species.

*Female*:—Length, 0.63 mm.

Like *mira* but distad the abdomen bears one complete cross-stripe of purple between the ends of the cut-off marginal stripe, a spot of purple dorsad centrally at tip and the indications from each side of a second cross-stripe a little proximad of the first. Both mandibles bidentate, the inner tooth broadly truncate, the mandibles weak. The two distal funicle joints subequal, each a little longer than the first, a little shorter than the pedicel. Coxæ concolorous.

Described from a single female captured from a window, September, 1913 (A. P. Dodd).

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2577, Queensland Museum, Brisbane, the specimen on a tag, the head on a slide.

**3. SELITRICHODELLA PURPUREITHORAX** new species.

*Female*:—Length, 1.10 mm.

Like *meteora* Girault but the abdomen more slender, longer than the rest of the body, its tip distinctly rather broadly purple and the stripes on the abdomen are reversed and more pronounced—thus at the termination of the marginal stripe on each side not far from the purple of tip there is an indication from each side of a cross-stripe and a complete, distinct cross-stripe farther proximad (farther proximad than the indicated cross-stripe in *meteora* and farther from ends of the marginal stripes), at about somewhat more than distal

third. Also base of abdomen is not narrowly purple; marginal purple of abdomen tends to be broader distad, narrowing toward base. Otherwise the same as *meteora* as far as can be told.

The species *meteora* bears a complete median carina on propodeum which is very short at the meson but lateral carinæ appear to be absent. Also in this new species, the mandibles are tridentate. Propodeum not clearly seen, short at the meson.

From one female captured in jungle, December 27, 1913 (A. P. Dodd).

*Habitat*: Harvey's Creek (Cairns), Queensland.

*Type*: No. Hy 2578, Queensland Museum, Brisbane, the specimen on a slide.

#### 4. SELITRICHODELLA COMETES new species.

*Female*:—Length, 1.05 mm.

Like *mira* but the center of scape above and funicle 1 are also purple; funicles 2 and 3 subequal, 2 longer. Mandibles bidentate, the second tooth emarginate at apex. Propodeum with a median carina and a lateral one on each side of the spiracle, close to the latter but not true lateral carinæ.

From one female caught on bushes, November 10, 1913 (G. F. Hill).

*Habitat*: Port Darwin, Northern Territory.

*Type*: No. Hy 2579, Queensland Museum, Brisbane, the female on a tag; head on a slide.

#### 5. SELITRICHODELLA SULFUREIVENTRIS new species.

*Female*:—Length, 0.80 mm. Abdomen no longer than the thorax.

Brilliant dark metallic purple, the antennæ, legs, and abdomen immaculate, pale sulphur yellow, the wings hyaline. Cephalic coxæ mostly concolorous. Funicles 2 and 3 subequal, each a little longer than 1, each distinctly longer than wide, the pedicel somewhat shorter. Funicle 3 distinctly shorter than the club. Mandibles bidentate. Propodeum with several carinæ just laterad of the spiracle and one on each side of it.

From one female reared from cecidomyiid galls on *Careya australis*, December, 1912 (A. P. Dodd).

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2580, Queensland Museum, Brisbane, the specimen on a slide.

#### 6. SELITRICHODELLA SPISSIGRADA new species.

*Female*:—Length, 1.20 mm.

Abdomen longer than rest of body, conic.

Black, the wings hyaline, the scape and legs pale, the hind coxa black; scutum long, lateral margins of parapsides with slight traces of yellow; antennæ dusky; the pedicel dusky above, otherwise subpallid, moderately long, shorter than funicle 1, subequal to funicle 2 which is longer than 3, the latter distinctly longer than wide; funicle 1 over twice longer than wide, distinctly shorter than the club which bears a short terminal spine. Mandibles tridentate, the teeth short and obtuse. Oral area yellowish. Fore wing with about 25 lines of rather fine discal cilia where widest, the stigmal vein long. Valves of ovipositor projecting a little. Mesopostscutellum orange yellow; propodeum very short at meson, without noticeable carinæ.

From one female from the Queensland Museum, through the kindness of Dr. Hamlyn-Harris, collected among undergrowth (mostly Eucalypti), April 16, 1913 (H. Hacker).

*Habitat*: Brisbane, Queensland.

*Type*: No. Hy 2581, Queensland Museum, Brisbane, thorax on a tag, head and abdomen on a slide.

**7. SELITRICHODELLA AURIVENTRIS** new species.

*Female*:—Length, 1.10 mm.

Same as *sulfureiventris* but the whole head is golden yellow, the abdomen longer than the thorax, the funicle joints longer, thus 3 is nearly twice longer than wide (plainly not so in the other species) and on the propodeum the carina along the mesal side of the spiracle is crescentic, joining the opposite carina at each end while in the other species it is not regularly curved and diverges more or less cephalad, the opposite carina curving correspondingly with it. And the mandibles are distinctly tridentate. Propodeum with a median carina.

From one female captured by sweeping along edge of jungle, May, 1913 (A. P. Dodd).

*Habitat*: Kuranda, Queensland.

*Type*: No. Hy 2582, Queensland Museum, Brisbane, the specimen on a slide.

## GENUS SELITRICHODES Girault.

The scutellum bears four sulci.

**1. SELITRICHODES FASCIATIVENTRIS** Girault.

Length, 1.20 mm. The two black abdominal stripes are somewhat proximad of middle. A more or less obscure dusky spot near the tegula. Funicle joints subequal, subquadrate; club slightly longer than the funicle. The types were reared from galls on Eucalyptus and are four females on a slide. The scutellum bears four sulci. Types re-examined.

**2. SELITRICHODES MORUM** (Girault).

Removed from *Tetrastichodes* which see. Type re-examined. Funicle 2 distinctly shorter than 3; stigmal vein over half the length of the marginal.

**3. SELITRICHODES FLAVISCUTELLUM** (Girault).

Removed from *Syntomosphyrum*. Type re-examined; it consists of the female taken at Ayr, Queensland. The ring-joints have not been verified.

**4. SELITRICHODES DARWINI** new species.

*Female*:—Length, 0.80 mm.

Black, the wings hyaline, the head suffused with yellow, the cephalic femora, the trochanters, knees, tibiae, tarsi and antennae white. Mandibles distinctly tridentate. Scutum very long. Pedicel somewhat longer than funicle 1 which is a little longer than wide, much larger than either of the other funicle joints which are small and narrow, joint 2 a little wider than long, 3 subquadrate, not quite half the length of 1 and distinctly narrower; club longer than the funicle, without a distinct terminal seta. Scape slightly compressed. Discal cilia of fore wing fine and dense, the blade large, obtusely rounded at apex. Tarsal joints short.

Differs from *morum* in that the stigmal vein is short (very long in *morum*), the body more robust and the color different.

From one female taken from window of a granary, October 6, 1911.

*Habitat*: Roma, Queensland.

*Type*: No. Hy 2583, Queensland Museum, Brisbane, the female on a slide.

**5. SELITRICHODES ROTUNDIVENTRIS** new species.

*Female*:—Length, 0.55 mm. Short, robust, the abdomen nearly round.

Black or brown-black, the head, legs, antennae, lateral margins of scutum, mesopleura, scutellum and (less distinctly) the base of abdomen across from margin to margin, bright lemon yellow. Hind coxa blackish, the hind femur a little dusky laterad at middle, the legs pallid.

Pediceal distinctly longer than funicle 1 which is subquadrate, longer than 2 which is narrower and subquadrate, 3 like 2 but shorter, hence wider than long. Mandibles with three acute teeth. Stigmal vein shorter than with *morum* which this species resembles in form.

This species resembles closely *flaviscutellum* Girault but the fore wings are narrower, the base of the abdomen yellowish, the cephalic margin of scutum not yellow, the hind femur not dusky along proximal half and the abdomen is rounded, not cylindrical (though obtuse at apex) as in *flaviscutellum*.

From one female captured in forest, December 24, 1912.

*Habitat*: Capeville (Pentland), Queensland.

*Type*: No. Hy 2584, Queensland Museum, Brisbane, the specimen on a slide.

#### GENUS NEOTETRASTICHODES Girault.

*Antea*, p. 228, line 2, Girault should read *Ashmead*; line 3, the word *male* should precede the word *female*.

#### 1. NEOTETRASTICHODES FLAVUS Girault.

Length of female, 1.80 mm.; of male, 1.30 mm. The types were captured by sweeping grass in forest, April 30, 1912. The types are one pair on a slide.

#### 2. NEOTETRASTICHODES SILVENSIS (Girault).

Removed from *Ootetrastichus*. Type re-examined. The following descriptive notes from a second female from the type locality, forest, April 3, 1914 are correct:—

Length, 1.30 mm.

Æneous green, the wings hyaline, the scape, legs except the concolorous hind coxa and somewhat over proximal third of abdomen creamy white; rest of abdomen dark metallic purple. Lateral margin of abdomen at base for a short distance metallic purple; proximal margin of purple of abdomen (dorsal aspect) rather deeply concaved (so that at the margins, the purple proceeds nearer to base than at center). Mandibles tridentate, the third tooth broad, obliquely truncate. Funicle 1 shorter than the club, longest, about two and a fourth times longer than its greatest width, 2 somewhat shorter than it, 3 a fourth shorter than 1, slightly longer than the pedicel. Cheeks short. Abdomen conic-ovate, somewhat longer than the thorax. Propodeum with a distinct median carina and what appears to be two lateral carinæ running to base of caudal coxa from each side of the spiracle and not side by side (probably due to an impression due to drying, thus giving the appearance of two carinæ). Propodeum finely reticulated; rest of thorax with the usual very fine longitudinal sheening of the group. Abdomen pointed at tip. Club with a very short nipple, the three joints not much unequal. Scape normal.

#### 3. NEOTETRASTICHODES MAXIMUS new species of A. P. Dodd and A. A. Girault.

*Female*:—Length, 2.30 mm.

Very dark metallic blue, the coxæ and femora concolorous; rest of legs and antennal scape golden yellow, rest of antennæ black. Fore wings hyaline. Stigmal vein with a distinct knob, postmarginal vein two thirds length of stigmal. Abdomen short and stout, convex above, straight beneath. Scutum and scutellum naked. Propodeum almost smooth, glabrous, not very short, with a median carina. Scape scarcely compressed; pedicel not elongate, subequal to funicle joint 2, 1 a little larger than 2, 3 a little smaller; club not much shorter than the funicle, the joints about subequal; ring-joints large and distinct.

From one female caught by sweeping in jungle, August 7, 1913 (A. P. Dodd).

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2585, Queensland Museum, Brisbane, the specimen on a tag, the head on a slide.

**4. NEOTETRASTICHODES ROBUSTUS** new species of A. P. Dodd.

*Female*:—Length, 2.10 mm. Robust.

Dark metallic green, the coxæ concolorous, the rest of legs and antennal scape bright golden yellow; pedicel and ring-joints brownish, rest of antennæ black. Wings stained yellowish. Thorax with scattered bristles. Propodeum rather short and broad, with a median carina. Abdomen conic-ovate, straight above, convex beneath. Scape slender, normal; pedicel elongate; funicle 1 distinctly longer than pedicel, nearly four times as long as wide, 2 no longer than the pedicel, 3 shorter; club no longer than funicle 1, with a short terminal nipple; ring-joints not large.

From one female taken from a window, Cooktown, February 3, 1912 (A.A.G.).

*Habitat*: Cooktown, Ayr, Ingham and Herberton, Queensland.

*Type*: No. Hy 2586, Queensland Museum, Brisbane, the Cooktown specimen on a tag, the head on a slide.

Also a female was taken from a window, Ayr, November 7, 1912; one from a window, Ingham, February 16, 1913; and another from a window, Herberton, December 28, 1913 (A.A.G.).

**5. NEOTETRASTICHODES MERIDIALIS** new species of A. P. Dodd.

*Female*:—Length, 1.65 mm.

Very similar to *robustus* Dodd but smaller, the hind coxæ golden yellow, the flagellum wholly yellow-brown; wings hyaline; propodeum not short; pedicel as long as the elongate first funicle joint; club longer than funicle 1.

From one female from a window of a wool-store, October 3, 1911 (A. A. Girault).

*Habitat*: Brisbane, Queensland.

*Type*: No. Hy 2587, Queensland Museum, Brisbane, the female on a tag; head on a slide.

**6. NEOTETRASTICHODES MERIDIANUS** new species.

*Female*:—Length, 1.40 mm.

Similar to *maximus* Dodd and Girault and *æneus* Girault differing from the former in not being very dark, black or nearly, but dark metallic green like *æneus*; also the fore wings are smaller, the antennæ dusky yellowish not black (except scape) and they are less robust. The tibiae are all straw yellow, the femora concolorous. Differs from *æneus* in having the femora concolorous and the pedicel somewhat less elongate. The pronotum is long, the upper thorax naked in all three species.

From two females on a card labelled "No. 27, Nat. Mus., Victoria. From galls on gum. 11.94."

*Habitat*: Melbourne, Victoria.

*Type*: No. Hy 2588, Queensland Museum, Brisbane, the two specimens on a card, a head on a slide.

**7. NEOTETRASTICHODES PERKINSI** new species.

*Female*:—Length, about 1.15 mm.

Pale golden yellow, the wings hyaline, the body marked with small black spots as follows: Three marginal spots (wider than long) on proximal half of abdomen and a minute dot caudad of the third; a longer than wide, small spot on pronotum caudo-laterad, one just mesad of tegula and one on lateral propodeum, the three in a line caudo-cephalad but the line obliqued a little caudo-mesad. Antennæ as in *Ootetrastichus beatus* Perkins. First and fourth ring-joints large, the inner two transverse-linear. Form like *Ootetrastichus*. Pedicel subequal to funicle 3, club 1 longest. Funicle 3 much longer than wide. Mandibles tridentate. Tip of valves of ovipositor black.

From one female taken by sweeping jungle along a forest streamlet, January 3, 1913 (A. P. Dodd).

*Habitat*: Gordonvale, Queensland.

*Type*: No. Hy 2589, Queensland Museum, Brisbane, the specimen on a slide.



**8. NEOTETRASTICHODES ELECTRA** new species.

*Female*:—Length, 2 mm.

Black, the wings hyaline; ventral half of head, tegulae, scape except dorsad at tip, postscutellum and abdomen golden yellow, the legs a little embrowned. Caudal coxa black. Stigmal vein rather short. Abdomen dorsad black across base narrowly, the black acutely produced caudad at meson; the tip black and between tip and base there are five complete cross-stripes, the first three connected along meson by a rather broad longitudinal stripe. Dorsum of abdomen scaly. A yellow spot at occipital margin of vertex against the eye, laterad of lateral ocellus. Thorax rather coarsely scaly, a line of setigerous punctures along lateral margin of scutum, the latter otherwise naked. A short sulcus at mesal base of scutellum, the second lateral sulcus foveate, the surface like that of the scutum. Propodeum scaly, moderate at the meson, without lateral carinae but with a median one and a short carina directly from the spiracle. The short third club joint with a short, distinct spur. Funicle 1 somewhat longer than wide, the others each shortening, 3 oval, a little shorter than the pedicel. Wings broad.

From one female caught October 11, 1914 (H. Hacker).

*Habitat*: Brisbane, Queensland.

*Type*: No. Hy 2590, Queensland Museum, Brisbane, the specimen on a tag; antenna on a slide.

## GENUS NEOMPHALOIDES Girault.

This genus is the same as *Ootetrastichella* but the scutum bears a median groove and the club is 3-jointed.

**1. NEOMPHALOIDES STYLATUS** new species.

*Female*:—Length, 2.20 mm. Abdomen conic-ovate, distad produced into a short stylus, the ovipositor extruded a short distance beyond the stylus. Abdomen distinctly much longer than the thorax.

Black, shining, the wings hyaline, the scape, knees, tibiae and tarsi yellowish brown, also the venation. Antennae long; funicles 1 and 2 subequal, each about two and a third times longer than wide and distinctly shorter than the long club, 3 a little shorter than 2, distinctly longer than the pedicel. First two club joints plainly longer than wide, the third somewhat shorter, with a distinct terminal nipple. Club as long as the scape. Mandibles tridentate, the two inner teeth together. Stigmal vein of moderate length. Second two ring-joints very short. Thoracic sulci very distinct. Scutum with a row of setae along lateral margin, otherwise naked. Propodeum finely wrinkled, tricarinate, rather long, the lateral carina forking at apex; an oblique ridge or carina running meso-cephalad from origin of the fork of the lateral carina, but not quite complete at either end. Lateral margin of propodeum carinated. Scutellum with a tinge of metallic green. Abdomen subpetiolate.

Differs from the genotype in that the stylus of the abdomen is not half as long as in that species. The latter is shorter at propodeal meson and has no lateral carina and nearly half the body of its abdomen is red, the body shiny, the sculpture rather faint. Its other colors are also much different.

From one female caught in jungle, August 20, 1914.

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2591, Queensland Museum, Brisbane, the specimen on a tag; head on a slide.

## GENUS EPITETRASTICHUS Girault.

The name *Pentastichodes* is naked and without standing in nomenclature.

## 1. EPITETRASTICHUS SPECIOSISSIMUS Girault.

The type specimen was captured in grass near a cane field, Babinda, October 29, 1911. The sixth abdominal marginal spot is open laterad, the first at base joined across meson. The conical marking of scutum may go only to apex of that part. One female, Gordonvale, forest, August 8, 1914.

## 2. EPITETRASTICHUS FLAVIPOSTSCUTELLUM Girault.

Length, 1 mm. Wings hyaline. Type female was captured December 27, 1913 by sweeping in the forest along Cape River; it is on a tag, the head on a slide.

## 3. EPITETRASTICHUS XANTHER (Girault).

A common forest species. *Antea* (these memoirs, II), p. 200, line 1 under this species, *face* should read *occiput*. The species is distinct from *nigriventris*. The thoracic pleura are often suffused with dusky, the cross-stripes of abdomen are regular, often alternately less broad or slightly incomplete laterad. Funicle joints subequal to each other and to the pedicel. The club bears a short nipple. Propodeum short at the meson, there with a median carina. A female in the type locality, November 8, sweeping edges of a forest streamlet.

“The black stripes across the abdomen are often obscure and suffused. One female, Rossville (Cooktown), Queensland, February 23, 1912, sweeping jungle along a roadside (A.A.G.) and another from forest, Meerawa, Queensland, July 26, 1913 (A.A.G.)”—A. P. Dodd.

## A. EPITETRASTICHUS XANTHER HILLI new variety.

Like *xanther* but the abdomen has but four cross-stripes commencing from proximal fourth, at base yellow; the body is smaller and the postscutellum yellow. Funicle 1 is also a little longer than the others, 3 subglobular. Antennae yellowish, also scutellum. Propodeum with a median carina but no true lateral one.

From one female taken from bushes, October 10, 1913 (G. F. Hill).

*Habitat*: Port Darwin, Northern Territory.

*Type*: No. Hy 2592, Queensland Museum, Brisbane, the female on a tag.

## 4. EPITETRASTICHUS LONGFELLOWI Girault.

Synonyms: *Epomphaloides viridis*, Girault; *Epitetrastichus nympha* Girault.

The median carina of propodeum forks only at apex and is quite solid. The abdomen has no petiole. Type re-examined.

The median carina of propodeum in this species and in *nympha* broadens just before distal end into a fork but the latter is solid; the oblong propodeal spiracle is near lateral margin, its long axis caudo-cephalad. Both are the same yet the caudal wings in *nympha* are slightly narrower and there is no yellow on the abdomen. The species *aneithorax* differs from both in having the scutum naked and as otherwise indicated. Types re-examined.

Dark metallic purple; legs bright golden yellow, the cephalic coxae suffused with metallic; antennal scape yellow, pedicel brown, rest black. Wings hyaline. Scutum with scattered bristles from setigerous punctures; median groove of scutum complete, narrow. Propodeum moderately short, with fine scaly sculpture; lateral carinae absent; median distinct.

Pedicele slender; funicle 1 little longer than pedicele, fully three times as long as wide; 2 one half the length of 1, 3 slightly shorter than 2; club somewhat shorter than funicle 1; ring-joints small about subequal. Notes from the following specimens:

A female captured from a window at Mirani (Mackay), October, 1911. The abdomen in this last specimen was suffused with brown; median groove of scutum complete, very narrow; club pale. Compared with type. A female at Ayr, Queensland, forest, November 6, 1912. One female, Cooktown, window, February, 1912.

##### 5. *EPITETRASTICHUS VARICOLOR* new species of A. P. Dodd.

*Female*:—Length, 1.75 mm.

Golden yellow; occiput, parapsidal furrows, grooves of scutellum and propodeum dark brownish; abdomen nearly wholly dusky dorsad; legs and antennal scape pale yellow, rest of antennæ black. Body slender, the abdomen slender, pointed conic-ovate. Median groove of scutum faint but complete. Propodeum rather short, scaly, with a pair of median carinæ. Wings hyaline. Flagellum very long and slender, funicle 1 somewhat longest of the funicle, twice as long as pedicele, club somewhat longer than any of the funicle joints, the second joint a little longer than the first, the third small.

From one female caught by sweeping in forest, June 13, 1912 (A.A.G.).

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2853, Queensland Museum, Brisbane, the female on a tag; head on a slide.

“This species is very similar to *Aprostocerca kelloggi* Girault but has only a little blackish on cephalic scutum at cephalic margin centrally, the propodeum is wholly black (yellow laterad of spiracle in *kelloggi*) and somewhat longer at the meson and the pronotum is broadly black across the meson nearly to the lateral margins. Only the face of pronotum is black in *kelloggi* and in this last species the cephalic half of scutum is blackish except along median line at lateral margins. Types compared.” (A. A. Girault.)

##### 6. *EPITETRASTICHUS BICOLOR* (Girault).

*Tetrastichus bicolor* Girault in *antea*.

*Female*:—Length, 1.65 mm.

Black; lower part of face, an area at insertion of wings, postscutellum, basal third or more of abdomen, legs (except base of hind coxæ) and antennal scape golden yellow; pedicele dusky, flagellum fuscous; rest of abdomen brownish with darker cross-stripes. Propodeum with a median carina. Median groove of scutum not very distinct. Abdomen conic-ovate, somewhat wider and longer than thorax. Funicle joints cylindrical ovate, 1 as long as pedicele and distinctly longer than wide, 3 a little shorter than 1, the first club joint as long as the other two combined. Fore wings broad, hyaline.

From one female captured by sweeping in strip of jungle, April 16, 1913 (A. P. Dodd), type locality.

##### 7. *EPITETRASTICHUS LONGICLAVUS* new species of A. P. Dodd.

*Female*:—Length, 1.60 mm.

Agreeing with *longfellowi* Girault but differing as follows: All legs and antennal scape and pedicele intense lemon yellow; abdomen almost wholly dark brown, slightly suffused with metallic, funicle 3 only slightly shorter than 1 and a little longer than the pedicele, club much longer than funicle 1, the first two club joints distinctly longer than wide (in *longfellowi*, the second funicle joint is subequal to the pedicele, 3 distinctly shorter, the original description

being erroneous; and scarcely more than half as long as 1, the club no longer than funicle 1, the first two club joints being wider than long). Propodeum with a weak curved carina mesad of the spiracle. Compared with type of *longfellowi*.

*Habitat*: Queensland.

*Type*: No. Hy 2594, Queensland Museum, Brisbane, the female on a tag; head on a slide.

#### 8. *EPITETRASTICHUS FLAVISCAPUS* new species of A. P. Dodd.

*Female*:—Length, 1.65 mm.

Dark metallic green, the coxæ and femora concolorous, the tibiæ, tarsi and antennal scape, golden yellow, rest of antennæ black. Wings hyaline. Scutum and scutellum naked. Propodeum rather long, coarsely scaly, with distinct median and lateral carinæ. Abdomen conic-ovate, no longer than the thorax. Pedicel somewhat shorter than the first funicle joint; funicle joints subequal, cylindrical ovate, half longer than wide. Club as large as two preceding joints united, with a short terminal nipple; last three ring-joints very small.

From one female captured in jungle, January 15, 1914 (A. P. Dodd).

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2595, Queensland Museum, Brisbane, the specimen on a tag, the head on a slide.

#### 9. *EPITETRASTICHUS HETÆRICOS* new species.

*Female*:—Length, 1.80 mm.

Very similar to *speciosissimus* but differing in that the large conical marking of the scutum is regular (not rather suddenly narrowed at a little over distal half of scutum) and extends nearly to apex of scutellum, the pronotum is black except laterad and the caudal margin very narrowly (only face of pronotum is black in the other species, not as originally described), the hind femur centrally is dark brown, the occiput is all black except ventral border, the scrobes are black and the hind coxæ exteriorly, the third marginal spot on the abdomen is smaller (the first spots joined across meson in both species and situate at base), also each of the following spots; and the metapleurum and caudal mesopleurum are black (not so in the other species, contrary to former statements). Antennæ dusky black except proximal two thirds of scape. The propodeum is a little visible at meson from above, bears a very short complete median carina but no true lateral ones. The cephalic, subquadrate black area on each axilla is decidedly longer in this species extending nearly to apex from cephalic margin, longer than wide (in the genotype nearly square and extending slightly caudad of middle). Stripe 6 of abdomen (just before apex) is merely broadly joined to 5 along the meson. A row of faint punctures along lateral margin of scutum in both species. Funicle 3 a little longer than wide. Mandibles tridentate, the teeth obtuse.

From one female caught in forest, August 13, 1914.

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2596, Queensland Museum, Brisbane, the specimen on a tag with type of *speciosissimus*, the head on a slide. The female type of the genotype is on a tag, the head on a slide.

#### 10. *EPITETRASTICHUS X-CARINATUS* new species.

*Female*:—Length, 1.50 mm.

Orange yellow, the distal third of scutum (or the part not black), scutellum between the lateral grooves, legs and scape pale lemon yellow; a rounded orange yellow area in center of scutellum. The following parts black: Head, prothorax, cephalic two thirds of scutum, propodeum except broadly along the meson and lateral margins of abdomen rather broadly from base to distal three fourths; also tip of abdomen and apex of each parapside. Postscutellum

lemon yellow. Propodeum with an X-shaped median carina, the cephalic pair of arms longer and curving mesad (*i.e.* convex, not concave); no true lateral carina, the surface scaly. Second ring-joint very short. Flagellum dusky brownish. Funicle 1 plainly shorter than the club, plainly longer than wide, 3 subequal to the pedicel, somewhat longer than wide. Club with a small terminal nipple. Mandibles tridentate (at least one). Somewhat like *Neomphaloidella saltensis* but the scutellum is not mostly black and so on.

From one female caught at 1,000 feet in jungle, May 27, 1914 (A. P. Dodd).

*Habitat*: Upper Tweed River, New South Wales.

*Type*: No. Hy 2597, Queensland Museum, Brisbane, the specimen on a tag, the head with slide type of *Tetrastichodes susurrus* Girault.

#### 11. EPITETRASTICHUS FILIFORMIS new species.

*Female*:—Length, 1.65 mm., excluding ovipositor which is extruded for two thirds the length of the abdomen, the latter conical, a third longer than the rest of the body. Head longer than wide, oval.

Dark metallic green, the knees, tibiae and tarsi pale yellow, the wings hyaline. Propodeum finely scaly, short at meson, there with a median carina, true lateral carinae absent but a weak carina directly from the spiracle and adjoining a long-oval fovea mesad. Antennae slender, filiform, the scape and funicle 1 elongate, the scape the longer of the two; pedicel not twice longer than wide at apex, less than half the length of funicle 1 which is subequal to the club; funicle 3 over thrice longer than wide, not quite two thirds the length of 1, longer than club 1 which is nearly twice longer than wide; club with a minute terminal nipple. Mandibles tridentate. Stigmal vein of moderate length. Scutum practically naked.

From one female caught in forest (1,500 feet), May 17, 1914 (A. P. Dodd).

*Habitat*: Upper Tweed River, New South Wales.

*Type*: No. Hy 2598, Queensland Museum, Brisbane, the specimen on a tag; head on a slide with slide type of *Selitrichodella cometes* Girault.

#### 12. EPITETRASTICHUS COBDENI (Girault).

*Tetrastichus cobdeni* Girault.

Much like *bicolor*. Propodeum scaly. Ocellar area black; postscutellum bright lemon yellow. Tegulae yellow. Propodeum without true lateral carinae but a convex narrow carina just mesad of spiracle, the median carina distinct, its proximal half narrowly prongshaped; a line of punctures down lateral margin of scutum, the latter otherwise naked. Type re-examined.

#### 13. EPITETRASTICHUS DARWINI (Girault).

*Tetrastichus darwini* Girault.

Median groove of scutum only at cephalic third. The club is long, cylindro-conic. Funicle 3 a little the longest. Face only of pronotum blackish, not the narrow dorsum. Propodeum with a median carina only, concolorous laterad and caudad of the spiracle. Scutum naked or nearly so. Type re-examined.

#### 14. EPITETRASTICHUS MARGIVENTRIS (Girault).

*Tetrastichus margiventris* Girault.

Resembles somewhat *Neomphaloidella westwoodi* which has the abdomen similarly colored but the antennae are different. Funicle 1 over four times longer than wide. Scutum naked. Type re-examined. It was captured December 2, 1912.

**15. EPITETRASTICHUS ÆNEITHORAX** new species.

*Female*:—Length, 1.35 mm.

Like *longfellowi* but the front coxa also orange yellow, together with the tegula, part of mesopleurum ventrad of it, part of metapleurum above and cephalad of hind coxa, sides of base of abdomen and venter of abdomen along distal half; body otherwise dark aneons green except scape, the pedicel dusky. Funicles 1 and 2 more or less subequal, distinctly shorter than the club, 3 a little shorter, longer than the pedicel. Scutum naked.

Described from one female captured in the jungle, December 4, 1913 (A. P. Dodd).

*Habitat*: Kuranda, Queensland.

*Type*: No. Hy 2599, Queensland Museum, Brisbane, the above specimen on a tag, the head on a slide.

**16. EPITETRASTICHUS POSTSCUTELLATUS** new species of Girault and A. P. Dodd.\*

*Female*:—Length, 1.35 mm.

Black, suffused with brown, the postscutellum lemon yellow, the wings hyaline, the abdomen brown with many cross-stripes of black, the legs, lower face and antennæ lemon yellow, the hind coxa black. Propodeum with a median carina and no others. Mandibles tridentate. Funicle 1 cylindrical oval, longest but not much longer than wide, 2 subequal to the pedicel, 3 oval, a little longer than wide; club with a short terminal spine. Pedicel dusky above. Scutum and scutellum not hairy, nearly naked.

*Male*:—Not known.

Described from one female captured by sweeping forest vegetation, summit of Pyramid Mountain (3,000 feet), August 17, 1912.

*Habitat*: Mulgrave River (Gordonvale, near Cairns), Queensland.

*Type*: No. Hy 2600, Queensland Museum, Brisbane, the above specimen on a tag, the head on a slide.

**A. EPITETRASTICHUS POSTSCUTELLATUS ATRELLA** new variety of A. P. Dodd.

*Female*:—Length, 1.40 mm.

Similar to *postscutellatus postscutellatus* Girault and Dodd but the thorax wholly uniformly black.

From one female captured on summit of Mount Pyramid, 3,000 feet, August 17, 1912 (A.A.G.).

*Type*: No. Hy 2601, Queensland Museum, Brisbane, the specimen on a tag.

In both varieties the cross-stripes on the abdomen are obscure.

**17. EPITETRASTICHUS 6-GUTTATIVENTRIS** new species.

*Female*:—Length, 1.30 mm.

Black, the legs white except coxæ, proximal two thirds of caudal femur, proximal fourth of other femora and distal two tarsal joints. Sides of abdomen at base (dorsal half) and three elliptical (long axis transverse) spots on each side of meson dorsad, proximal third from base, golden yellow, the spots not prominent, the distal pair smallest; each spot is nearer lateral margin than to meson. Antennæ wholly black; pedicel subequal to funicle 3, funicle 1 distinctly longer but shorter than the club; funicle 3 somewhat longer than wide. Club with a short but distinct terminal spine, joint 3 shortest. Propodeum scaly, moderately short at the meson, there with a carina, true lateral carinae absent. Stigmal vein rather long. Mandibles with two distinct teeth and a third distinctly indicated but short and obtuse. Second ring-joint very short.

From one female captured by sweeping in forest, May 18, 1914.

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2602, Queensland Museum, Brisbane, the specimen on a tag; head on a slide.

\* Probably a variant of *cobdeni*.

**18. EPITETRASTICHUS CRESSONI** new species.

*Female*:—Length, 1.55 mm.

Deep orange yellow, the abdomen with three dusky cross-stripes within proximal half, the first some little distance out from base, the distal one about across the middle. Funicle and club black. Tip of scape and dorsal pedicel dusky. Wings hyaline. Tip of valves of ovipositor, center of pronotum (including the neck), tegulae and a minute dot at extreme latero-caudal angle of pronotum, dusky blackish. Mandibles tridentate. Pedicel rather long, subequal to funicle 3 which is distinctly longer than wide. Funicle 1 about one and a half times longer than wide, somewhat longer than the pedicel, subequal to 2, shorter than the club whose third joint is shortest and with a terminal spine. Club 1 a little shorter than funicle 3. Postscutellum lemon yellow. Propodeum scaly, without lateral carinae, the median present, complete, not long.

From one female captured in forest, May 20, 1914.

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2603, Queensland Museum, Brisbane, the female on a tag; head on a slide.

Named for Ezra Townsend Cresson.

**19. EPITETRASTICHUS BURMEISTERI** new species.

*Female*:—Length, 1 mm.

Dark metallic purple, the wings hyaline, the legs (except proximal half of coxae), a little over proximal half of abdomen and the antennae golden yellow, the yellow of abdomen dorsal with three purple cross-stripes, the proximal one fainter. Funicle joints subequal, subglobular, a little wider than long, shorter than the pedicel; club large, ovate, its third joint short, wider than long, shorter than the stout terminal spine. Third tooth of mandible much shorter, obliquely truncate, the outer two rather long, acute. Tegula golden yellow. Propodeum short at the meson (carinae not seen). Stigmal vein short. Posterior wing with six lines of discal cilia where widest. Distal three ring-joints very short.

From one female labelled "Pt. Darwin, 10-10-13. Forest. G. F. Hill."

*Habitat*: Port Darwin, Northern Territory.

*Type*: No. Hy 2604, Queensland Museum, Brisbane, the specimen on a tag, the head on a slide.

Dedicated to Hermann Burmeister.

## GENUS QUADRASTICHUS Girault.

**1. QUADRASTICHUS SANNIO** Girault.

This species belongs to the genus *Paraprostocetus* which see.

**2. QUADRASTICHUS FUSCUS** (Girault).

Length, 0.70 mm. *Antea*, under this species, line 4, *ring-joints* should be in the singular number. The type is on a slide and was collected from a window, March 20, 1913. The original description is in error in regard to funicle 3 which is also ring-like but larger than 2.

## GENUS NEOMPHALOIDEA Girault.

**1. NEOMPHALOIDEA KURANDENSIS** (Girault).

From *Aprostocetus*. The types are five females on a card and a slide with appendages. They were reared from braconid cocoons. Head with scattered thimble punctures. In the male the femora are paler, the antennae with four funicle, two club joints. The female measures 2 mm.

Propodeum of moderate length, the lateral carina forked at apex, the fork solid. The punctures of head are on the vertex and dorsal half of face. At the ventral end of each

eye, the face is gently inflexed, the portion ventrad being on a lower level than the dorsal part (the latter bearing the punctures). The caudal femur is concolorous, the others more or less fuscous. Second two ring-joints very short. Segment 2 of abdomen reticulated. Face narrows below the eyes (cephalic aspect) somewhat as in *Atoposoma* but the vertex is not elevated. A number of females were reared July 5, 1912 from *Apanteles* cocoons on a blade of grass, forest, Gordonvale, Queensland. Types re-examined.

**2. NEOMPHALOIDEA SULCATA** new species of Girault and A. P. Dodd.

*Female*:—Length, 2.30 mm.

The same as *aneca* but the femora also concolorous, the tibiae brownish. Pedicel and rest of antennae black. Median groove of scutum complete. Propodeum distinctly tricarinate, the spiracle laterad of the lateral carina. Pedicel of usual length (as in *aneca*), but the flagellum stouter, the distal funicle joint distinctly shorter than the proximal, about a fourth longer than the pedicel; funicle 1 somewhat over twice longer than wide; joint 2 intermediate in length. Agreeing otherwise with *aneca*. Mandibles tridentate. Club plainly 3-jointed, with a short, terminal seta, the first joint longest, longer than wide.

Described from one female caught by sweeping grass and foliage on edge of jungle, along the Mulgrave River, March 30, 1913 (A. A. Girault).

*Habitat*: Northern Queensland (Gordonvale, near Cairns).

*Type*: No. Hy 2605, Queensland Museum, Brisbane, the above specimen on a tag, the head on a slide.

Later, a female was found from Thursday Island, Torres Strait, collected in forest, March 11, 1912.

**3. NEOMPHALOIDEA METALLICA** new species of Girault and A. P. Dodd.

*Female*:—Length, 2 mm.

Color as in *Epitetrastichus longfellowi*, metallic green. Wings hyaline. Median groove of scutum complete. Scutum and scutellum without bristles. Propodeum rather long, with a distinct neck, shining, rugose, carinated posteriorly; median and lateral carinae present, distinct. Antennae as in *longfellowi* but the first ring-joint is distinctly larger than the other two.

Described from one female caught by sweeping in heart of jungle, 1,500 feet, September 12, 1913 (A. P. Dodd).

*Habitat*: Northern Queensland (Kuranda, near Cairns).

*Type*: No. Hy 2606, Queensland Museum, Brisbane, the above specimen on a tag, the head on a slide.

“The propodeum in this species bears several irregular, weak carinae, both longitudinal and transverse and laterad of the lateral carina is rugulose; the irregular carinae are not numerous, most of the space between median and lateral carinae polished.” (A. A. Girault).

**4. NEOMPHALOIDEA IO** Girault.

One female, forest, Mount Pyramid opposite Gordonvale, Queensland, 2,500-3,000 feet, June 2, 1913 (A. P. Dodd).

“This specimen differed from the type in having the marginal stripe of abdomen much broader; also funicle 3 was barely as long as the pedicel. The type antenna has funicle 3 only a little longer than the pedicel, not much longer as given in the original description.” (A. P. Dodd).



**5. NEOMPHALOIDELLA PERPULCHRA** new species.

*Female*:—Length, 1.35 mm.

Dark aeneous green, the wings hyaline; the head (except occiput medially above), pronotum (except at meson), propleura, tegulae, legs (except proximal third of hind coxae) and abdomen, intense lemon yellow, also apex of pedicel, the antennae otherwise dark blackish green. Abdomen with three metallic green cross-stripes close together (commencing at proximal fourth) and joined more or less along the meson and along each margin, the third stripe at meson giving off a short mesal longitudinal stripe which proceeds distad to a level with two round spots on each side of the meson (at about apex of proximal three fourths); a rather broad, dark green stripe across just before tip of abdomen. Propodeum similar in sculpture to rest of thorax, short at the meson; a pair of median carinae diverging at once and following the caudal margin; propodeal spiracle in an ovate impression, there being no true lateral carinae. Mandibles tridentate, the two outer teeth acute. Pedicel longer than any of the funicle joints of which 1 is longest, somewhat longer than wide, 3 distinctly wider than long, 2 somewhat wider than long; club rather stout, without a conspicuous terminal nipple, practically with none at all. A line of obscure thimble punctures along lateral margin of scutum and on the scutellum just outside (laterad) of the first groove.

Described from one female caught by sweeping foliage in forest, November 30, 1913 (A. A. Girault).

*Habitat*: Northern Queensland (Gordonvale near Cairns).

*Type*: No. Hy 2607, Queensland Museum, Brisbane, the above female on a tag, the head on a slide.

**6. NEOMPHALOIDELLA PARVULA** new species of A. P. Dodd.

*Female*:—Length, 1 mm.

Very dark metallic green, the coxae and femora concolorous, rest of legs and antennal scape golden yellow, rest of antennae dusky black. Fore wings broad, hyaline. Abdomen short, triangular, the apex of the triangle ventrad. Scutum and scutellum naked; median groove of scutum very narrow. Propodeum short and broad, sculptured like the rest of the thorax, with a median carina. Pedicel subequal to funicle 3 which is not twice as long as wide, 2 subequal to 3, 1 somewhat shorter; club nearly as long as the funicle, first two club joints subequal; flagellum with sparse long, thin hairs.

From one female taken in jungle, 800 feet, September 13, 1913 (A. P. Dodd).

*Habitat*: Kuranda, Queensland.

*Type*: No. Hy 2608, Queensland Museum, Brisbane, the female on a tag, the head on a slide.

**7. NEOMPHALOIDELLA BRUNNEA** new species of A. P. Dodd.

*Female*:—Length, 1.65 mm.

Biscuit brown; the occiput, scutum, center of scutellum and dorsum of abdomen darker; margins of eyes, legs (except hind coxae) and antennal scape pale lemon yellow, rest of antennae yellow-brown. Wings hyaline. Abdomen nearly twice as long and somewhat wider than the thorax, convex above, straight beneath. Scutum and scutellum naked; median groove of scutum complete, distinct. Propodeum not long, sculptured like the rest of the thorax, with a pair of median carinae. Pedicel no longer than funicle 3, 1 a little the longest, not much longer than wide, club as long as two preceding joints united, without a terminal spine; first club joint as long as the other two combined.

From one female captured sweeping along jungle-edged forest streamlet, January 3, 1913 (A. P. Dodd).

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2609, Queensland Museum, Brisbane, the specimen on a tag; head on a slide.

**8. NEOMPHALOIDEA FLAVICORNIS** new species of A. P. Dodd.

*Female*:—Length, 1.5 mm.

Dark metallic green, the abdomen brownish, the legs and antennal scape golden yellow, rest of antennae yellow-brown. Median groove of scutum very narrow, incomplete. Scutum and scutellum naked. Propodeum finely scaly, short at the meson, with a median carina. Abdomen a little longer than head and thorax united. Wings hyaline. Mandibles tridentate. Pedicel and funicle joints subequal, each two thirds longer than wide; club somewhat wider than funicle, twice as long as wide, with a short nipple; first two club joints about equal, 3 smaller; second and third ring-joints small.

From one female captured by sweeping jungle along roadside, Rossville, February 23, 1912 (A.A.G.).

*Habitat*: Rossville (Cooktown), Queensland.

*Type*: No. Hy 2610, Queensland Museum, Brisbane, the specimen on a tag; head on a slide.

**9. NEOMPHALOIDEA QUADRIFASCIATA** new species.

*Female*:—Length, 0.80 mm.

Golden yellow, the wings hyaline; apex of parapsides and of axillae, propodeum and four very distinct, rather narrow cross-stripes on abdomen, jet black, the abdominal stripes distributed over most of the dorsum. Mandibles tridentate. Funicle joints not long. Center of occiput black. Last two ring-joints very short. Propodeum with a median carina, the lateral carinae most probably absent.

From one female reared from gall on wattle, January 8, 1914 (A. P. Dodd).

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2611, Queensland Museum, Brisbane, the female on a tag.

**10. NEOMPHALOIDEA BOUSSINGAULTI** new species.

*Female*:—Length, 1.25 mm.

Similar to *quadrifasciata* but more robust and the cephalic margin of scutum except at each end and a spot on base of scutellum at meson are also black; also the apex of each parapside is more broadly black and more than half of each axilla. The black markings are submetallic in both species. The spot on the scutellum is longer than wide and does not extend to the first groove. Scape dusky at distal half, pedicel so above at base; rest of antenna dusky; funicle joints subquadrate, subequal, each somewhat shorter than the pedicel. Propodeum with a median carina and no others.

From one specimen taken in forest, 1,500 feet, June 2, 1913 (A. P. Dodd).

*Habitat*: Mount Pyramid (Cairns), Queensland.

*Type*: No. Hy 2612, Queensland Museum, Brisbane, the specimen on a tag.

**11. NEOMPHALOIDEA PALLIDICAPUT** new species.

*Female*:—Length, 1.15 mm.

Black with a submetallic lustre, the wings hyaline; upper occiput dark; legs except most of hind coxae, the head, the abdomen and the antennae, pale lemon yellow. Distal third of abdomen metallic green and two rather broad cross-stripes of same in the intermediate third of same, also a less distinct cross-stripe still farther proximad; prepectus and vicinity of wing insertion also lemon yellow. Antennae suffused with dusky; pedicel subequal to funicle 1 which is distinctly longer than wide, subequal to 2, 3 somewhat shorter; club with

Cephalad.

a terminal seta. Mandibles tridentate. Propodeum short at the meson, widening laterad, with a median carina which forks at apex and runs along the caudal margin strongly, laterad turning straight cephalad forming a lateral carina which runs directly into the minute, round spiracle at cephalic margin. Propodeum polygonally lined, the sculpture different from the usual fine longitudinal sheening peculiar to the subfamily. Scutellum and postscutellum brownish, the former so only around the margins.

From one female, forest, February 16, 1912 (A. M. Lea and A.A.G.).

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2613, Queensland Museum, Brisbane, the specimen on a tag; head on a slide.

## 12. NEOMPHALOIDELLA SEMIFLAVICEPS new species.

*Female*:—Length, 1.25 mm. Slender, the abdomen conical, longer than rest of body.

Dark metallic purple, the wings hyaline, the legs concolorous except knees, tibiae and tarsi, which together with the propleura, head (except occiput) above antennae (orange yellow) and the pronotum centrally on each side of meson (the latter broadly concolorous) bright lemon yellow. The yellow on pronotum is separated from the yellow of propleura rather narrowly. Antennae dusky. Base and sides of abdomen slightly yellowish. Funicle joints subequal, each slightly longer than wide, somewhat shorter than the pedicel; club with a small terminal seta; funicle 2 narrower than the others. Mandibles with three distinct teeth which are normal. Propodeum very short, apparently without carinae.

From one female captured in forest, August 2, 1913 (A. P. Dodd).

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2614, Queensland Museum, Brisbane, the female on a tag; head on a slide.

A species somewhat like *Aprostocetus montanus* and *purpureus*, more like the latter.

## 13. NEOMPHALOIDELLA VIRIDISCAPUS new species.

*Female*:—Length, 2 mm. or nearly. Long and slender, the abdomen longer than the rest of the body.

Bright golden yellow, the wings hyaline, conspicuously marked with bright metallic green as follows: A marginal stripe on abdomen broken into spots of various sizes from base to distal three fourths;° a long line on abdomen from apex to middle along ventro-lateral aspect; median line of abdomen (purplish) rather broadly from base to distal three fourths; two narrow cross-stripes on abdomen (excluding one around base) near base; extreme tip of abdomen; ocellar area; center of occiput; scutellum except laterad of second groove; a large peltate area with an emarginate caudal margin at little less than cephalic half of scutum and not extending laterad to margins, the latter left rather broadly yellow; cephalic apex of each parapside rather broadly and a dot just cephalad of it on pronotum; cephalic half of each axilla; propodeum except laterad of postscutellum (cephalad of spiracle); metapleurum, metaventer, caudal portion of mesopleurum and mesoventer; scape, pedicel above at proximal half, funicle joints and base of first club joint. Propodeum short at meson, wider laterad, without a lateral carina. Funicle joints stout, 1 slightly longer than wide, 3 slightly wider than long. Mandibles tridentate. Pedicel rather long, longer than any of the funicle joints. Tip of ovipositor black.

From one female captured in forest, April 18, 1914 (A. P. Dodd).

*Habitat*: Cloncurry, Queensland.

*Type*: No. Hy 2615, Queensland Museum, Brisbane, the specimen on a tag.

° On dorsal aspect of course: all descriptions refer to this aspect unless particularly mentioned otherwise.

**14. NEOMPHALOIDELLA NIGRICLAVA** new species.

*Female*:—Length, 1.05 mm.

Dark aneous green, the antennae white, the club black; knees, tibiae and tarsi white, the wings hyaline; second two ring-joints very short; funicle 3 a little shorter than the others which are a little shorter than the pedicel and about a fourth longer than wide; club with a small terminal spine. Mandibles tridentate. Propodeum short at the meson, with a flat median carina, lateral carinae and a curved, convex carina between the two. Median groove of scutum complete. Scutum naked. Valves of ovipositor somewhat extruded. The usual fine tetrastichine sculpture.

From one female captured in forest, January 14, 1913 (A. P. Dodd).

*Habitat*: Ingham, Queensland.

*Type*: No. Hy 2616, Queensland Museum, Brisbane, the specimen on a tag; head on a slide.

**15. NEOMPHALOIDELLA NOMADIS** new species.

*Female*:—Length, 1.20 mm.

Very similar to *viridiscapus* Girault but differing in the following particulars: The head is wholly yellow except center of occiput obscurely, the body is smaller, the abdomen not nearly twice the length of the thorax only a little longer, the axillae, scutellum and parapsides are wholly metallic green, the abdomen bears five cross-stripes (the first two narrower) from base to apex (the first not counted as at base); no median colored line on abdomen; the metapleurum is yellow only across from insertion of fore wing; only the pedicel is distinctly marked with metallic green. Otherwise about the same. Funicle joints all a little wider than long. Mesopostscutellum lemon yellow.

From two females captured in forest, April 16, 1914 (A. P. Dodd).

*Habitat*: Cloucurry, Queensland.

*Type*: No. Hy 2617, Queensland Museum, Brisbane, one of the specimens on a tag with type of *viridiscapus*.

**16. NEOMPHALOIDELLA SALTENSIS** new species.

*Female*:—Length, 1.50 mm.

Orange or reddish yellow, the abdomen and legs yellowish brown, also the scape and head; upper half of occiput, flagellum, tip of scape above and meson of pronotum broadly black, the other parts marked nearly like *silvensis* except that the abdomen is margined with black along a little over proximal half only (not to the distal black as in *silvensis*), the distal end of each marginal stripe broken in one or two places so that there appear to be one or two marginal spots caudad. Postscutellum lemon yellow, propodeum black, orange laterad of the spiracle. Scutellum laterad of first grooves distinctly suffused with reddish. The abdomen is not conical as in *silvensis* yet longer than the thorax. Propodeum short at the meson, with a pair of median carinae but no others. Central frustum-shaped black marking on scutum at cephalic half; a black spot on caudo-lateral angle of pronotum. Club with a terminal spine. Funicle 1 subequal to the club, 3 distinctly longer than the rather long pedicel, 2 intermediate between 1 and 3, the latter twice longer than wide. Median groove of scutum delicate. Teeth of mandibles not distinctly separated as regards the last two.

From one female captured in forest, March 31, 1914.

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2618, Queensland Museum, Brisbane, the specimen on a tag; head on a slide.

**32. EURYTOMA SARCOPHAGA** new species.

*Female*.—Length, 3 mm.

Very similar to *nigripes* Girault but may be distinguished at once by having funicle 1 shorter, only about half the length of the scape, the hind tibia is less broadly black between the ends, the wings are hyaline, not distinctly stained under the marginal vein, the latter is a little shorter and the concaved basin filling the meson of the propodeum is different in sculpture having a more or less distinct median ruga running through the basin and paired cephalad. Segments 2-6 of abdomen in both species glabrous (except in *nigripes* 6 is very finely lined polygonally) and the head and thorax lightly downy. Hind tibiae with two spurs. Valves of ovipositor white at tip.

*Male*.—The same except for the secondary characters, the long abdominal petiole and the lack of the median carina on the propodeal basin; also the distal half of the scape is black. Antennae 10-jointed, the scape swollen.

Described from a number of specimens as follow: Thirteen females labelled "No. 22. Parasitic on psychid larvæ. Darwin, 10-9-13. G.F.H."; one female and two males labelled "No. 20. Parasitic on small lepidop. larvæ. Darwin, 27-9-13."; three males and ten females labelled "No. 23. Darwin, N.T. 11-10-13. From psychid larvæ."; one male, two females labelled "No. 27. Darwin, N.T. 18-10-13," and four females labelled "No. 21. Parasitic on psychid. Darwin, 1-9-13."

*Habitat*: Port Darwin, Northern Territory.

*Types*: No. *Hy* 3236, Queensland Museum, Brisbane, one male, three females on a tag; male and female antennae and female hind legs on a slide.

**33. EURYTOMA SEMIFUSCICORNIS** new species.

*Female*.—Length, 4.10 mm.

Black, the wings hyaline; knees, tibiae, scape and antennae distad of funicle 1, reddish brown; distal half of tibiae and the tarsi whitish; tegulae variable, reddish brown to nearly black. Venation brown yellowish, the postmarginal vein slightly longer than the stigmal, both somewhat shorter than the marginal. Hind tibial spurs double. Funicle 1 elongate, a little over half the length of the scape, 5 shortest, a little longer than wide, subequal to club 1 (which as usual is well-separated from the longer distal joint); club 2 subequal to funicle 2 or 3 both of which are distinctly shorter than 1. Pedicel smaller than any of the joints following. Propodeum punctate, with an ovate median channel which includes transverse foveae; propodeum with white pubescence. Abdomen glabrous, the distal two segments finely reticulated. Thorax not noticeably pubescent. Hind coxa densely scaly.

*Male*.—The same but smaller; antennae 10-jointed, the club 2-jointed, the two joints subequal; funicle and pedicel black, the latter very short. Funicle 5 longer than wide, shortest of the funicle. Funicle 1 about four fifths the length of the scape.

Described from one male, five females labelled "37. Nat. Mus. Victoria. Out of pupa of *Limacodes*."

*Habitat*: Melbourne, Victoria.

*Types*: In the National Museum, Melbourne, one male, four females minutien-mounted; male and female antennae on a slide.

**34. EURYTOMA EPICEPHALÆ** new species.

*Female*.—Length, 2 mm.

Jet black including the coxae and antennae; proximal half of scape or less and rest of all legs rich yellowish-brown. Wings hyaline, the marginal vein distinctly somewhat longer than the stigmal, the postmarginal a little longer than the stigmal. Tips of intermediate and caudal tibiae and the tarsi of the same legs, white. Scape rather short; pedicel subglobular, smaller than any of the funicle joints of which 1 is hardly longer than the following three or four, somewhat longer than wide, somewhat less than half the length of the scape. Hind tibial spurs double. Propodeum with a median concavity which is very finely, densely

**21. NEOMPHALOIDELLA OCTOGUTTATA** new species.

*Female*.—Length, 1.15 mm. Abdomen pointed, conic-ovate. Slender.

Black with the usual sculpture, the wings hyaline, the scape, tibiae, tarsi and most of first two pairs of femora, pale yellowish, the abdomen ventrad golden yellow except along meson, above black with a golden yellow spot at base centrally; four smaller spots (wider than long) on each side of meson (narrowly separated by a thin black median stripe but the first pair obscurely so) and a rather broad cross-stripe a short distance before tip, golden yellow; the four spots uniformly distributed between the basal spot and the distal stripe. Fumicle joints slender, over twice longer than wide, subequal, longer than the pedicel. Club with a distinct terminal spine. Mandibles tridentate. Second two ring-joints very short. Propodeum very short at meson, widening laterad, noncarinate but laterad with two oblique, wedgeshaped impressions (wide-end cephalad) narrowly separated, the separating ridge having the appearance of a true lateral carina; the minute, round spiracle is in the lateral of these two impressions which do not extend quite to cephalic margin of propodeum.

From one female caught in miscellaneous sweepings, May 11, 1914 (A. P. Dodd).

*Habitat*: Murwillumbah, New South Wales.

*Type*: No. Hy 2622, Queensland Museum, Brisbane, the specimen on a tag; head and abdomen on a slide.

GENUS TETRASTICHELLA Girault.<sup>11</sup>**1. TETRASTICHELLA PALLIDIVENTRIS** new species.

*Female*.—Length, 0.75 mm. Slender. Postmarginal vein barely developed.

Black, the wings hyaline, the head, antennae, abdomen and legs very pale yellow, the abdomen with four very faint cross-stripes of dusky, the first and last rather far from their respective ends of the region. Stigmal vein rather long, the marginal cilia of fore wing not short, distinctly somewhat longer than usual (about one sixth of greatest wing width). Propodeum with a distinct median carina, no true lateral carinae, scaly; a loop-like carina directly from spiracle. Fumicle joints with sparse, very long, fine hairs, all long, 3 twice longer than wide, a little shorter than the short club, much longer than the pedicel, somewhat shorter than 1 or 2. Club with a long, distinct terminal spine. Mandibles tridentate. Abdomen longer than the thorax. Pedicel a little longer than wide at apex. Second two ring-joints extremely short, the first large, distinct.

From one female caught in jungle, July 11, 1914.

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2623, Queensland Museum, Brisbane, the specimen on a tag; head on a slide.

**2. TETRASTICHELLA FASCIATELLA** Girault.

This is the correct new name proposed for *Tetrastichus fasciatus* (Girault) and not as in *antea*, p. 238.

**3. TETRASTICHELLA FLAVELLA** new species of Girault and A. P. Dodd.

*Female*.—Length, 1.50 mm.

Uniform honey yellow, the legs and antennae concolorous; eyes and ocelli garnet. Wings hyaline. Propodeum short. Pedicel distinctly longer than fumicle 1; fumicle joints subequal, all a little longer than wide; second club joint longer than first, first ring-joint not very small, second and third minute.

From one female caught on foliage of Eucalyptus, forest, October 6, 1913 (A.A.G.).

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2624, Queensland Museum, Brisbane, the specimen on a tag; head on a slide.

<sup>11</sup> See *Syntomosphyrella*.

**4. TETRASTICHELLA TRICOLOR** new species.

*Female*:—Length, 1 mm.

Dark brown, the legs (except most of hind coxa) and scape pale yellow; lower half of face and ventral margin of occiput lemon yellow; abdomen golden yellow, bearing four cross-stripes of fuscous beginning a little distad of proximal third; the first three of these stripes are so close together and so much diffused as to form what appears to be one broad fuscous stripe across the abdomen at about middle; the fourth stripe is midway between apex and the third stripe (or distal margin of the broad stripe). Propodeum with a median carina and no others, scaly reticulate. Stigmal vein long, the postmarginal absent. Wings hyaline. Second two ring-joints extremely short, hidden between the first and funicle 1. Pedicel and funicle joints subequal, the funicle joints subquadrate or else slightly longer than wide. Mandibles tridentate.

From one female reared from miscellaneous galls on Eucalyptus, November, 1912.

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2625, Queensland Museum, Brisbane, the specimen on a slide.

## GENUS APROSTOCERELLA Girault.

**1. APROSTOCERELLA KELLOGGI** Girault.

Length, 1.35 mm. Funicle 1 slightly shorter than the pedicel, slightly longer than 2 or 3. Propodeum short, with a median carina. The type was captured by sweeping along a jungle path and consists of a female on a tag and a slide with the head. The abdomen appears to have but three cross-stripes. Type re-examined.

**2. APROSTOCERELLA IO** Girault.

A female, type locality, jungle, June 29. This specimen was metallic purple. Propodeum without lateral carinae, the median carinae complete. Scape more or less dusky. First ring-joint much the longest.

**3. APROSTOCERELLA FLAVA** Girault.

I have verified the median grooved line of scutum for the type female.

**4. APROSTOCERELLA FULGENS** new species.

*Female*:—Length, 1.80 mm.

Brilliant golden yellow, the broad fore wings hyaline; face of pronotum, cephalic margin of propodeum and three cross-stripes on abdomen jet black; first cross-stripe of abdomen at apex of about proximal third, narrow, widely interrupted at the meson, the second broader, complete, the third abbreviated laterad. A minute marginal dot precedes the first cross-stripe. Tip of abdomen and ovipositor concolorous. Funicle and club dusky black; scape and pedicel concolorous. The latter dusky at base above; three distal ring-joints extremely short, first long; pedicel obconic, subequal to funicle 2 which is longest, 1 shortest, barely longer than wide, 3 intermediate between 1 and 2; club with a short terminal spine which is distinct. Mandibles tridentate. Club two thirds or more the length of the funicle. Propodeum dusky and short at the meson, with a distinct median carina there which forks at apex, the lateral carina absent, the spiracle rather large, round-oval.

From one female specimen captured in forest, January 8, 1914 (A. P. Dodd).

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2626, Queensland Museum, Brisbane, the specimen on a tag, the head on a slide.

GENUS EPOMPHALOIDES Girault.

1. **EPOMPHALOIDES FLAVUS** Girault.

*Female*:—Length, 1.35 mm. Funicle 1 a little longer than wide. Mandibles tridentate, the inner tooth shortest. The type was captured in forest, May 3, 1913 and is on a slide.

2. **EPOMPHALOIDES VIRIDIS** Girault.

This is a synonym of *Epitetrastichus longfellowi* Girault.

3. **EPOMPHALOIDES PULCHER** new species of Girault and A. P. Dodd.

*Female*:—Length, 1.60 mm.

Dark metallic green, the coxae concolorous; rest of legs bright golden yellow, the femora somewhat brown; antennal scape yellow; pedicel brownish; rest of antennae black. Propodeum with a strong median carina. Wings hyaline. Pedicel one half shorter than first funicle joint which is elongate; second slightly shorter than first; third a little shorter than second but distinctly longer than pedicel; club one half longer than first funicle joint, first club joint the longest, a little longer than second.

From one female caught by sweeping in heart of jungle, 800 feet, September 13, 1913 (A. P. Dodd).

*Habitat*: Kuranda, Queensland.

*Type*: No. Hy 2627, Queensland Museum, Brisbane, the female on a tag; head on slide.

"A female at Malanda, Queensland, virgin jungle, December 31, 1911. Compared with type. Slender. Valves of ovipositor somewhat extruded, the femora more or less colored proximad inwardly, the coxae yellowish. Antennae slender, filiform, the ring-joints distinct. Scutum naked. Lateral carinae on propodeum absent. Fore wings broad and somewhat sordid." (A. A. Girault.)

4. **EPOMPHALOIDES PALLIDIPES** new species of Girault and A. P. Dodd.

*Female*:—Length, 2 mm.

Dark metallic green; oral area of face yellow; antennal scape yellow, rest of antennae black; legs wholly yellow. Propodeum scaly; median carina of propodeum forking before apex. Pedicel elongate but barely as long as funicle 3, 1 a half longer than pedicel, 2 somewhat shorter than 1, 3 shorter than 2. Mandibles tridentate.

From one female caught in forest, July 1, 1913 (A. P. Dodd).

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2628, Queensland Museum, Brisbane, the specimen on a tag; head on a slide.

5. **EPOMPHALOIDES SEMIFLAVICEPS** new species of Girault and A. P. Dodd.

*Female*:—Length, 2.10 mm.

Bright metallic green; legs, antennal scape, face below the antennae, margins of the eyes and a square patch near base of abdomen dorso-mesad, golden yellow; rest of antennae, black. Wings hyaline. Propodeum rather long. Otherwise as in *pallidipes*.

Described from one female caught by sweeping in forest, August 5, 1913 (A. A. Girault).

*Habitat*: Northern Queensland (Gordonvale near Cairns).

*Type*: No. Hy 2629, Queensland Museum, Brisbane, a female on a tag; the head on a slide.



**6. EPOMPHALOIDES VARIEGATUM** new species.

*Female*:—Length, 0.85 mm. Short.

Deep golden yellow, the wings hyaline; the upper part of occiput, obscure, transverse stripes across dorsum of abdomen, side and venter of the latter at base, side of thorax and hind coxae, black; legs and scape white, the rest of antennae pallid dusky. Mandibles black, tridentate. Pedicel much longer than any of the funicle joints, stout, obconic; first funicle joint longest, slightly longer than wide; second shortest, somewhat wider than long, narrower than the others; third subhemispherical, wider than long, longer than second and wider; second two ring-joints very short; club with a distinct terminal spine. Fore wings with the marginal fringes rather longer than usual, the venation yellow; the discal cilia short and like minute points.

Described from one female caught by sweeping in forest, December 4, 1913.

*Habitat*: Northern Queensland (Gordonvale near Cairns).

*Type*: No. Hy 2630, Queensland Museum, Brisbane, the above specimen on a slide.

## GENUS NEOTRICHAPOROIDES Girault.

This genus is confirmed.

**1. NEOTRICHAPOROIDES UNIGUTTATUS** Girault.

See *Tetrastichomorpha flava*, *antea*. *Female*: Length, 2.20 mm. The median carina of propodeum forks at apex. Funicle 1 over four times its own width, somewhat shorter than the club. Sculpture normal. The type was captured in forest, May 3, 1913 and is on a tag, the head on a slide. Other females have been captured in the type locality, July 7, 1912 and April 20, 1914. There are four ring-joints.

**2. NEOTRICHAPOROIDES FLAVIPRONOTUM** new species.

*Female*:—Length, 1.30 mm.

Agreeing with the description of *Trichaporoidella eleganta* (Girault) but the whole of the dorsal thorax except the pronotum is dark metallic green and only the base of abdomen and the lateral margin along nearly proximal half are metallic green. Ocellar area green; funicle and club black. Second ring-joint extremely short. Propodeum with a strong median carina; no true lateral carinae; a yellow area on propodeum just laterad of spiracle. Part of vertex caudad of ocelli, distal half of scape above and dorsal pedicel metallic green.

From three females captured in forest, March 31 and April 3, 1914.

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2631, Queensland Museum, Brisbane, one of the specimens on a tag.

Caudal margin of pronotum at meson green sometimes. Lateral part of propodeum narrowly yellowish. On April 9, 1914 two females at Townsville, Queensland (A. P. Dodd).

**3. NEOTRICHAPOROIDES DECORA** (Girault).

Removed from *Trichaporoidella*. Second ring-joint very short. Type slide re-examined. In a second female taken in the type locality, April 13, 1913 (forest), it was seen that there is a carina just laterad of the spiracle on propodeum but true lateral carinae are absent.

**4. NEOTRICHAPOROIDES FRATER** new species.

*Female*:—Length, 1.75 mm. Scutum naked. Funicle 3 much longer than wide.

Exactly similar to *Trichaporoidella particolor* Girault but stouter and blue (the yellow orange) and of the head only the oral area is yellow and the legs are not white but deep orange yellow except hind coxae above at proximal half. Funicle 1 subequal to club, 3 to the

elongate pedicel. Scape yellow except at apex above. Ring-joint 2 extremely short, the other three large. Mandibles bidentate, tooth 2 broadly truncate. The yellow of abdomen at side of base is distinct but less than a sixth of its length. The spot above at base of abdomen also shorter than in the compared species.

From one female caught in forest, May 15, 1914 (A. P. Dodd).

*Habitat*: Chindera (Tweed River), New South Wales.

*Type*: No. Hy 2633, Queensland Museum, Brisbane, the specimen on a tag; head on a slide.

Compared with type of the *Trichaporoides*.

GENUS EPENTASTICHUS Girault.

1. EPENTASTICHUS WALLACEI new name.

*Aprostocetus serguttatus* Girault, preoccupied.

*Female*:—Length, 0.80 mm.

Agrees with the description of *Epentastichus flavella* but only the meson of propodeum is dusky, the body is golden yellow, the abdomen bears three roundish marginal dots on a little over proximal half and is dusky across base narrowly. Also funicle 1 is shortest, quadrate, 2 and 3 somewhat longer than wide, each somewhat shorter than the pedicel which is somewhat shorter than with *flavus*. An oblique dusky stripe along cephalic margin of propodeum on each side of meson. Otherwise, like *flavus*. Club with a short terminal spine. Mandibles tridentate. Propodeum with a median carina. Wings broad. Hind wings with about five lines of discal cilia where widest.

From one female captured in forest, April 15, 1914 (A. P. Dodd), Cloncurry, Queensland.

2. EPENTASTICHUS QUADRIMACULÆ new species.

*Female*:—The same as *wallacei* but the abdomen bears only two of the marginal dots, the proximal two, and the body is a third larger.

From one female captured with the above (*wallacei*), April 15, 1914.

*Habitat*: Cloncurry, Queensland. Forest.

*Type*: No. Hy 2632, Queensland Museum, Brisbane, the specimen on a slide.

3. EPENTASTICHUS FLAVELLA new species.

See *antea* (these Memoirs, II), p. 243, *Epentastichus flavus* (Girault) which, together with *Quadrastichodes flavus* Girault, is a *nomen nudum*. Additional characters are: Length, 1.18 mm. Antennae inserted a little above the ventral ends of the eyes. Mandibles tridentate. Marginal cilia of fore wings short. Scape long, compressed. Club terminating in a nipple. The type is a head on a slide. The type female was captured on forest downs, July 14, 1912.

GENUS SYNTOMOSPHYRELLA Girault.

1 SYNTOMOSPHYRELLA FUSCIPENNIS Girault.

One female, type locality, December 4, forest. Compared with type. The head is more or less brownish and the postmarginal vein really only a fourth the length of the stigmal. The species resembles *Selitrichodelia fuscipennis*.

This species must stand as it is though it is exceedingly similar to *Selitrichodelia fuscipennis*. Yet the latter is said to have a solid club and a groove on the scutum. Both species have a short propodeum at meson which bears a complete median carina (very short) and no others. The wings are identical but distinctly broader in the *Selitrichodelia* and the

marginal fringes shorter. The third funicle joint in the *Syntomosphyrella* is shortest, somewhat wider than long, 2 longest, somewhat longer than wide, nearly as long as the pedicel, 1 a little shorter than 2. In the *Scitrichodelia*, the median groove of scutum is not deep but delicate. In the *Syntomosphyrella* there can be no doubt in regard to at least two club joints while no trace of the third can be seen; the club is divided a little proximad of middle.

To further complicate matters I have a specimen of a species agreeing with the *Scitrichodelia* except that there are three ring-joints and two distinct club joints. This specimen differs from the *Syntomosphyrella* in having the antennae stouter, the mandibles distinctly larger and the wings broader, besides the groove on the scutum. This specimen was captured at Tweed Heads, Tweed River, N. S. Wales, May 14, 1914, in forest (A. P. Dodd). The second ring-joint is very short. The cephalic tibiae are all white in all three (not the femora as originally stated for the *Syntomosphyrella*).

After some consideration, I concluded the New South Wales specimen to be the *Scitrichodelia*<sup>12</sup> with which it agrees in every particular that could be made out. It has a short postmarginal vein. Types re-examined.

## 2. SYNTOMOSPHYRELLA QUADRI-MACULATA Girault.

Equals *Scitrichodelia trimaculosa* Girault. Types compared.

## 3. SYNTOMOSPHYRELLA ATRIVENTRIS new species.

*Female*:—Length, 1 mm. Short, robust.

Black, the wings hyaline; the pronotum, scutum (except for a large subquadrate blackish area at base extending nearly to lateral margins) and the head orange yellow; also abdomen slightly around base. Scutellum, legs except hind coxa (other coxae blackish at base) and hind femur (washed with blackish), antennae and lateral margins of scutum (more broadly cephalad), contrasting lemon yellow. Scutum long; propodeum very short. Mandibles tridentate. Pedicel distinctly longer than any of the funicle joints, the latter subquadrate, subequal. Club without a distinct terminal seta. Antennae washed with dusky. Stigmal vein long, the postmarginal distinctly but only slightly developed. Fore wings broad.

From one female captured by sweeping jungle, along a forest streamlet, June 14, 1913 (A. P. Dodd).

*Habitat*: Gordonsvale (Cairns), Queensland.

*Type*: No. Hy 2634, Queensland Museum, Brisbane, the specimen on a tag, the head on a slide.

## 4. SYNTOMOSPHYRELLA ACOMATA new species of Girault and A. P. Dodd.

*Female*:—Length, 1.10 mm.

Golden yellow, the wings hyaline, the appendages concolorous; a spot on each side of face of pronotum, the cephalo-lateral angle of each axilla, meson and caudal margin at meson of propodeum (jet) and two spots on abdomen somewhat distad of middle, one on each side of meson, blackish. Middle of cephalic margin on each side of propodeum, dusky. Funicle joints subequal, each somewhat wider than long and about half the length of the pedicel. Mandibles tridentate. Propodeum short at the meson. Abdomen short and stout.

Described from two females reared from miscellaneous galls on *Eucalyptus*, October 6, 1913 (A. P. Dodd).

*Habitat*: Gordonsvale (Cairns), Queensland.

*Type*: No. Hy 2635, Queensland Museum, Brisbane, one of the above specimens on a tag, the head on a slide.

<sup>12</sup> *Scitrichodelia fuscipennis* must therefore be referred to *Tetrastichella* where the name is preoccupied. The new name *nubilipennis* is herewith given to it.

GENUS SELITRICHODELIA Girault.<sup>13</sup>

1. **SELITRICHODELIA AURIOS** Girault.

The type locality is Brisbane, Queensland.

2. **SELITRICHODELIA TRIMACULOSA** Girault.

A synonym of *Syntomosphyrella quadrimaculata* Girault.

3. **SELITRICHODELIA QUADRIMACULATA** Girault.

*Antea*, p. 247, line 2 of the description, *trimaculata* read *trimaculosa*.

4. **SELITRICHODELIA CULEX** new species.

*Female*:—Length, 1 mm.

Differing from the genotype in having a glazed sculpture or nearly glazed. Black, the wings hyaline, the head, antennae and legs except coxae, lemon yellow; also dorsum of abdomen at meson near apex, more or less so. Mandibles tridentate. Postscutellum somewhat yellowish, nearly reaching the abdomen, the propodeum very short at the meson, the median carina extremely short, no true lateral carinae but a short carina leading directly from the spiracle, curved to caudal margin then reascending cephalo-laterad. Funicle joints all distinctly shorter than the pedicel, 2 a little the largest, all somewhat wider than long. Club without a terminal spine, ovate, somewhat longer than the funicle.

From one female captured in forest, December 24, 1911.

*Habitat*: Double Island (mainland) near Cairns, Queensland.

*Type*: No. Hy 2637, Queensland Museum, Brisbane, the specimen on a tag, the head on a slide.

5. **SELITRICHODELIA MESMERI** new species.

*Female*:—Length, 1 mm. Abdomen conic ovate, longer than the thorax.

Agrees with the description of *trimaculosa* but there is no dusky spot on the scutellum and the spot at apex of each axilla is a little smaller. There is a minute black dot at the extreme latero-caudal apex of the pronotum in both species. Mandibles tridentate. Propodeum very short.

From one female captured in forest, April 16, 1914 (A. P. Dodd).

*Habitat*: Cloncurry, Queensland.

*Type*: No. Hy 2638, Queensland Museum, Brisbane, the specimen on a slide.

Compared with types of *trimaculosa*. The propodeum is not dusky in *mesmeri*. Dedicated to Franz Anton Mesmer.

6. **SELITRICHODELIA TRANSVERSIFASCIATUS** new species.

*Female*:—Length, 1.45 mm.

Like *Tetrastichus* Haliday but the club is solid and the scape convexly compressed beneath as in many encyrtine genera but not really foliaceously dilated but rather broadly compressed; two distinct, rather large ring-joints. Abdomen conic-ovate. Wings normal. Mandibles tridentate. Propodeum hidden at the meson by the postscutellum, without lateral carinae. Median sulcus of scutum faint.

Honey yellow, the wings hyaline, the venation dusky, the body marked with black as follows: A crescent across the upper occiput but interrupted at the meson, a dusky marking in front of lateral ocellus, one below insertion of antenna, a longish marking just meso-ventrad

<sup>13</sup> See *Syntomosphyrella*.

of ventral end of eye, face of pronotum; a little longer than wide rectangular spot, obliques, center of each side of scutum; a little longer, nearly quadrate spot at base of scutellum at meson (the three forming somewhat the appearance of a death's head), a minute dot on pronotum latero-caudal angle, apex of the axilla (the latter entirely cephalad of scutellum) and six narrow but distinct cross-stripes on abdomen, the first at base, the fifth distinctly interrupted at the meson, the sixth a little curved, abbreviated laterad a little and some little distance from apex. Funicle joints subequal, a little wider than long, shorter than the pedicel; club rather large, short-ovate. Disk of scutum orange yellow.

From one female caught by sweeping forest uplands, May 29, 1914 (A. P. Dodd).

*Habitat*: Maclean, Clarence River, New South Wales.

*Type*: No. Hy 2636, Queensland Museum, Brisbane, the specimen on a tag; head on a slide with slide type of *Neomphaloidella octoguttata* Girault.

#### GENUS ASYNTOMOSPHYRUM Girault.

##### 1. ASYNTOMOSPHYRUM PAX Girault.

*Female*:—Length, 0.75 mm. The type was captured in forest, 1,500 feet, May 30, 1913 and is on a slide.

##### 2. ASYNTOMOSPHYRUM ACUTIVENTRIS Girault belongs to *Tetrastichus*.

##### 3. ASYNTOMOSPHYRUM UNFASCIATIVENTRIS new species.

*Female*:—Length, 0.80 mm.

Bright golden or orange yellow, the abdomen and legs lemon yellow, the propodeum dusky and a rather narrow cross-stripe of black on abdomen a little beyond middle; wings hyaline. Tip of valves of ovipositor black. Sculpture very fine and usual for the group. Propodeum scaly and with a median carina and an irregular pair of lateral ones, the mesal one forked. Mandibles tridentate. Hind wings attenuate, narrow. Marginal fringes of fore wing somewhat longer than usual. Funicle joints 2 and 3 subequal, each somewhat longer than 1, subequal to pedicel and club 2, the latter longest of the club; terminal spine prominent. Funicle 1 somewhat longer than wide. Antennæ slender, dusky black, the scape and pedicel white beneath. Spiracle cephalad and between the pair of lateral carinæ. Fore wings moderately slender.

From one female captured in forest, January 5, 1914 (A. P. Dodd).

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2639, Queensland Museum, Brisbane, the specimen on a slide.

##### 4. ASYNTOMOSPHYRUM MINUTISSIMUM new species.

*Female*:—Length, 0.50 mm.

Similar to the preceding but smaller and the abdominal stripe is interrupted at the meson rather broadly. Also, the antennæ are shorter, the club lacks the distinct terminal spine and the funicle joints are all wider than long (instead of all longer than wide); moreover, funicle 1 is longest, 3 shortest, 2 intermediate, the pedicel longer than either; club longer than the funicle. Also, the antennæ are not black but yellow like the rest of the body. Mandibles smaller.

From one female captured by sweeping forest, January 4, 1913.

*Habitat*: Capeville (Pentland), Queensland.

*Type*: No. Hy 2640, Queensland Museum, Brisbane, the specimen on a slide.

PARAPROSTOCETUS new genus.

Like *Trichaporoidella* Girault but the scutum bears a median sulcus.

1. PARAPROSTOCETUS PURPUREITHORAX new species. Genotype.

*Female*.—Length, 1 mm.

Dark metallic purple, the wings hyaline, the antennæ, legs and abdomen rich golden yellow, the abdomen with two purple cross-stripes just before tip, the second a little broader and more distinct, the extreme tip purple and the lateral margin along the short distance between tip and the second or distal cross-stripe. Tip of valves of ovipositor purple. Abdomen conic-ovate, somewhat longer than the thorax. Funicle joints subequal, each a little longer than wide, the pedicel about equal to either of them; second two ring-joints very short. Club with a minute nipple at apex. Scape rather short. Mandibles tridentate but the third tooth minute. Stigmal vein short. Sculpture normal. Propodeum very finely scaly, very short at the meson, without lateral carinæ, the spiracle cephalad and in a short longitudinal depression or half channel, the median carina present, very short. Thorax with scattered, inconspicuous setæ which are not numerous.

From one female captured by sweeping bushes on October 10, 1913 (G. F. Hill).

*Habitat*: Port Darwin, Northern Territory.

*Type*: No. Hy 2641, Queensland Museum, Brisbane, the specimen on a tag.

2. PARAPROSTOCETUS SANNIO (Girault).

From *Quadrastichus*. Propodeum with a median carina, no others; funicle joints as in *Ootetrastichus beatus* Perkins. Femora purple along dorsal edge. Marginal stripe of abdomen broad. Second two ring-joints very short, usually concealed. Base of abdomen nearly free from purple. Type re-examined. A second female, type habitat, February 19, 1914.<sup>14</sup>

DUOTRASTICHUS new genus of A. P. Dodd.

*Female*.—Similar to *Tetrastichus* Haliday but the antennæ 9-jointed, with four ring-joints, two funicle and a solid club.

1. DUOTRASTICHUS MONTICOLA new species of A. P. Dodd. Genotype.

*Female*.—Length, 1.75 mm.

Head, legs (except dusky hind coxæ) and basal third of abdomen golden yellow. Thorax very dark æneous green, the scutellum chocolate brown, the postscutellum lemon yellow; apical two thirds of abdomen dark brown, more or less obscurely, transversely striped with black; ocelli in a dark area. Antennæ yellow-brown. With the usual fine tetrastichine sculpture. Median groove of scutum complete. Scutum with a row of shallow punctate depressions just within the parapsidal furrows. Abdomen conic-ovate, no longer than rest of body, almost straight above, gently convex beneath. Propodeum rather short, scaly, with a median carina. Wings hyaline, marginal vein as long as submarginal, stigmal moderately long. Pedicel rather long but slightly shorter than either of the funicle joints, of which 2 is somewhat the largest; club wider but no longer than preceding joint, with a short terminal nipple. Eyes garnet. Mandibles tridentate.

From one female captured by sweeping in forest, summit of Mount Pyramid, 3,000 feet, August 17, 1912 (A.A.G.).

*Habitat*: Mount Pyramid (Cairns), Queensland.

*Type*: No. Hy 2642, Queensland Museum, Brisbane, the specimen on a tag; head on a slide.

<sup>14</sup> A third, July 10. In this specimen the mesal two of the usual four grooves on the scutellum were practically absent, indicated at apex only. The coxæ are purple.

## MEMOIRS OF THE QUEENSLAND MUSEUM.

## GENUS ELACHERTETRASTICHUS Girault.

Removed from the Elachertini where it had been misplaced. Now a synonym of *Rhincopeltella* in the Omphalini.

## GENUS EULOPHOSCOTOLINX Girault.

Removed from the Elachertini.

## GENUS CIRROSPILOMYIA Girault.

Removed from the Elachertini. The club is 3-jointed.

## GENUS WINNEMANA Crawford.

## 1. WINNEMANA PURPUREA (Girault).

*Cirrospiloidelleus purpureus* Girault.

Differs from the genotype in that the postmarginal vein is as long as the stigmal. Differs from *Cirrospilomyia magniventris* Girault in being purple, the legs are paler, the propodeal spiracle farther mesad in a longitudinal wide depression while the scutellum has weak longitudinal grooves. Type re-examined.

This species has been reared from Cecidomyiid galls on *Melaleuca*, type locality, January, 1913 (A. P. Dodd). The club lacks the terminal spine.

## PSEUDOMPHALOIDES new genus.

Differs from *Neomphaloidella* Girault in that the funicle is 4-jointed, the club 2-jointed.

## 1. PSEUDOMPHALOIDES ÆNELLA new species. Genotype.

*Female*:—Length, 2.25 mm.

Dark metallic blue; coxæ concolorous, rest of legs bright golden yellow; scape suffused with yellow, rest of antennæ black. Wings hyaline. Median groove of mesocutum incomplete, failing anteriorly. Mesoscutum and scutellum without bristles. Propodeum short, with fine polygonal scaly sculpture, median carina distinct, lateral carinæ absent. Funicle 1 long, distinctly longer than pedicel; 2 and 3 subequal, each a little shorter than 1, much longer than pedicel; club long, much longer than funicle 1; first ring-joint rather large, other two very small.

From one female captured sweeping in heart of jungle, 800 feet, September 13, 1913 (A. P. Dodd).

*Habitat*: Kuranda, Queensland.

*Type*: No. Hy 2643, Queensland Museum, Brisbane, the specimen on a tag, the head on a slide.

## EPIQUADRASTICHUS new genus.

*Female*:—Similar to *Quadrastichodes* Girault but the scutum with a median sulcus, the club solid, the scape normal, also the venation. Ring-joints subequal, large.

1. EPIQUADRASTICHUS EMERSONI new species.<sup>15</sup>

*Female*:—Length, 2.50 mm. Long, the abdomen conic-ovate, longer than the rest of the body.

Very dark metallic green, the abdomen coppery black, the wings hyaline; legs and scape (except the latter dorsad and the caudal two pairs of coxæ) pale yellowish brown. Oral area

<sup>15</sup> Dedicated to Ralph Waldo Emerson.

rather broadly golden yellow and a golden yellow triangle at meson of cephalic vertex. Pedicel elongate, subequal to funicle 4 which is somewhat over half the length of 1, the latter elongate, distinctly longer than the club, over thrice longer than wide; funicle and club clothed with moderately long hairs. Club slightly nipped. Mandibles tridentate. Marginal vein distinctly longer than the submarginal. Sculpture somewhat rougher than usual but normal for the tribe, the propodeum slightly smoother, glabrous narrowly along the median line, noncarinate. Pronotum (viewed from above when the head has been removed) large, three fourths the length of the scutum. Abdomen sculptured like the propodeum. Scutum nearly naked; pronotum with scattered bristles from obscure punctures.

From one female caught by sweeping in forest, June 10, 1914.

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. *Hy* 2644, Queensland Museum, Brisbane, the specimen on a tag; head on a slide.

In the Diagnosis of Genera, *antea*, p. 249, line 6 of the whole, an asterisk should follow the word *lines*. Page 250, under *Melittobia*, the sentences as follows should be added: Frons directed dorsad, head longer than wide, body flattened. The genus bears three ring-joints. Page 251, line 1 under II, omit the numeral 3. In the table, characters based on the propodeum have no significance.

#### TRIBE CERATONEURINI.

*Antea*, p. 251, second footnote, insert the word *also* before *by*.

#### GENUS CERATONEURONELLA Girault.

For correction of the generic description, *see* the first species herewith described.

#### 1. CERATONEURONELLA RUFOBASALIS new species.

*Female*:—Length, 2.05 mm.

Agrees with the description of *nigriventris* Girault in all details but differs as follows: The base of the abdomen is reddish yellow (a little less than proximal third all round); the petiole is white; the first funicle joint is subequal to the pedicel which is longer than in the other species and the stained area on the fore wing is much less distinct, only an obscure stain under about the middle of the marginal vein (a little distad of the middle). In the genotype this spot is large and distinct, ovate and projects conically distad of the venation. Tip of abdomen whitish. Hind coxa and femur with the elongate black spot. Abdomen finely scaly. Segment 3 of abdomen shorter than 1, intermediate between it and segment 4. Mandibles tridentate. Median groove of scutum absent. Median groove of scutellum indicated by an incision at base only. Funicle 3 shorter than 1, barely longer than wide.

From two females labelled "No. 26. 10-10-13. G. F. Hill."

*Habitat*: Port Darwin, Northern Territory.

*Types*: No. *Hy* 2645, Queensland Museum, Brisbane, two females on a tag.

In this genus the stigmal vein is shorter than usual, the marginal vein slender, the hind tibial spur longer and stout (but not greatly lengthened), the club solid, the scutum simple, the median groove of scutellum faint, the first lateral groove further laterad than usual, as seen from above along lateral margin of scutellum and resembling the grooved scutellum of the Elachertini; the first grooves are absent. Hind legs, wing and antenna of genotype re-examined. In the genotype, funicle 1 is only a little longer than the pedicel and no longer than the other two funicle joints.



**2. CERATONEURONELLA ALIGHERINI** new species.

*Female*:—Length, 2 mm.

Similar to *rufobasalis* except that the thorax is uniform in color and the abdomen wholly black except the white extreme tip and petiole. The black stripe down mesal side of caudal femur is longer than in *nigriventris* extending from the knee distinctly more than half way to base (not more than half way in the genotype). The light infuscation of the fore wing has straight margins (bulged proximad and distad in the genotype and much more distinct). The discal ciliation of the fore wing in all species is not dense but moderately scattered, the cilia numerous. Abdomen distad of segment 3 densely reticulated (much the same in *rufobasalis*), proximad glabrous. Propodeum very densely scaly; lateral carina present (also in *rufobasalis*) and the lateral margin carinated (or a carina at the lateral margin).

From one female captured by sweeping jungle along the Mulgrave River, April 12, 1914.

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2646, Queensland Museum, Brisbane, the female on a tag; head, fore wing and hind legs on a slide.

Dedicated to Dante Alighere.

**PARACERATONEURA** new genus.

Like *Ceratoneuronella* but the antennæ bear four ring-joints. The abdominal petiole is as long as the hind coxæ.

**1. PARACERATONEURA GOETHEI** new species. Genotype.

*Female*:—Length, 1.85 mm.

Similar to *Ceratoneuronella nigriventris* Girault but the wings are hyaline, the thorax uniform in color, the hind femur without an elongate black spot nor the coxa. Club and distal two funicle joints black, the rest of antennæ dusky except the red scape. First two teeth of mandibles strong, acute, the third much shorter, broadly truncate. Funicle 3 distinctly shorter than 1, only somewhat longer than wide, 1 twice longer than wide; pedicel subequal to funicle 3. Second ring-joint shortest. Abdomen scaly after segment 3. Propodeum with a long median carina. Club without a terminal spine.

From one female caught by sweeping forest, May 27, 1914.

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2647, Queensland Museum, Brisbane, the specimen on a tag; head and hind leg on a slide.

**GENUS CERATONEURONOMYIA** Girault.

The genus bears four ring-joints. Types re-examined.

**1. CERATONEURONOMYIA ARNOLDI** Girault.

The type locality is Goondi (Innisfail), Queensland.

**2. CERATONEURONOMYIA RUSKINI** new species.

*Female*:—Length, 1.25 mm.

Like the original description of the genotype but the first ring-joint is large, the other three transverse-linear. Abdomen glabrous, finely scaly distad. Dark metallic green, the scutum and scutellum rosaceous coppery, the wings hyaline, the legs yellowish brown, the tibiae and tarsi whitish. Scape and distal two club joints whitish. Antennæ as in *Ceratoneuronomyia longiscapus* Girault (actual comparison) but the pedicel is paler. Hind lateral angle of propodeum acute. Like *longiscapus* but differing as follows: The coxæ are wholly yellowish brown, the rosaceous tints are present, the hind lateral angle of propodeum

is very sharp (obtuse in the other species), the sculpture is somewhat coarser and there are a few isolated setæ along lateral margin of scutum, the median carina of propodeum paired, diverging gradually to apex (in the other species, forks a little proximad of the middle); there is a sharp lateral carina from the spiracle which forms at apex the acute lateral apex of the propodeal neck (lateral apex of propodeal neck acute in *longiscapus* and the carina is present); but there are in this species two parallel carinæ, rather wide apart, from cephalic margin about a third or more of the way from meson to spiracle and running toward the lateral carina (absent in *longiscapus*, only one carina runs from the lateral carina cephalo-mesad to the median carina near middle).

From three females captured in jungle, February 5, 1914 (A. P. Dodd).

*Habitat*: Babinda, North Queensland.

*Types*: No. *Hy* 2648, Queensland Museum, Brisbane, two females on a tag, two heads on a slide.

GENUS CERATONEUROPSIS Girault.

1. **CERATONEUROPSIS AFFINIS** new species of Girault and A. P. Dodd.

*Female*:—Length, 1.30 mm.

Agreeing with the description of the genotype, *poincarei* Girault, but all the posterior legs are golden yellow and the first two pairs of femora are brownish; abdominal petiole yellow ventrad; pedicel golden yellow, like the scape; fifth abdominal segment occupying less than one half of the surface; abdomen wholly finely reticulated; funicle joints subequal, rather more slender than in *poincarei*; the pedicel distinctly more so and quite as long as first funicle joint; and the propodeum is tricarinate, the carinæ distinct, the small spiracle just within (mesad of) the lateral carina.

Described from one female caught by sweeping within and along edges of jungle, May 25, 1913 (A. A. Girault).

*Habitat*: Northern Queensland (Gordonvale near Cairns).

*Type*: No. *Hy* 2649, Queensland Museum, Brisbane, the above specimen on a tag, the head on a slide.

GENUS CERATOTRASTICHUS Girault and Dodd.

The scutum has a median sulcus.

1. **CERATOTRASTICHUS BISULCATUS** Girault and Dodd. Genotype.

*Female*:—Antennæ 11-jointed, three ring, funicle and club joints; scutellum with only two grooves, the mesal ones absent; scutum with a median groove, with numerous small setigerous punctures. Propodeum with a delicate median carina, reticulated. Petiole short, the second segment of abdomen occupying about a fourth of the surface, not very much longer than the others. Mandibles tridentate, the teeth large as in the Pteromalini. Hind tibial spur normal. Length 1.05 mm.

Dark metallic green, the wings hyaline, the legs, scape and pedicel yellow brown. Body with the usual fine sculpture excepting the scutum as noted. Distal club joint terminating in a distinct spur; funicle 1 a little wider than long, the other two still wider; pedicel a little longer than funicle 1; funicle and club black. Antennæ short. Lateral carinæ absent on propodeum.

Described from one female captured by sweeping in the jungle, November 15, 1913 (A. P. Dodd). Type re-examined.

*Habitat*: Harvey's Creek (Cairns), Queensland.

*Type*: No. *Hy* 2650, Queensland Museum, Brisbane, the female on a tag; head and a hind tibia on a slide.

## PROCERATONEURA new genus.

*Type: Ootetrastichus lustris* Girault.

Petiole wider than long yet rather distinct. Club joints subequal. Propodeum without a median carina except a weakly indicated one; other carinae absent. The pedicel is short, distinctly shorter than funicle 3 in spite of the statement in my table of species of *Ootetrastichus* where the contrary is stated. The original description of the species is correct. Type re-examined.

A second female has been examined captured by sweeping in forest, August 5, 1913 (A.A.G.), Gordonvale and a third same place, April 12, 1914. The first funicle joint is stouter and a little longer than the other two, distinctly not twice longer than wide. The third tooth of the mandible is truncate. Like *Ootetrastichus* otherwise but the three distal ring-joints are transverse-linear, the first large and the club is short and equally divided, subequal to funicle 1.

## EUPLECTROTETRASTICHUS new genus.

*Female*:—Head (cephalic aspect) triangular, the antennae inserted in the middle of the face, 11-jointed, with three ring-joints, the club 3-jointed. Hind tibial spurs single, enormously elongated as in *Euplectrus*, over half the length of hind tarsus. Venation normal. Scutum with a median groove, the scutellum with four, each of the inner two near the meson. Pronotum as in the Eurytomidae. Propodeum with a V-shaped median carina and a curved lateral one. Abdomen with a short, stout petiole, cylindrical, the segments unequal. Mandibles tridentate.

*Male*:—Not known.

*Type*: The following species.

## 1. EUPLECTROTETRASTICHUS SPENCERI new species.

*Female*:—Length, 1.50 mm.

Rich orange yellow, immaculate, the wings hyaline; tip of ovipositor black, also the funicle and club; pedicel subequal to funicle 1 which is subequal to 2, 3 somewhat shorter, plainly longer than wide. Club with a short nipple. Scutum with greyish pubescence.

Described from one female captured along edges of jungle, November 1, 1913 (A. P. Dodd).

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2651, Queensland Museum, Brisbane, the above specimen on a tag, the head and a hind leg on a slide.

Dedicated to Herbert Spencer.

## ACERATONEURA new genus of Girault and A. P. Dodd.

*Female*:—Antennae 11-jointed, three ring-joints, four funicle joints, two club joints; second club joint with a terminal spur. Mandibles tridentate. Hind tibiae with one apical spur, the spur not long. Mesonotum with a median groove. Scutellum with four grooves. Propodeum densely punctate, with a distinct median carina. Abdomen convex above, straight below; petiole short and stout; all segments nearly subequal, the fourth the longest.

*Male*:—Not known.

*Type*: The following species.

## 1. ACERATONEURA SPLENDIDA new species of A. P. Dodd and A. A. Girault.

*Female*:—Length, 2 mm.

Bright brownish yellow; proximal half of all coxae and antennal scape, pedicel and ring-joints concolorous, rest of legs pale straw yellow, almost white; vertex and upper half of face, a patch in center of abdomen near apex and antennal flagellum black; eyes garnet. Wings hyaline. Abdomen densely finely punctate. Pedicel short; first funicle joint long, over four

times as long as wide, three times as long as the pedicel; 2-4 shortening, 4 two thirds as long as 1; club scarcely longer than last funicle joint; first club joint the longer.

Described from one female taken sweeping in jungle, November 1, 1913 (A. P. Dodd).

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2652, Queensland Museum, Brisbane, a female on a tag, the head on a slide.

SUBFAMILY ELACHERTINÆ.

TRIBE ELACHERTINI.

*Ascotolinx* to the Hemiptarsenini; *Secodella* to the Omphalini; *Eulophoscotolinx*, *Cirrospilomyia* and *Elachertetrastichus* to the Tetrastichini.

GENUS ZAGRAMMOSOMA Ashmead.

1. ZAGRAMMOSOMA PULCHRA Girault.

*Female*:—Length, 1 mm. The wavy line down face is midway between base of antenna and ventral end of eye and extends to ventral end of head, avoiding the clypeus. *Antea*, line 9 of the description, insert *club* after *third*. The two marginal markings following the suberescence transverse stripe are deeply cleft centrally from caudad, the first the more so. The type female is on a slide and was captured April 9, 1913. A second female was captured in the same place just a year later.

The ring-joint is present. Coxæ metallic. Pedicel much smaller than funicle 1.

CIRROSPILOIDELLEUS new genus.

For diagnosis, see *antea*, p. 254.

1. CIRROSPILOIDELLEUS BICOLOR new species.

*Female*:—Length, 1.35 mm. Funicle 2 subquadrate; club joints wider than long. Funicle 1 a half longer than wide. The female type is on a tag, the hind legs and head on a slide. It was taken May 14, 1913 by sweeping jungle trees along a forest streamlet.

The proximal two thirds or nearly of the abdomen is lemon or brownish yellow. General color black. A thin median carina and a cross-carina at middle, shows on the propodeum. Segment 2 of abdomen is nearly a fourth the surface. Terminal spine of club over half the length of that region. Nonmetallic. Type re-examined.

A female at Cairns, November 1, 1911, sweeping foliage of *Melaleuca*.

2. CIRROSPILOIDELLEUS PURPUREUS Girault.

A species of *Winnemana* Crawford of the Tetrastichini.

3. CIRROSPILOIDELLEUS FASCIATIVENTRIS Girault.

Synonym: *Cirrospilomella fasciatus* Girault which see.

CIRROSPILOPSIS new genus.<sup>16</sup>

Differs from *Cirrospiloidelleus* in having the terminal spine of the club normal, not elongate and stout.

<sup>16</sup> The species are very similar to species of *Pseudiglyphomyia*.

**1. CIRROSPILOPSIS NIGRIVARIEGATUS** new species. Genotype.

*Female*:—Length, 1.05 mm.

Deep orange yellow, the wings hyaline; proximal third of abdomen dorsad yellow-brown except the margins, meson of venter of abdomen rather broadly same color, the abdomen, metapleurum and most of mesopleurum, propodeum, petiole, parapsidal furrows, cephalic margin of scutum, neck of pronotum, occiput centrally and sutures between scutum and scutellum, jet black. Face, pronotum and postscutellum lemon yellow. Legs and antennæ yellowish brown, the flagellum distinctly suffused with blackish. Club with a small terminal spine; funicle joints subequal, a little longer than wide, stout; pedicel a little shorter than either funicle joint. Mandibles 5-dentate. Postmarginal vein a little shorter than the stigmal. Thorax coarsely scaly reticulate. Propodeum and petiole foveate-rugulose, the former nevertheless with a distinct median carina.

From one female captured by sweeping jungle along the Mulgrave River, April, 12, 1914.

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2653, Queensland Museum, Brisbane, the female on a tag; head and hind tibiae on a slide.

**2. CIRROSPILOPSIS FUSCA** (Girault).

Removed from *Pseudiglyphomyia*. Type re-examined. See remarks under *quinquefasciatus*.

**3. CIRROSPILOPSIS QUINQUEFASCIATUS** new species.

*Female*:—Length, 1.38 mm.

Dull honey yellow, the wings hyaline, the caudal margin of pronotum and the postscutellum lemon yellow; five cross-stripes on abdomen equally distant from base and apex; cephalic margin of scutum and propodeum, median carina and neck of latter and a small area just mesad of tegula, black. Center of occiput black and tip of ovipositor valves. Propodeum with a distinct median carina, otherwise delicately rugulose. Funicle joints subequal, oval, a little longer than the pedicel. Club as long as the funicle, with a short terminal spine. Mandibles 5-dentate. Thorax on each side of postscutellum lemon yellow. Postmarginal vein somewhat shorter than the stigmal.

From one female captured on sand-ridges, forest near coast, May 9, 1914 (A. P. Dodd).

*Habitat*: Chindera (Tweed River), New South Wales.

*Type*: No. Hy 2654, Queensland Museum, Brisbane, the specimen on a tag; head and a caudal tibia on a slide.

Differs from *fusca* in having *distinct* stripes on the abdomen and otherwise; *fusca* is uniformly colored all over and the propodeum is honeycombed, the median carina obscure.

GENUS PSEUDIGLYPHELLA Girault.

In the description of the genotype, *antea*, p. 255, line 9, *postmarginal* should read *submarginal*. The parapsidal furrows are complete and deep and reach the scutellum mesad of the axillæ which are not much advanced. In the genotype, there are some golden yellow markings on the head, notably a stripe across cephalic vertex, dorsal margin of eye narrowly; two subquadrate metallic areas are blocked off on each side of dorsal face by the stripe across the vertex; also on the dorsal face a narrow yellow stripe across from eye to eye and a rather short, broad mesal stripe joining this with the cross-stripe of vertex. Inner teeth of mandible minute. Marginal vein not twice the length of the rather long stigmal.

Additional females in the type locality, forest, January, April and November. *Antea*, table of genera, p. 271, line 27, *bicarinate* read *noncarinate*; *an* read *a very*; *paired* omitted.

**1. PSEUDIGLYPHELLA PETIOLATA** new species.

*Female*:—Length, 1.20 mm.

Differs from the genotype in being partly nonmetallic and in bearing a petiole. Also, the tarsal joints are short. Black-purple, the wings hyaline, the legs, head, abdomen and antennae honey yellow, the abdomen margined with fuscous from base to middle. Thorax coarsely scaly. Abdomen with a distinct yellow petiole. Propodeum with a distinct median carina and other interlacing carinae, conical, brown along the meson. Postscutellum brown. Propodeum subrugulose, with a distinct lateral carina, the spiracle minute. Grooves of scutellum not joining around apex. Parapsidal furrows running off laterad before reaching pronotum, distinct. Axillae not advanced. Venation pale, the stigmal vein about a third the length of the marginal. Center of ocellus and flagellum dusky. Pedicel and two funicle joints subequal, the two latter each distinctly somewhat longer than wide. Club as long as the funicle, distinctly 3-jointed and terminating in a short spine. Mandibles 5-dentate.

From one female captured in jungle, July 13, 1913.

*Habitat*: Harvey's Creek (Cairns), Queensland.

*Type*: No. *Ily* 2655, Queensland Museum, Brisbane, the female on a tag; head and caudal tibiae on a slide.

GENUS *ATOPOSOMA* Masi.

**1. ATOPOSOMA SAINTPIERREI** Girault.

*Antea*, p. 257, line 4 of the description, *mesical* read *mesial*; line 10, *scutum* read *scutellum*; *lags*, *legs*.

**2. ATOPOSOMA GROTIUSI** Girault.

The conical marking on the scutum extends narrowly to the scutellum. The second femur is dusky ventrad, the second tibia with a dusky band just below knee. There are six stripes on abdomen counting the one at immediate base and the colored median line of abdomen extends from the second cross-stripe to apex and is distinct. There is no spot on the postscutellum or else it is faint. There are two metallic stripes across the face above antennae, a short dash across meson just ventrad of antennae and laterad of each end of this, an irregular spot. Type re-examined. A second female from forest, type locality, April 20, 1914.

**3. ATOPOSOMA MAZZININI** Girault.

The parapsidal furrows and whole of median line of scutum and scutellum are colored, on the latter the narrow median stripe bulging centrally, thickening somewhat at center on scutum. Abdomen with seven cross-stripes (counting one at extreme base and one at apex), the median longitudinal stripe distad originating at stripe 4 and giving off a lateral curved branch which runs caudad to stripe 5, forming a W-shaped marking.<sup>17</sup> Propodeum wholly metallic. Type re-examined.

One female, Magnetic Island (Townsville), Queensland, January 19, 1913.

GENUS *PSEUDELACHERTEUS* Girault.

**1. PSEUDELACHERTEUS AURIPES** Girault.

Three females (Queensland Museum Collections), type locality, on flowers of *Baekea*, April 22, 1913 (H. Hacker). The second ring-joint is large, the first very short and narrow. The ring-joints are present.

<sup>17</sup> Inverted.

**2. PSEUDELACHERTEUS NIVEICORNIS** new species.

*Female*:—Length, 1.05 mm.

Differing from the three species so far known in having the antennæ wholly yellowish-white like the legs while the body is otherwise as in *silvensis* except that the abdomen is lemon yellow in ground color. Margining black of the abdomen broad. Scutellum finely sheened. Funicle joints globular to subglobular, subequal to the pedicel. Petiole of abdomen distinct. Mandibles 5-dentate.

From one female caught by sweeping in forest, March 2, 1914 (A. P. Dodd).

*Habitat*: Cooktown, Queensland.

*Type*: No. Hy 2656, Queensland Museum, Brisbane, female on a tag, head and hind legs on a slide.

**3. PSEUDELACHERTEUS INVENTRIX** new species.

*Female*:—Length, 1.50 mm.

Very similar to *silvensis* but segment 2 of abdomen is black and there are 2-3 dusky cross-stripes on distal third of abdomen. Pedicel subequal to funicle 1. In the single specimen, one caudal tibia appeared to bear two spurs but I could find only one in the other species upon re-examining the types.

From one female captured in forest, June 10, 1914.

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2657, Queensland Museum, Brisbane, the specimen on a tag; hind legs and head on a slide.

GENUS ENTEDONOMORPHA Girault.<sup>18</sup>**1. ENTEDONOMORPHA TENNYSONI** and **ENTEDONOMORPHA RENANI** Girault.

These two species are very much alike. The genotype is metallic like *renani*. The two type bodies have been carefully re-examined and remounted together on a slide. The species differ as follows:

<i>renani</i> .	<i>tennysoni</i> .
Petiole stout.	Petiole narrower.
Scutum purple.	Scutellum purple.
Abdomen broad, brown-yellow discally except venter which is black along proximal two thirds.	Abdomen slender, light yellowish discally above and below.
Caudal margin of pronotum smooth.	Pronotum uniformly sculptured.
Scutum subconvex.	Scutum flat.
Parapsidal furrows not quite attaining the latero-caudal angle of pronotum but ending laterad.	Parapsidal furrows just attaining the latero-caudal angle of pronotum.
Abdomen with a subfuscous stripe across center.	

A female of *renani* was captured March 30, 1913, type locality. The reticulation of the scutum is coarser than that of the scutellum, its cephalic margin glabrous. Pronotum transverse-quadrate.

<sup>18</sup> This genus upsets the present tribal arrangements, the spurs of the caudal tibiae varying from one to two. The unique structure makes belief in parallelism most difficult. We are certainly ignorant!

**2. ENTEDONOMORPHA SUBFUSCIVENTRIS** new species.

*Female*:—Length, 1.60 mm. Compared with types of *tennysoni* and *renani*.

Differing from *tennysoni* Girault in being stouter, in having the abdomen but obscurely yellowish centrally (dorsal aspect), in having the first two femora fuscous and submetallic and in being nearly black, not evidently metallic green. Also, the scutum is distinctly longer than wide (cephalic end); the parapsidal furrows cephalad curving off before attaining the pronotum (in *tennysoni*, the scutum is wider than long cephalad, the gouge-like parapsidal furrows attaining the pronotum at the latter's extreme latero-caudal angle). The hind wings are about twice broader (about ten lines of discal cilia). Abdomen with some yellowish just before apex ventro-laterad. Grooves of scutellum curving toward each other slightly, at apex (somewhat closer in *tennysoni*). Spiracle of propodeum situate centrally, between the arms of a V-shaped carina just laterad of the lateral carina, the mouth of the V opening laterad. Petiole of abdomen longer and stouter, with a median and dorso-lateral sulcus. Otherwise as in *tennysoni*. Scutum subglabrous cephalad. Pronotum uniformly sculptured. Cephalic femur nearly black, much darker than middle.

From one female taken in jungle, August 7, 1913 (A. P. Dodd).

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2658, Queensland Museum, Brisbane, the specimen on a tag, head and hind legs on a slide.

In this genus the axillæ are not advanced and the "true lateral carina" of propodeum is a curved sulcus.

**3. ENTEDONOMORPHA UNICA** new species.

*Female*:—Length, 1.60 mm. Differs from the genotype in having two spurs on the caudal tibiae.

Dark metallic blue, the abdomen wholly dark metallic green, the wings hyaline; scape and legs very pale yellow except cephalic femora and coxæ and sides of middle coxæ. Differs from *subfusciventris* in having the hind coxæ not brown, the abdomen not suffused with red yellowish, the pronotum is a little more coarsely sculptured, densely punctate, the grooves of scutellum are separated at apex only by a narrow space, the abdomen is shorter, nearly round from dorsal aspect, the petiole shorter, segment 2 occupying two thirds of the surface; the mandibles are 5-dentate. On the propodeum there is a short (abbreviated) carina from caudal margin between the median carina and the curved sulcus which represents the lateral carina (present in *subfusciventris*). Otherwise the same.

From one female caught in jungle, June 25, 1914.

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2659, Queensland Museum, Brisbane, the specimen on a tag, head and hind legs on a slide.

A second female, same place, July 11, 1914.

**4. ENTEDONOMORPHA VARICORNIS** new species.

*Female*:—Length, 2.40 mm.

Very dark metallic green, the abdomen reddish yellow broadly margined dorsad and ventrad with black, the mesal reddish area broadening distad. Scape and legs white, the hind coxa dark metallic. Pedicel and funicle 1 reddish yellow, funicle 2 suffused with reddish. Scutellum purplish, its grooves widely separated at apex as in *subfusciventris*, the foveæ of each groove united so that the sulcus is nearly continuous (distinctly broken somewhat distad of middle). Abdomen conic-ovate. Hind tibial spur single, distinct. Mandibles 4-dentate, the mesal two teeth small. Fourth club joint very short, obtuse, the lateral spur minute, present,



from side of base. Cephalic part of scutum rather broadly glabrous, the pronotum punctate. Funicles 2 and 3 subequal, shorter than 1. Sculptured otherwise as in the genotype except that the scutellum is glabrous, scaly laterad of the grooves, the axillæ glabrous.

From one female caught in jungle, June 25, 1914.

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2660, Queensland Museum, Brisbane, the specimen on a tag with type *unica*; hind legs and head on slide with type *unica*.

#### 5. ENTEDONOMORPHA ALBICLAVA new species.

*Female*:—Length, 1.80 mm. Grooves of scutellum continuous, that is, not broken nor composed of foveate punctures. Caudal tibial spurs *double*.

Dark metallic blue, the scutellum and propodeum dark brassy, the abdomen dark coppery, pale yellow along meson of venter rather broadly and dorsad at base, the petiole brown. Legs, scape and club white, the tegulæ yellowish. Fore wings slightly stained. Grooves of scutellum just separated at apex by a narrow carina. Propodeum and scutellum glabrous, polished, also the parapsides and axillæ and over cephalic third of scutum (that portion cephalad of the parapsidal furrows). Rest of scutum coarsely scaly. Pronotum reticulate but with numerous scattered punctures. Scutum with a setigerous fovea just meso-cephalad of the cephalic ends of the parapsidal furrows. Lateral carinæ of propodeum represented by a curved sulcus, the propodeum with no other carinæ from caudal margin but caudad of the spiracle, the caudo-lateral angle is punctate. Mandibles 4-dentate. Funicle 1 twice longer than wide, longer than usual, 4 quadrate, the club usual. Caudal knees pinkish.

From one female caught in jungle, June 3, 1914 (A. P. Dodd).

*Habitat*: Grafton, New South Wales.

*Type*: No. Hy 2661, Queensland Museum, Brisbane, the specimen on a tag; head on a slide plus a caudal tibia.

#### 6. ENTEDONOMORPHA SPADICICORNIS new species.

*Female*:—Length, 1.30 mm. Differs from the genotype in having *two* hind tibial spurs.

Dark brassy green, the vertex rosaceous coppery, the abdomen honey yellow, margined from base to distal two thirds with dark metallic green (segment 2), rather narrowly dorsad, very broadly ventrad. Wings hyaline. Legs, scape, pedicel, distal half of club 3 and distal club joint white, rest of antennæ rich brown. Scutum and parapsides imperial purple. Pronotum delicately scaly, the neck coarsely so, the caudal margin smooth. Scutum smooth at cephalic fourth, the rest scaly, the scales very coarse at caudal half, twice coarser than those farther cephalad; parapsides moderately finely scaly but along about lateral half distinctly more coarsely so, the areas sunken, thus nearly punctures. Scutellum moderately finely scaly, the grooves foveate and widely separated distad, not leaving the lateral margins, straight. Axillæ very finely scaly. Propodeum glabrous; a circular carina surrounding spiracle on the mesal and caudal sides and the lateral carina is shortly indicated from caudal margin; laterad of the circular carina, propodeum finely scaly. Petiole a little longer than wide, longitudinally rugulose. Funicle 1 over twice longer than wide, 2 and 3 each somewhat shorter, subequal. Mandibles 5-dentate, the last two teeth—4 and 5—minute, barely separated (left) or teeth 3 and 4 are minute equal, distinctly separated, very much smaller than 5 which is subequal to 2 (right).

From one female captured July 23, 1912 by sweeping jungle.

*Habitat*: Goondi (Innisfail), Queensland.

*Type*: No. Hy 2662, Queensland Museum, Brisbane, the specimen on a tag; head and hind legs on a slide.

GENUS GYROLASELLA Girault.

*Antea*, p. 178, table of genera, line 18, the word *absent* should read *short*.

1. GYROLASELLA SPECIOSA Girault.

*Antea*, p. 167, line 4 of the description, *side* read *margin*. The marking on the scutum is like the Greek letter Tau of the lower case and on one side the arm is not joined. The stripe across the propodeum passes over the spiracle, partly embracing it. Funicle joints subquadrate, the club with a minute terminal spine.

Forest, December 27, 1912. *Type* on a slide. Length, 1 mm.

2. GYROLASELLA FASCIATA Girault. Genotype.

Length, 1.50 mm. *Antea*, p. 166, line 4 of the description, *distal apex* read *dorsal aspect*. Densely polygonally reticulated (thorax). Reared from Eucalyptus galls. *Types* on a slide. Cephalic axilla metallic green.

3. GYROLASELLA CONSOBRINUS Girault.

Length, 2 mm. A stripe across cheek ventrad of eye. Scape striped obliquely with metallic. Reared from galls, forest, December 12, 1912. *Types* on a slide. Line 6 of abdomen with a line-like caudal offshoot on each side of meson; 7 consisting of a round dot on each side of meson and an area at each lateral margin.

4. GYROLASELLA SPECIOSISSIMA Girault.

The *types* are on a slide. They were captured May 28, 1912 in forest (1,500 feet).

5. GYROLASELLA LINEATA Girault.

Length, 1.75 mm.; slender. Median line of caudal half of scutum metallic green. Also the meson of each axilla except at each end. Line 5 of abdomen curved convexly cephalad. Polygonally reticulated. The *type* is on a tag, the head on a slide.

6. GYROLASELLA QUADRIFASCIATA Girault.

A species of *Pseudiglyphomyia* which see.

7. GYROLASELLA VIRIDILINEATA (Froggatt.)

*Carlocyba viridilineata* Froggatt in *antea*, p. 271.

8. GYROLASELLA GRACILIS new species.

*Female*:—Length, 1.90 mm.

Similar to *viridipronotum*<sup>10</sup> but the marking on the scutum is shaped like the head (side view plus part of stalk) of an ordinary pin, extends to scutellum but the "head" is separated

<sup>10</sup>New species. *Female*:—Length, 1.85 mm. Honey yellow, the wings hyaline, the body marked with bright metallic green as follows: Pronotum, scutum except lateral margins narrowly, meson of scutellum rectangularly, the green not extending quite to the lateral groove, a longer than wide spot at mesal base of postscutellum, mesal half or more of each parapside, axillae except lateral and caudal margins, propodeum except transversely just cephalad of the spiracle, immediate base of abdomen and seven thin cross-stripes, the first four close together (2 and 3 more prominent, crescentic, 3 embracing 4), 5 broader, joined narrowly to 4 along meson; 6 caret-shaped; 7 near apex, narrowly interrupted at meson: a dot at edge between 5 and 6. Eyes convergent, the facial margin convex Ocellar area, a large, cuncate spot on vertex caudad of eye, pedicel above and a longitudinal stripe along upper side of scape; mesoventer, hind coxa above at base and cephalic femur ventrad, also green. Propodeum noncarinate. Mandibles tridentate. The male is similar but stripes 1-3 of abdomen are confluent.

One male, five females from the collections of the National Museum, Melbourne, labelled "28. From leaf-galls on gum. 3.11."

*Habitat*: Melbourne, Victoria.

*Types*: In the National Museum, Melbourne, the above specimens on a card and a slide with heads and female hind legs.

from pronotum narrowly by yellow; the central green of scutellum is oval; the green of parapsides does not form a continuous piece with the spot on the axilla, the latter here larger, elliptical and isolated from the green of parapsides; the last two stripes on abdomen are also joined along the meson; a green line between each antenna at insertion. Mandibles about 5-dentate.

From one female bred from capsules of red gum November 12.

*Habitat*: Melbourne, Victoria.

*Type*: In the National Museum, Melbourne, the specimen on a tag.

#### 9. *GYROLASELLA PARTICOLOR* new species.

*Female*:—Length, 1.05 mm.

Golden yellow, the wings hyaline, except that the stigmal knob is dusky; cephalic half (or somewhat more) of scutum, except along lateral margins, an elliptical spot on scutellum at middle of base, a smaller but similar spot at apex (cephalad) of each axilla and the propodeum metallic greenish blue, the abdomen with six submetallic cross-stripes equally distributed, narrow and separate. Mandibles with two distinct outer teeth and three or four minute inner ones. A very small (a mere trace) fuscous area under stigmal knob. Thorax scaly. Legs pallid, the femora dusky above at base. Hind tibial spur distinct. Antennæ dusky yellow, the funicle joints a little wider than long, the second slightly the larger, both distinctly shorter than the pedicel.

Described from one female caught by sweeping in forest December 9, 1913.

*Habitat*: Northern Queensland (Gordonvale near Cairns).

*Type*: No. *Hy* 2663, Queensland Museum, Brisbane, the above specimen on a slide.

#### 10. *GYROLASELLA DUPLINEATA* new species.

*Female*:—Length, 1.15 mm.

Intense golden yellow, the wings hyaline, the legs and antennæ concolorous (scape not seen). Marked with dark metallic green as follows: Extreme latero-caudal angle of pronotum; median line of scutum (narrowly), except at each end (more toward caudal end); suture between scutum and scutellum (narrow); parapsidal furrows except at each end; median line of scutellum except at each end (forming a narrow or thin line as on the scutum); suture between axilla and parapside (only at mesal end); an elongate wedge near tegula; cephalic and caudal margins of propodeum narrowly, the cephalic line dilated near the spiracle and extending laterad no farther than that, the caudal stripe still less broad; extreme base of abdomen at center and six stripes across abdomen, all thin, 2 and 3 close together, 3 with a small nipple at meson caudad, 6 convexly curved and shorter (*i.e.*, not extending laterad as far as the others which do not quite reach the lateral margin); in life, these stripes (1, 4 and 5) appear double; also a line of three narrow dots like spiracles or slits, dorso-laterad from cross-stripes 1-4. Thorax scaly; ocellar areas apparently non-metallic; funicle 2 much wider than long, 1 somewhat so. Venation yellow. Vertex sparsely hispid. Mandibles 4 or 5-dentate.

Described from one female caught with *particolor*.

*Habitat*: Northern Queensland (Gordonvale near Cairns).

*Type*: No. *Hy* 2664, Queensland Museum, Brisbane, the above specimen on a slide.

#### 11. *GYROLASELLA LATEROGUTTATA* new species.

*Female*:—Length, 1.25 mm.

Honey yellow, the wings hyaline; the legs concolorous. Marked with dark metallic green as follows: A caret-shaped marking on upper face each side; ocellar spots; scape and much of pedicel; distal two thirds of median line of scutum, the line like an inverted exclamation

point; all of disk of pronotum; parapsidal furrows, except at each end; proximal two thirds of median line of scutellum, the line swelling caudad; all of propodeum out to spiracle; six distinct, but thin stripes across abdomen centrally, the stripes abbreviated laterad; and four short transverse dashes or marks, non-co-ordinated with the cross-stripes, along abdomen in the dorso-lateral aspect. Hind tibial spur distinct, rather stout. Mandibles tridentate, the third tooth truncate and with indications of minute teeth. Postmarginal vein nearly as long as the stigmal.

Described from one female caught by sweeping in forest, December 2, 1912 (A. P. Dodd).

*Habitat*: Northern Queensland (Gordonvale near Cairns).

*Type*: No. Hy 2665, Queensland Museum, Brisbane, the above specimen on a tag, the head and hind tibiae on a slide.

**12. GYROLASELLA FESTIVA** new species.

*Female*:—Length, 2 mm.

Bright lemon yellow, the legs and antennae concolorous but the scape metallic green along the dorsal edge. Wings hyaline. Marked with brilliant metallic green as follows: A line across neck of pronotum, one across the narrow pronotum appearing like the cephalic margin of scutum; mesal margin of each parapside; a tau-shaped marking centrally on scutum, the upright of the letter extending to caudal margin, the cross-piece at cephalic third; whole of median line of scutellum, the green swollen somewhat centrally; a broad stripe across cephalic margin of propodeum involving the spiracles; the connection between propodeum and abdomen; five stripes across the latter from base to distal third, first stripe connected with immediate base of abdomen at meson, stripes 2-4 connected along the meson, fifth stripe with a short, cephalic projection at meson; a spot laterad of postscutellum; a longitudinal line on axilla and another in the vicinity of the tegula. Postmarginal vein nearly as long as the stigmal. A green stripe across face from dorsal ends of eyes. Mandibles 6-dentate. Antennae dusky; funicle joints subquadrate. Ocelli in green areas.

Described from one female reared from miscellaneous galls on Eucalyptus in forest, October 7, 1913.

*Habitat*: Northern Queensland (Gordonvale near Cairns).

*Type*: No. Hy 2666, Queensland Museum, Brisbane, the above specimen on a slide.

**13. GYROLASELLA IMMACULATIVENTRIS** new species.

*Female*:—Length, 1 mm.

Greenish yellow, the legs and antennae concolorous, the wings hyaline. The following dark metallic green markings: A line connecting the ocelli; an oval dot on each caudo-lateral angle of pronotum; a rather broad stripe across cephalic margin of scutum not extending quite to margins on each side, its caudal edge emarginate at meson; a longer than wide spot on parapside, caudo-mesal corner; a similar but smaller, oval spot on the axilla, meso-cephalad, abutting on to the marking on the parapside; a small triangular spot center of base of scutellum; another somewhat swollen one on propodeum about at the spiracle; a shallow V-shaped but conspicuous marking center of propodeum appearing like a bird with spread wings; and a short longitudinal dash just mesad of tegula. Thorax densely scaly.

From one female captured in grass in forest, April 6, 1914.

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2667, Queensland Museum, Brisbane, the specimen on a slide.

**14. GYROLASELLA TAU** new species.

*Female*:—Length, 2.15 mm.

Very similar to *festiva*, the scutum bearing a green marking like the Greek letter Tau of the lower case or Upsilon of the capital case. Differing however, as follows: The parapsidal furrows are metallic green but not the inner margin of the parapsides; the green median line of scutellum is swollen distad like an inverted exclamation point. The propodeum is green only on each side of the projecting postscutellum; there is a green dot in center of each parapside and another (larger) spot on each axilla mesad; also a spot filling the center of the postscutellum. The abdominal stripes differ in that there are six, the first really consisting of a semicircular loop on each side at base, the apex or top of the loop a little caudad of mesad, the caudal end at lateral margin and accented like a round spot; stripes 2-6 connected along meson by a narrow line, 2 and 3 abbreviated laterad, 5 fainter but complete, some distance from 6 which is near apex and represented by a dot on each side at margin. Ocelli in green spots; just latero-caudad of lateral ocellus a green dash and a crescentic mark ventrad of each; also a narrow green line connecting antennal insertions from thence dorsad to ventral end of each eye. Scape beneath, basal third of pedicel and a curved, long spot above on scape also green. Otherwise similar but the mandibles 5-dentate.

From two females on a card labelled "Mordialloc. Emerged 11-10. F. Spry, Vict."

*Habitat*: Mordialloc, Victoria.

*Types*: In the National Museum, Melbourne, the above specimens on a tag, the heads on a slide.

**15. GYROLASELLA BRACTEATA** new species.

*Female*:—Length, 0.75 mm.

Yellowish green, the wings hyaline, the shortly extruded valves of the ovipositor black. Marked with dark metallic green as follows: A transverse line across meson of pronotum, a dot at each caudo-lateral angle of pronotum, a short, elliptical marking along meson of scutum at about distal three fourths, a narrow wedgeshaped marking along mesal margin of each parapside a little caudad of middle (extending well toward caudal edge but not reaching it). A little over cephalic half of median line of scutellum rather broadly, dorsal propodeum except lateral margin and cephalo-laterad, a small triangular (apex mesad) spot over propodeal spiracle, two<sup>20</sup> wider than long spots on meson of abdomen a little distad of middle of proximal half and two marginal dots resembling spiracles nearly opposite the central transverse spots but a little caudad of each one respectively. Funicle joints narrower than the club, subequal, somewhat wider than long. Mandibles with about four teeth. Pedicel above metallic at base.

From one female caught in forest, April 10, 1914.

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2668, Queensland Museum, Brisbane, the specimen on a slide.

**16. GYROLASELLA MULTIPUNCTUM** new species.

*Female*:—Length, 2 mm. Slender, rather large.

Greenish yellow, the wings hyaline; marked with dark metallic green as follows: Three minute marks in a triangle just ventrad of ocelli; two very narrow lines across face, one above antennæ, the other through their insertions; dorsal edge of scape and a spot on each side; proximal third or more of pedicel; somewhat less than distal half of median line of scutum very narrowly; an oval spot in center of parapside, an elongate spot along center of axilla;

<sup>20</sup> A faint third one distad of second.

a dot at center of scutellum at meson, an elongate dot on median line of same at proximal third and a shorter one at distal third; cephalic and caudal margins of propodeum very narrowly; center of immediate base of abdomen; four marginal dots on abdomen along proximal half and a marginal dot a little distance proximad of tip; opposite the four proximal marginal dots a cross-stripe of which the distal three are double, the first of the couplets much more distinct, the stripes not quite reaching the marginal dots; a fifth, unpaired and faint stripe just caudad of the others but farther away from the fourth than the first four are from one another; stripes 2-4 connected very narrowly along the meson. Thorax and vertex with scattered black setæ. First abdominal stripe faint. Thorax scaly. Mandibles tridentate.

From one female caught sweeping grass in forest, April 6, 1914.

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2669, Queensland Museum, Brisbane, the specimen on a tag; head, middle and hind tibia on slide with type of *immaculativentris* Girault.

**17. GYROLASELLA BIOCULATIVENTRIS** new species.

*Female*:—Length, 0.93 mm.

Like *Zagrammosoma pulchra* Girault but the wings all hyaline, the legs all white except hind coxa and proximal half of hind femur, the sides of the other coxæ metallic; the head white except occiput and cheeks; at meson of vertex caudad, the white descending a short distance into the occiput. The abdomen bears a large eye-spot on each side at margin a little distad of middle and between these and base two obscure transverse white dots in a line longitudinally, the distal one somewhat larger. Some ivory white around the axilla and tegula. The rather long stigmal vein a little darkened. Scape white, antennæ black; funicle 2 a little wider than long, 1 somewhat longer than the pedicel. Mandibles tridentate. Two ring-joints.

From one female captured by sweeping grass and foliage in forest, January 29, 1913.

*Habitat*: Townsville, Queensland.

*Type*: No. Hy 2670, Queensland Museum, Brisbane, the specimen on a slide.

**18. GYROLASELLA HOPKINSI** new species.

*Female*:—Length, 1.05 mm.

Like *worcesteri* Girault but the large conically acuminate marking of scutum plainly reaches the caudal margin (in the other species barely so), the propodeum is wholly dark metallic green except for a transverse, narrow wedge on each side of postscutellum, the mesal margin of each parapside is metallic except at extreme caudal end; and the abdomen bears long, abbreviated stripes, nearly confluent longitudinally and there are three transverse, disconnected marginal dashes (and a fourth minute one caudad). Differs from *pulchra* in being much less robust, in bearing the metallic coloration on the parapsides and having the marking on the scutum subacutely pointed (as in *channingi*) and in the large abdominal cross-stripes. In *pulchra* the stripes on the abdomen are not plain but more or less emarginated, fluted or curved. Ocelli in green areas and cephalo-ventrad of the lateral ocellus, there is a green mark, more or less elongate. In *worcesteri*, the valves of the ovipositor are extruded but shortly. Pedicel above at base and sides of scape washed with metallic green. Mandibles tridentate.

From one female caught in forest, March 21, 1913.

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2671, Queensland Museum, Brisbane, the above specimen on a slide.

Dedicated to Cyril G. Hopkins.

**19. GYROLASELLA RARIFASCIATUS** new species.

*Female*.—Length, 1.75 mm. Postmarginal vein about half the length of the stigmal.

Lemon yellow, the wings hyaline, the following parts dark metallic green: Occiput except the white ventral fourth, a concave stripe across cephalic margin of clypeus with a projection dorsad at meson and more broadly curving across cheeks around the outline of the ventral ends of the eyes to the occiput; two small spots along the mesal margin of the eye one beneath the other, the upper spot really the ventral end of a metallic green line between the ocelli and running from them down the eye; ocellar areas; prothorax except ventro-lateral aspect; scutum except lateral margin very narrowly; axillæ except lateral and caudal margins, scutellum except narrowly around apex, more broadly laterad of the grooves; postscutellum except lateral and apical margins continuously; propodeum excepting a narrow transverse stripe laterad of middle of postscutellum; base of abdomen circularly (abdominal markings purplish black), tip of abdomen shortly and six cross-stripes, the first four very broadly joined along the meson, the fourth to fifth rather narrowly so, the fifth to the sixth broadly again as though the caudal meson of the fifth was prolonged in the shape of a beehive to the sixth, the latter convexed at meson caudad but not joined to the black at tip; stripe 5 with each end along margin turned cephalad a short distance; each arm of stripes 1-4 slanted caudo-laterad. Legs lemon yellow; cephalic coxa with a metallic green spot at base cephalad, femur with a metallic green stripe along dorsal and ventral aspects, on caudal femur, the two joined across lateral aspect at base, the ventral streak short; caudal coxa laterad with a green line across base and half way down the ventral margin; mesoventer; most of meson of abdomen (coppery); dorsal aspect of scape and pedicel; a small spot against base of antenna meso-dorsad. Mandibles tridentate. Flagellum dusky. Thorax densely scaly.

From three females from galls, "Gall No. 25," May, 1914 (H. Hacker).

*Habitat*: Brisbane, Queensland.

*Type*: No. Hy 2672, Queensland Museum, Brisbane, the three females on a tag; head on a slide with *bracteata*.

**20. GYROLASELLA ÆREIGUTTATA** new species.

*Female*.—Length, 0.80 mm.

Pale golden yellow, the wings hyaline, marked with dark metallic green as follows: Ocellar area, a dot on extreme latero-caudal angle of pronotum, two large hemispherical spots on cephalic scutum at cephalic margin, one on each side, midway between meson and lateral margin (reaching to apex of proximal fourth), mesal margins of each parapside, a rather large oval spot on the axilla, a small triangle base of scutellum at meson, a longer than wide spot laterad of apical scutellum and a wider than long one on propodeum opposite base of postscutellum; a small triangle at meson of base of abdomen, a rather broad cross-stripe on abdomen, abbreviated near lateral margins at a little proximad of middle followed by a rather large central triangular spot. Tip of valves of ovipositor black. Dorsal edge of scape metallic. Mandibles 4-dentate.

From one female caught in forest, November 8, 1913.

*Habitat*: Stewart's Creek (Townsville), Queensland.

*Type*: No. Hy 2674, Queensland Museum, Brisbane, the specimen on a slide.

## GENUS CIRROSPILOMELLA Girault.

**1. CIRROSPILOMELLA VARIFASCIATA** new species.

*Female*.—Length, 1.55 mm.

Orange yellow, the postscutellum lemon yellow; fore wings with an obscure substigmal spot. Parapsidal furrows and other thoracic sutures black. Propodeum with a distinct median carina, otherwise scaly. Terminal joint of club with an apical spine, funicle 1 somewhat

longer than wide, longer than 2. Mandibles 5-dentate. Thorax scaly. Meson and caudal margin of pronotum black. A wavy stripe at immediate base of abdomen; and four cross-stripes equally distributed between base and apex, the second and third connected along the meson, the third with a stripe against it but which is abbreviated from each end, crossing the meson rather widely; stripe 4 thickened centrally and at meson of cephalic margin with a nipple-like projection; stripe across base of abdomen acutely pointed distad at meson. A dusky stripe on propodeum in the place of lateral carinae. A marginal small spot on abdomen between stripe at base and stripe 1, this spot obscurely continued toward meson but not reaching it. Postmarginal vein shorter than the stigmal.

From one female caught in forest, June 17, 1914.

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2675, Queensland Museum, Brisbane, the specimen on a tag.

## 2. CIRROSPILOMELLA FASCIATA Girault.

Synonym: *Cirrospiloidelleus fasciativentris* Girault.

There are but four cross-stripes on the abdomen. No distinct median carina on propodeum. Wings slightly stained. Funicle 1 a half longer than wide; club with a small, distinct fourth, nipple-like joint without a terminal spine. Types re-examined.

## GENUS EURYSCOTOLINX Girault.

### 1. EURYSCOTOLINX GUTTATIVERTEX Girault.

A female, Cairns, Queensland, October 25, 1911 sweeping foliage and grass in a bog. The marginal stripe of abdomen and the spot were hardly developed. The spot on the vertex was distinct.

### 1. EURYSCOTOLINX IMMARGINATUS new species.

*Female*:—Length, 1.85 mm.

Like the genotype but the abdomen has no black, the pedicel is concolorous with the scape and the funicle joints are subequal, all distinctly longer than the pedicel (each about somewhat over twice longer than wide). The scape along its dorsal edge bears distinctly longer and more numerous bristles. The body is slenderer, the postmarginal vein somewhat shorter, the wings stained along the venation. Spot in center of vertex not very distinct. Mandibles 5-dentate.

From one female captured in jungle, March 1, 1914.

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2673, Queensland Museum, Brisbane, the specimen on a tag; hind tibiae and head on a slide.

## GENUS PSEUDIGLYPHOMYIA Girault.

### 1. PSEUDIGLYPHOMYIA FUSCA Girault.

A species of *Cirrospilopsis*.

### 2. PSEUDIGLYPHOMYIA QUADRIFASCIATA (Girault).

From *Gyrolasella*.

### 3. PSEUDIGLYPHOMYIA OCCIDENTALIS new species.

*Female*:—Length, 1.30 mm.

Similar to *rusticus* Girault but the exclamation-point-like marking along meson of scutellum is narrower and longer, reaching to distal fifth, the mark on axilla is not a minute dot but a minute spot, ovate; the abdomen bears three distinct cross-stripes commencing at middle, the distal one wider and blacker; also from each side out from base two cross-stripes



are indicated by transverse spots and one also just before extreme apex. In both species the cephalic margin of the scutum is broadly jet black. Funicle 2 a little longer than wide. Propodeum finely scaly, without lateral carinae but with a distinct median one. Mandibles about 6-dentate.

From one female caught in forest, April 15, 1914 (A. P. Dodd).

*Habitat*: Cloncurry, Queensland.

*Type*: No. Hy 2676, Queensland Museum, Brisbane, the specimen without head on a tag.

#### 4. **PSEUDIGLYPHOMYIA NIGRISCUTUM** new species.

*Female*:—Length, 1.25 mm.

Black, the following parts orange yellow: Head (except center of occiput and dusky ventral margin of face), pronotum except face and caudal margin across meson, parapsides, lateral margin of each axilla rather broadly, scutellum laterad of grooves except at base, distal third of scutellum between the grooves and the postscutellum. Propodeum rugulose but the median carina is distinct. Legs (except hind coxa) and proximal half of scape pale yellowish. Caudal femur a little dusky at proximal half. Postmarginal vein not quite as long as the stigmal, the fore wings lightly dusky across from the whole marginal vein. Mandibles 5-dentate. Funicle 1 a little longer than wide, 2 barely so, subequal to the pedicel. Terminal spine of club distinct, the club as long as the funicle.

From one female captured in forest, May 12, 1914 (A. P. Dodd).

*Habitat*: Chindera (Tweed River), New South Wales.

*Type*: No. Hy 2677, Queensland Museum, Brisbane, the specimen on a tag.

#### **PSEUDIGLYPHUS** new genus.

Antennae short, capitate, 9-jointed with two large ring-joints, the club large, 3-jointed. Abdomen pointed conic ovate, from above depressed and pointed ovate, the ovipositor shortly exerted. Segment 2 of abdomen longest, 7 next so, the former occupying a little less than a fourth of the surface, its caudal margin straight. Postmarginal vein a little shorter than the stigmal. Propodeum with a solid median carina, the spiracle small, suboval. Mandibles with two larger outer teeth and but a single inner smaller one. Differs from *Pseudiglyphella* in having the axillae much advanced. Scutellum with a lateral grooved line.

#### 1. **PSEUDIGLYPHUS GROTIUSI** new species. Female. Genotype.

Length, 1.50 mm.

Dark steel or purplish blue, the wings hyaline, the legs concolorous except the knees, the intermediate and caudal tibiae (except at base of the latter) and the three proximal tarsal joints which are whitish. Scutum coarsely scaly, the scutellum between the grooves, postscutellum and the propodeum glabrous; scutellum scaly laterad of grooved line. Segments 2 and 3 of abdomen glabrous, the rest reticulated; segment 3 very short. Antennae dusky yellowish, the scape concolorous with the body, the pedicel dark, subequal in length to funicle 1 which is longer than wide; funicle 2 subquadrate. Distal club joint terminating in a small nipple. Type captured by sweeping jungle growth along a forest streamlet, June 14, 1913 and is mounted on a tag (head and caudal tibiae on a slide with the type appendages of *Stomatoceras aureus* Girault). A second female, type locality, forest, August 27, 1913.

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2678, Queensland Museum, Brisbane.

The species is respectfully dedicated to Hugo Grotius.

**2. PSEUDIGLYPHUS SPADICIVENTRIS** new species.

*Female*:—Length, 1.30 mm.

Differing from *grotiusi* Girault in having the abdomen chestnut brown, the median carina of propodeum solid (in *grotiusi* of the same shape exactly!) and a broad depression in the place of the lateral carina (apparently), in the center of which is the minute spiracle, the propodeum apparently the same as in *grotiusi*. The ovipositor is barely exerted (so in the genotype). The legs (except coxæ) are white, washed slightly but distinctly with dusky, the antennæ white, the two funicle joints subequal (1 slightly longer than 2 which is quadrate); scape and pedicel dusky. Mandibles tridentate. Abdomen not densely reticulated as in *grotiusi*, the scalines less distinct. Compared with an authentic specimen of *grotiusi* and the two are alike excepting the colorational differences in the abdomen and legs.

From one female caught sweeping in forest, along mountain foothills, July 9, 1913 (A. P. Dodd).

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2679, Queensland Museum, Brisbane.

In this genus the scutum is short, the axillæ much advanced, reaching a little over half way to cephalic margin of scutum, the short, complete parapsidal furrows meeting them. Mandibles 3-dentate. There appears to be a carina laterad and mesad of the spiracle, converging caudad, forming an oblique V whose arms inclose the spiracle.

GENUS MESTOCHARELLA Girault.

**1. MESTOCHARELLA FERALIS** Girault.

Slender. Mandibles tridentate, the third tooth truncate. Club terminating in a little spur. Postmarginal vein shorter than the stigmal. Funicles 1-3 longer than wide, cylindrical. The type is on a tag, the head on a slide. Wings ample. Jungle, April 4, 1913.

In *Antea*, p. 264, line 4, *Atoposomoidella channingi* is a naked name. *Gyrolasella channingi* is referred to.

TRIBE EUPLECTRINI.

GENUS PACHYSCAPHA Howard.

A male specimen with enormously dilated scape but otherwise like *Euplectrus* in every detail was taken in jungle at Tweed Heads (Tweed River), New South Wales, May 3, 1914 (A. P. Dodd). The stigmal vein was distinctly shorter than the postmarginal.

GENUS EUPLECTRUS Westwood.

*Antea*, p. 273, line 1, *2-jointed* should read *solid*. The mandibles are absent in this genus and there are two ring-joints. The antennæ are inserted ventrad of the middle of the face, near the clypeus. The species described by Girault from Australia agree in these particulars and the descriptions should be understood accordingly.

**1. EUPLECTRUS XANTHOCEPHALUS** Girault.

*Antea*, p. 274, line 3, *one* read *two* and *3-jointed* read *solid*.

Length, 2.10 mm. The *type* female is on a tag, the head on a slide. It was captured April 15, 1912.

**2. EUPLECTRUS CAIRNSENSIS** Girault. Female, male.

Length, 2.15 mm. Male about the same. The *types* consist of a single pair on a tag. The female type was captured October 25, 1911 (Cairns), the male May 11, 1913 at Gordonvale. A female at Kuranda, Queensland, jungle, May 14, 1913.

**3. EUPLECTRUS MELANOCEPHALUS** Girault.

Length, 2.20 mm. The *type* was captured in jungle, May 8, 1913 and is on a tag.

**4. EUPLECTRUS PULLIPES** new species.

*Female*:—Length, 1.80 mm.

Colored like *Euplectromorpha nigrifemur* (Girault), the tibiae and tarsi yellow, also the middle coxa; but the abdomen centrally is more narrowly yellow, the marginal black being broad. Scutellum and axillae uniformly scaly reticulate, the scutum a little rougher but similar, the pronotum much finer, its neck, however, as rough as the scutum. Longest spur of hind tibiae half the length of the hind tarsus. Antennae 9-jointed, two ring-joints, club solid. Post-marginal vein much longer than the stigmal. Mandibles absent. Scutum and scutellum simple; yellow of abdomen paler toward base; ventrad yellow, margined with black as the dorsal surface, the distal part of the black long. Funicle and club fuscous; funicle 1 somewhat longer than the pedicel, longest, 2 and 3 each slightly shorter, 4 a little longer than its width. Club a little longer than funicle 1 which is distinctly longer than wide. Like the other species. Sculpture of scutum finer cephalad. Compared with *Euplectromorpha nigrifemur*.

From one female caught by sweeping in jungle, May 9, 1913 (A. P. Dodd).

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2680, Queensland Museum, Brisbane, the specimen on a tag.

**5. EUPLECTRUS CARINISCUTUM** new species.

*Female*:—Length, 3 mm.

In my table of Australian species runs to *scotti* Girault but upon comparison with the type of that species I find the following differences: In coloration a striking difference is that the cross-stripe on distal abdomen connecting the marginal stripes at apex is broadly interrupted at meson and also it is much broader extending to apex; there is thus formed a rather broad median path of yellow from a little less than proximal three fourths to apex. The scutellum is shagreened (or reticulated into raised points) instead of longitudinally striate, the axillae show very faint sculpture. Otherwise about the same in all details mentioned in the description of *scotti* except that the antennae are black distad of funicle 2. Club solid; mandibles absent. Two ring-joints, the first shortest.

From one female captured in jungle, April 2, 1914.

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2681, Queensland Museum, Brisbane, the specimen on a tag, head on a slide.

**6. EUPLECTRUS KURANDAENSIS** Girault.

Length, 2.20 mm. *Type* captured along edge of jungle, May 20, 1913 and is on a tag.

**EUPLECTROMORPHA** new genus.

The antennal club is solid, the mandibles absent. The genus was not described elsewhere as intended. See *antea*.

**1. EUPLECTROMORPHA UNIFASCIATA** Girault.

Length, 1.65 mm. *Antea*, p. 276, line 3 of the description, *other* read *others*. Flagellum dusky. The *type* was captured on October 28, 1911 and is on a tag, the head and a caudal leg on a slide (with the type head of *Spalangia australiensis* Girault). First ring-joint very short-

**2. EUPLECTROMORPHA NIGRIFEMUR** (Girault).

Length, 2.50 mm. *Type* re-examined. It was captured May 9, 1913 and is on a tag. The description in *antea* is correct. Distal three funicle joints subequal, subglobular, the first somewhat longer. Maxillary palpi 2-, the labial 1-jointed. A second female, type habitat, July 24, 1913.

**3. EUPLECTROMORPHA VARIEGATA** new species.

*Female*.—Length, 2.15 mm.

Like *malandaensis* but reddish, the prothorax black except two narrow, wider than long spots on each side of meson dorsad, the lateral portions of propodeum black and somewhat over distal third of abdomen dorsad (but broken by yellowish meso-cephalad); lateral margin of abdomen to apex of proximal third from distad, dusky black. Abdomen yellowish brown. Legs reddish. Caudal half of each parapside and of scutum and all of scutellum except a narrow conical reddish marking along meson from base to apical third, contrasting lemon yellow. Head lemon yellow, reddish at center of vertex, jet black along the scrobes and on occiput except ventrad. Funicle 1 longest, somewhat longer than wide, the others oval; pedicel shorter than funicle 1. Wings a little stained. Otherwise about as in *malandaensis*. Antennæ yellowish, suffused with dusky. Tarsi yellow.

From one female caught in forest, May 12, 1914 (A. P. Dodd).

*Habitat*: Chindera, New South Wales.

*Type*: No. Hy 2682, Queensland Museum, Brisbane, the specimen on a tag.

**4. EUPLECTROMORPHA MAGNIVENTRIS** new species.

*Female*.—Length, 3.05 mm.

Like *Euplectrus melanocephalus* Girault but a little over a distal third of the abdomen is purplish black, the marginal coloration is broader except just out from base where it nearly disappears and distad in the black there are two small white triangles at the meson, the caudal one somewhat larger and just before apex. The body is more robust; abdomen and legs white except as noted and the hind coxa. Head subaneous. Scape white, pedicel dusky, rest of antenna black. Funicle 1 elongate, over twice longer than wide, longer than the club; other joints of funicle shortening, 2 a fourth shorter than 1, 4 slightly shorter than the club, much larger than the pedicel. Mandibles absent. Antennæ 9-jointed, the club solid. Hind tibial spurs unequal, the largest not quite half the length of the tarsus. Pronotum and scutum with long whitish pubescence.

From one female caught in jungle, August (A. P. Dodd).

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2683, Queensland Museum, Brisbane, the specimen on a tag; head and a hind tibia on a slide.

**A. EUPLECTROMORPHA MAGNIVENTRIS CHINDERAENSIS** new variety.

*Female*.—Length, 2.75 mm.

Black, the head submetallic, the wings hyaline, scape and abdomen whitish, abdomen dorsad black at distal fourth and at immediate base, the intervening white portion margined narrowly laterad with the black, but the marginal stripe besides being thin (except distad where it abruptly widens) is distinctly interrupted at apex of proximal fourth. Wings hyaline. Similar to typical form but the marginal stripe of abdomen is thinner and the legs are yellowish brown (except hind coxa) instead of white. The abdomen also appears to be flatter and longer. Compared with type of typical form.

From one female caught, May, 1914 (A. P. Dodd).

*Habitat*: Chindera (Tweed River), New South Wales.

*Type*: No. Hy 2684, Queensland Museum, Brisbane, the female on a tag.

**5. EUPLECTROMORPHA ÆREICEPS** new species.

*Female*:—Length, 1.87 mm.

Black, the head dark metallic green, the wings hyaline; coxæ, hind femur and apex of hind tibiæ distinctly black. A small triangular area at base of abdomen, dorsad and ventrad yellowish white; proximal third of caudal femur white; other femora orange toward tip. Flagellum black, the scape white. Pronotum (except caudal margin), cephalic part of scutum and cephalic half of parapsides, scabrous, rest scaly like the scutellum and axillæ. Scutum hairy. Propodeum glabrous, with the usual median carina and a curved, deep groove in the place of lateral carinæ. Funicle 1 slightly longer than the club, about twice longer than wide, the other three funicle joints subequal, somewhat longer than wide, longer than the pedicel. Club without a terminal spine.

From one female caught in jungle, August 20, 1914.

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2685, Queensland Museum, Brisbane, the specimen on a tag.

**EUPLECTROMORPHELLA** new genus.

Differs from *Euplectromorpha* Girault in bearing mandibles.

**1. EUPLECTROMORPHELLA CICATRICOSA** new species.

*Female*:—Length, 2 mm.

Black, the wings subhyaline, the hind coxæ black, except above; abdomen, legs and antennæ orange yellow; the abdomen margined all round with black. Thorax finely scaly, the scutum smoother cephalad, the propodeum glabrous, with a median carina. Antennæ 9-jointed, with two ring-joints, the club solid, the four funicle joints subglobular and more or less equal, the pedicel somewhat smaller. Mandibles 7-dentate. Resembles *Euplectrus melanocephalus* Girault. Fourth funicle joint somewhat wider than long, somewhat shortest. Club without a distinct nipple.

Described from one female caught by sweeping in forest and jungle, August 22, 1913.

*Habitat*: Northern Queensland (Gordonvale near Cairns).

*Type*: No. Hy 2686, Queensland Museum, Brisbane, the specimen on a tag; head on a slide.

**TRIBE OPHELININI.**<sup>21</sup>

The genus *Ophelinus* Haliday was inadvertently omitted in the table of genera.

**GENUS ALOPHOMORPHA** Girault.

This genus belongs to the Eulophini which sec.

**GENUS SYMPIESOMORPHELLEUS** Girault.

Synonym: *Diglyphomorphomyia* Girault.

The club terminates in an unarticulated nipple.

**1. SYMPIESOMORPHELLEUS SUTTNERI** Girault.

Length, 1.96 mm. The *type* is on a tag, the head and a caudal leg on a slide. It was captured in jungle, May 26, 1913. The abdomen is purplish black, yellow at base.

<sup>21</sup> See *Entedonomorpha*

**2. SYMPIESOMORPHELLEUS THOREAUINI** new species.

*Female*:—Length, 1.58 mm.

Shining black, the legs, scape and a large wedged shaped area in dorsal abdomen from base, yellowish brown; the yellow abdominal area originates at base where it is narrower but truncate; distad it extends not quite to middle and there is broadly truncate; for its entire length it fills the abdominal dorsum except narrowly along each lateral margin (the margining black, widening distad. Wings hyaline. Mandibles 6-dentate. Funicle joints subequal, oval, 1 a little the longest, larger than the globular pedicel; club ending in the usual nipple-like "joint" (nonarticulated). Median carina of propodeum solid, the spiracle round, small, in a roundish depression; a more or less distinct, obtuse spiracular "groove." Segment 2 of abdomen occupying somewhat over a fifth of the surface, longest. Parapsidal furrows quadrate. Axillæ not advanced. Grooves of scutellum broadly separated distad (nearly for entire apical margin). Thorax distinctly moderately coarsely scaly, the propodeum glabrous; dorsal abdomen distad with very delicate scaly sculpture. Marginal vein nearly thrice the length of the stigmal which is distinctly shorter than the postmarginal.

From one female caught by sweeping forest, June 7, 1914.

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2687, Queensland Museum, Brisbane, the specimen on a tag.

Dedicated to Henry David Thoreau.

**3. SYMPIESOMORPHELLEUS PAUCIFASCIATUS** new species.

*Female*:—Length, 1.75 mm.

Orange yellow, the wings hyaline, the abdomen and legs a little lighter yellow, the former narrowly margined down each dorsal edge with blackish and with two distinct, black cross-stripes at distal third, the two joined along the meson by a short median black line. Antennæ concolorous, all the funicle joints larger than the short pedicel, the first longest, distinctly longer than wide, the others subglobular. Mandibles 7-dentate. Segment 3 of abdomen only half the length of 2, which occupies about a fourth of the surface. Thorax scaly. Median carina of propodeum paired, forking caudad.

Described from one female caught by sweeping over all parts of island, a mile from mainland, forest, December 25, 1911.

*Habitat*: Northern Queensland (Double Island near Cairns).

*Type*: No. Hy 2688, Queensland Museum, Brisbane, a female on a tag; head and hind legs on a slide.

**4. SYMPIESOMORPHELLEUS ALBICLAVA** new species.

*Female*:—Length, 1.80 mm.

Orange yellow, the abdomen honey yellow, the legs concolorous with the abdomen. Scape and club yellowish white, pedicel and funicle 1 orange, other funicle joints black. Abdomen narrowly obscurely margined with black from base to distal three fourths, the marginal stripe broken into obscure dots. Fore wings slightly stained with yellowish. Antennæ as in *nigriscutellum* also the venation. Vertex lemon yellow. Thorax scaly, the scutum rather thickly pin-punctured, the scutellum with only a few of these punctures. Immediate tip of abdomen black. Postscutellum platelike. Propodeum glabrous, finely scaly laterad, with the usual three carinæ—also a carina just laterad of the spiracle. Segment 2 of abdomen occupying a third of the surface. Mandibles about 8-dentate.

From one female caught November, 1912.

*Habitat*: Gordonvale, Queensland.

*Type*: No. Hy 2689, Queensland Museum, Brisbane, the specimen on a tag; head and hind legs with the slide type of *Euryscotolinx immarginatus*.

In this genus, the scutellum really bears four grooved lines, the second groove shorter and visible only from dorso-laterad, the first as described—from dorsal aspect near lateral margin of scutellum.

*Euplectrophelinus* differs merely in having the club solid and a very short abdominal petiole. Otherwise it is exactly similar except that segment 2 of the abdomen is longer. *Sympiesomorphelleus* is the same as *Diglyphomorphomyia*. All the species bear four grooved lines on the scutellum but as described not as in the Tetrastichini and probably most of the genera with grooves on scutellum are the same. The presence of the second groove is not a good diagnostic character at all and I have now ignored it. The species *E. saintpierrei* has the punctures of the groove of scutellum isolated; in the species of *Sympiesomorphelleus* they are joined.

#### GENUS ALOPHOMORPHELLA Girault.<sup>22</sup>

*Female*:—In my table of genera runs to *Alophomorphella* Girault but the grooves of the scutellum are narrow, delicate and merely curve toward each other at apex, the abdomen is sessile and the propodeum bears a pair of close, narrow median carinæ, the distinct, conspicuous, median groove-like impressions of scutum (distal half) and scutellum (proximal three fourths) absent. Lateral carina of propodeum represented by an oblique line of foveæ which is caudad, far from the spiracle. Mandibles 5- and 6-dentate. Marginal vein subequal to the submarginal, the stigmal long, somewhat over a third the length of the marginal, the postmarginal nearly half the length of the marginal. Parapsidal furrows not reaching pronotum. Head triangular. Axillæ advanced but not greatly.

#### 1. ALOPHOMORPHELLA ASPERITERGUM new species

*Female*:—Length, 2.70 mm.

Bright æneous, the legs (except base of cephalic and all of other coxæ) and scape except slightly above at tip, orange yellow, the tibiæ and tarsi whitish; antennæ black; wings hyaline but fore wings with a distinct but not large, rounded, smoky spot centrally just opposite apex of stigmal vein. Venation brown. Abdomen dark coppery except at base. Head sculptured finely. Pronotum, scutum and parapsides punctate, postscutellum, scutellum and axillæ densely scaly shagreened. Propodeum delicately scaly, roughly scaly like the scutellum laterad of the oblique lateral groove (commencing just at the mesal margin of spiracle which is moderate and round-oval, cephalad). Abdomen finely scaly except the green segment 2 which is not long. Abdomen depressed, conical, as long as the rest of the body. Hind coxa dorsad scaly. Antennæ inserted in the middle of the face, the third club joint minute and with a distinct terminal spine. Funicle 1 about twice longer than wide, 4 a little longer than wide, all longer and larger than the pedicel which is only a little longer than wide. Funicles 2 and 3 subequal, somewhat shorter than 1. Postscutellum much shorter than scutellum. Pronotum normal.

From one female caught on forest uplands, May 30, 1914 (A. P. Dodd).

*Habitat*: Maclean (Clarence River), New South Wales.

*Type*: No. Hy 2690, Queensland Museum, Brisbane, the female on a tag; caudal tibiæ and head on a slide.

Very similar indeed to *niveipes* but the legs pure white in that species, the propodeum mesad of the spiracle less distinctly scaly, the abdomen with a short petiole, the spot on fore wing somewhat longer.

<sup>22</sup> Other species a few pages beyond. The species here were intended for a new genus.

**2. ALOPHOMORPHELLA NIVEIPES** new species.

*Female*:—Length, 2.5 mm.

Dark metallic green, the legs (except caudal coxæ) and the scape white. Scutellum and axillæ brassy. Fore wings with a long-ovate dusky spot with its axis obliqued caudo-proximad from the end of the stigmal knob; but this spot does not touch the stigmal vein being half the length of that vein directly caudad of its apex. Antennæ black; funicle 1 distinctly the longest, elongate, twice the length of the pedicel, longer than the club; funicles 2 and 3 subequal, 4 shorter than 3, slightly longer than wide; third club-joint nipple-like, itself with a short, stout terminal nipple. Mandibles about 6-dentate. Stigmal vein a little over a third the length of the marginal, shorter than the postmarginal yet slender. Grooves of scutellum joined around apical margin. Abdomen glabrous, distad finely scaly. Thorax densely punctate, the axillæ and scutellum more densely scaly, the propodeum glabrous, with a distinct median carina which has a narrow sulcus along each side of it; lateral carina represented by a straight line of foveæ running meso-caudad from the spiracle to near apex of the median carina; this lateral line of foveæ does not reach the spiracle by the latter's own diameter and a little more. Spot on fore wing not twice longer than wide.

From one female taken in jungle, May 3, 1914 (A. P. Dodd).

*Habitat*: Tweed Heads (Tweed River), New South Wales.

*Type*: No. Hy 2691, Queensland Museum, Brisbane, the specimen on a tag; head and caudal tibia on a slide.

PARENTEDON new genus.

For diagnosis see *antea*, p. 279.

**1. PARENTEDON AUSTRALIS** new species.

Length, 2 mm. The types were taken in forest, December 27, 1912 and January 8, 1913.

**2. PARENTEDON SOBRINUS** new species of Girault and A. P. Dodd.

*Female*:—Length, 1.95 mm.

Similar to the genotype but the abdomen is more uniform in color (not submetallic distad) and darker, the margins still obscurely darker. The following structural differences: The grooves on the scutellum are separated around distal margin by only slightly more than their own width (distinctly more separated in *australis*); on the propodeum there are a number of weak oblique carinæ from the side of the distinct median carina and also from the cephalic margin of propodeum mesad of the spiracle, the longitudinal space between the two groups of carinæ, smooth, the lateral of the two separated from the small round spiracle by a broad complete sulcus; caudal margin of propodeum carinated, turning up toward the spiracle and thus forming the more or less distinct lateral carinæ as in *australis*; the spiracle is somewhat larger in this species; sculpture of mesothorax alike in both species; mandibles with only eleven teeth. Antennæ dark, scape whitish, the pedicel so beneath; funicle 4 quadrate.

Described from one female caught by sweeping in forest, June 18, 1912 (A. A. Girault).

*Habitat*: Northern Queensland (Gordonvale near Cairns).

*Type*: No. Hy 2692, Queensland Museum, Brisbane, the above specimen on a tag.

Both *australis* and the above species have a hoodlike neck at apex of propodeum.

**3. PARENTEDON SIMILIS** new species of Girault and A. P. Dodd.

*Female*:—Length, 1.50 mm.

Similar to the preceding species (*sobrinus*) but slenderer, the abdomen slenderer and brownish interiorly (along mesal portion) only, the femora and tibiæ nearly white, the abdomen narrower and with a short, distinct petiole and the second segment occupies only a third of the surface (not a half or nearly). Mandibles 14-dentate. Segments 3 and 4 of abdomen,



long, subequal, combined slightly longer than segment 2 (not so in *sobrinus*). Grooves of scutellum separated at apex by less than their own diameter. Abdomen black, or nearly. Oblique carinæ from median carina of propodeum very long and oblique.

Described from one female caught by sweeping in a jungle pocket, November 16, 1913 (A. P. Dodd).

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2693, Queensland Museum, Brisbane, the above specimen on a tag; head and hind tibiæ on a slide.

#### 4. PARENTEDON FRATERCULUS new species.

*Female*:—Similar to *similis* but the fore wings stained yellow, the mandibles 15-dentate, the second segment of abdomen a little shorter, the abdomen sessile, the hind wing a little narrower, the grooves of scutellum separated by a little more than their width. Oblique carinæ from median carina of propodeum not so distinct as in *similis* and shorter and less oblique.

From one female captured in a meadow, February 24, 1912.

*Habitat*: Cooktown, Queensland.

*Type*: No. Hy 2694, Queensland Museum, Brisbane, the specimen on a tag; head and hind tibiæ on a slide.

#### TABLE TO THE AUSTRALIAN SPECIES OF PARENTEDON GIRAULT.

Grooves of scutellum separated at apex by not more than their own width or only slightly more.		
Segment 2 of abdomen occupying half the surface, 3 and 4 united, much shorter than it;		
mandibles 11-dentate; wings subhyaline; abdomen sessile .. ..	<i>sobrinus</i> G. & D.	
Segment 2 of abdomen occupying only a third or somewhat more of the surface; wings		
hyaline; mandibles 14-dentate; abdomen with a short petiole .. ..	<i>similis</i> G. & D.	
The same; wings yellowish; mandibles 15-dentate; abdomen sessile	<i>fraterculus</i> Girault.	
Grooves of scutellum at apex separated plainly more than their own width.		
Segment 2 of abdomen occupying one third of surface; wings yellowish; mandibles		
13-dentate .. .. .	<i>australis</i> Girault.	

#### GENUS OPHELOMINUS Girault.

##### 1. OPHELOMINUS GROTIUSI Girault.

Length, 2.50 mm. The *type* is on a tag, the head and caudal tibiæ on a slide. It was taken in forest near a streamlet, June 27, 1913.

##### 2. OPHELOMINUS PULCHERRIMUS new species of A. P. Dodd.

*Female*:—Length, 2.80 mm.

Very similar to *consonus* Girault<sup>23</sup> but all the coxæ metallic, except apical half of cephalic pair; mandibles 5-dentate; abdomen with more yellow dorsad, the basal half being yellow, margined with purplish black but at the caudal margin of the yellow at meson there is an extension from the black into the yellow area (in *consonus* the yellow extends to less than half the abdomen, is more broadly margined with purplish and with no black extension into the yellow at meson); the abdomen is no longer than the thorax (in *consonus* it is distinctly longer), the median carina of propodeum is distinct and the stigmal vein is shorter as in *grotiusi* Girault.

From one female caught sweeping in forest, January 27, 1914 (A. P. Dodd).

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2695, Queensland Museum, Brisbane, the specimen on a tag, the head on a slide.

<sup>23</sup> *Pardiaulomella*.

**3. OPHELININUS FUCOSUS** new species.

*Female*.—Length, 2.60 mm.

Dark æneous coppery, the head and propodeum metallic green, the wings hyaline, pronotum except the caudal margin broadly, legs and abdomen deep golden yellow, the tegulae, cephalic two pairs of coxae and all femora pale yellow. Scape orange yellow, dusky along dorsal edge. Base of abdomen centrally ventrad, base and the lateral margins dorsad for about proximal third, a dot at lateral margin dorsad just distad of end of the marginal stripe, tip of abdomen and of ovipositor valves and a large frustum-shaped marking dorsad centrally a little distad of the pair of marginal dots blackish metallic green (dark metallic green at base of abdomen dorsad). Postmarginal vein somewhat over twice the length of the stigmal, the latter about a fifth the length of the marginal. Propodeum noncarinate, somewhat more finely punctate than the rest of the thorax. Mandibles 6-dentate. Antennae with funicles 1-3 subequal, elongate (nearly thrice longer than wide), 4 somewhat shorter; club not quite as long as funicle 3. Like the other species. Mesal margin of the marginal stripe of abdomen scalloped. In all the species of the genus, the parapsidal furrows curve off laterad not reaching the pronotum.

From one female caught by sweeping forest in swamp, May 14, 1914 (A. P. Dodd).

*Habitat*: Chindera (Tweed River), New South Wales.

*Type*: No. Hy 2696, Queensland Museum, Brisbane, the specimen on a tag; head and hind tibiae on a slide.

GENUS DIGLYPHOMORPHOMYIA Girault.<sup>24</sup>

*Antea*, p. 281, in the description, line 3, *slightly* read *somewhat*. The antennae bear *two* ring-joints.

**1. DIGLYPHOMORPHOMYIA NIGRISCUTELLUM** Girault.

One female, type habitat, May 29, 1913. There were seven teeth in the mandibles in this specimen. In *antea*, line 2 of the description, insert *quite* after *not*; line 3, *very obscure darker* read *four dusky*; line 4 insert *numerous* after *with*; line 4 after *disk* a semicolon and *also similar punctures on the lemon yellow caudal part of scutum*. The club terminates in a long, thick spur. Caudal knees reddish. Type re-examined.

GENUS ALOPHOMORPHELLA Girault.<sup>25</sup>**1. ALOPHOMORPHELLA ILLUSTRIS** Girault.

The fore wings bear a faint sooty round spot a little caudad of the middle of the blade, opposite the stigmal knob; stigmal vein about a third the length of the marginal. Type re-examined.

**2. ALOPHOMORPHELLA EDISONI** new species.

*Female*.—Length, 1.05 mm.

Dark metallic green, the wings hyaline, the abdomen purple, ventrad yellowish, dorsad at base with a yellowish brown triangle whose straight base is distad; this triangle extends nearly to margin on each side and is on proximal fourth. Legs white. Scape pale yellow; funicle dusky yellow, club dusky black. Funicle joints globular yet a little longer than wide, a little smaller distad, 1 subequal in length to the pedicel. Mandibles 5-dentate. Club with a distinct terminal spine. Parapsidal furrows delicate yet easily found, curving off laterad, not reaching pronotum by some distance; a setigerous, minute puncture just mesad of distal end of each furrow, the latter running to the axilla before the latter's mesal apex. Grooves of

<sup>24</sup> Equals *Sympiesomorphellus*.

<sup>25</sup> See preceding few pages for other species. Only the genotype bears the median thoracic impression.

scutellum distinctly separated for some distance at apex. Scutum coarsely scaly, except at cephalic margin, there less coarsely so (like the scutellum and axillæ). Median carina of propodeum narrow, lateral carinæ absent, the minute round spiracle with several foveæ meso-caudad of it, forming a short sulcus mesad of spiracle. Propodeum glabrous. Petiole short but distinct. Abdomen depressed. Postmarginal vein much longer than the stigmal, the latter a fourth the length of the marginal. Third club joint much the smallest. Meson of thorax flat.

From one female taken in forest, May 16, 1914.

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2697, Queensland Museum, Brisbane, the specimen on a tag; head and hind leg on a slide.

Respectfully dedicated to Thomas Alva Edison.

### 3. **ALOPHOMORPHELLA ALBICLAVA** new species of Girault and A. P. Dodd.

*Female*:—Length, 2.50 mm.

Like the genotype but dark metallic blue, the pronotum, scutellum and propodeum dark purplish; abdomen suffused with yellow medially for proximal two thirds; antennal club white like the legs; scutum and scutellum without a median longitudinal depression; grooves of scutellum more convex, closer together; thorax with very fine scaly sculpture, the pronotum reticulately rugulose; first funicle joint much longer, three times as long as pedicel and twice as long as fourth funicle joint; only twice as long as pedicel and one third longer than fourth funicle joint in the genotype; mandibles only 4-dentate.

Described from one female caught by sweeping in jungle, June 7, 1913 (A. P. Dodd).

*Habitat*: Northern Queensland (Gordonvale near Cairns).

*Type*: No. Hy 2698, Queensland Museum, Brisbane, a female on a tag, the head and hind legs on a slide.

## GENUS DIAULINOPSIS Crawford.

Head thin; scape flattened and somewhat widened; funicle 2-jointed, club swollen, 3-jointed, with a terminal spine, two ring-joints. Parapsidal furrows deeply impressed. Scutellum with two parallel furrows. Propodeum noncarinate but with obscure spiracular sulci. Postmarginal vein almost as long as marginal. Caudal tibie with two weak spurs, the shorter one very obscure. Abdomen sessile.

The male is the same but the scape is much more widened, the club not enlarged. After Crawford (1912).

### 1. **DIAULINOPSIS SUBATRICORPUS** new species.

*Female*:—Length, 1.30 mm.

Shining black, with a faint purplish tinge, the wings lightly sooty, the legs (except coxæ and hind femur) and scape white. Thorax finely scaly, the propodeum subglabrous, not showing sculpture, perfectly plane (*i.e.*, noncarinate, nonsulcate), the spiracle small, at cephalic margin. Antennæ as in *Atoposoma* Masi, the funicle and club compressed but the funicle and pedicel as in the genotype of *Diaulinopsis* (as described); club also as described for the genotype but somewhat shorter. Abdomen as long as the rest of the body, the black valves of the ovipositor distinctly but shortly extruded. Stigmal vein a little over a third the length of the marginal, the postmarginal over half the length of marginal. Mandibles 6-dentate.

From one female captured in jungle, February 10, 1914 (A. P. Dodd).

*Habitat*: Babinda (Cairns district), Queensland.

*Type*: No. Hy 2699, Queensland Museum, Brisbane, the specimen on a tag; head and hind legs on a slide.

## ARDALOIDES new genus.

In this genus the axillæ are not advanced.

*Type*: The following species.

**1. ARDALOIDES SIMITHORAX** new species. Genotype.

*Female*:—Length, 1.80 mm.

Dark metallic green, the abdomen black, whitish at distal third of the second segment. Wings with a substigmal blotch. Caudal coxæ concolorous, femora and legs brownish yellow, the hind femora subfuscous, the tibiæ lighter. Midventer of abdomen yellowish white. Thorax polygonally reticulated, the propodeum glabrous, with a distinct, long median carina and a lateral sulcus mesad of the small oval spiracle, the propodeum at apex ending in a nose; abdomen shining, with a long petiole, the second segment also long, obconical, depressed, occupying over a third of the surface, the third less than half its length. Scutellum with marginal grooves which join around the apex. Parapsidal furrows short, distinct. Pronotum transverse quadrate. Antennæ 9-jointed with two ring-joints, the club solid, four funicle joints. Pedicel fuscous, short, funicle 1 longer than it and longest of the funicle, the next three joints globular. Club slightly nipped at tip, longer than any of the funicle joints. Mandibles 7-dentate. Hind tibial spurs normal. Postmarginal and stigmal veins long, the former the longer, the marginal somewhat shorter than the submarginal but over twice the length of the stigmal.

The genus is characterised by the 9-jointed antennæ with two ring-joints and the solid club, also the long petiole.

*Male*:—Not known.

Described from one female captured by sweeping in jungle, September 12, 1913 (A. P. Dodd).

*Habitat*: Kuranda, Queensland.

*Type*: No. Hy 2700, Queensland Museum, Brisbane, the specimen on a tag; head and hind legs on a slide.

**2. ARDALOIDES 10-DENTATUS** new species.

*Female*:—Differing from the typical form in having 10-dentate mandibles, the blotch on the fore wing subobsolete, the caudal coxæ brown, the scutellum bears a short median sulcus at a little over proximal fourth (in the typical form in center of scutellum a round fovea or puncture, it is a little distad of center and may be accidental). In both species, the lateral half of each side of propodeum is scaly, the rest glabrous. In this species lateral carinæ are certainly absent and true grooves but there is a groove-like depression. In the genotype I could not with certainty make out whether or not it was a true groove but apparently not. In both species the parapsidal furrows curve off some distance before pronotum.

In the genotype the mandibles are pale, dark brown at tip; in this species the mandibles are all dark brown. The scape is pale lemon yellow in both.

Described from one species caught in forest, June 30, 1914.

*Habitat*: Gordonvale, Queensland.

*Type*: No. Hy 2701, Queensland Museum, Brisbane, the specimen on a tag.

## GENUS EUPLECTROPHELINUS Girault.

In the genotype, the propodeum is black mesad out nearly to the lateral carina. A second specimen had the propodeum black only down the median line rather broadly.

## PROARDALUS new genus of Girault and A. P. Dodd.

*Female*:—Similar to *Ardaloides* Girault but nonmetallic and there is only one ring-joint and the petiole of abdomen is shorter, the second segment not depressed and obconic as in *Ardaloides* whose petiole is slender, longer than the hind coxæ and somewhat over thrice longer than its width. The petiole with this genus is not as long as the hind coxæ (*per se*) and not much longer than wide, the second segment convex-hemispherical, occupying somewhat over a fourth of the surface. Otherwise about the same. Similar to *Euplectrophelinus* Girault but there is but the one ring-joint, the propodeum is without a neck and lateral carinæ (but with lateral sulci) and the second abdominal segment is much shorter (about half the surface in the other).

*Type*: The following species.

1. **PROARDALUS NIGRICAPUT** new species of Girault and A. P. Dodd

*Female*:—Length, 1.15 mm.

Shining black, the wings hyaline, the abdomen, legs, scape and pedicel (but darker), yellow-brown, the abdomen margined all round rather broadly with blackish. Grooves of scutellum joining round apex. Thorax reticulated, the lines not raised. Scutellum and propodeum practically without sculpture, polished. Segment 2 of abdomen equal in length to 3 and 4 combined, its caudal margin slightly convexed. Mandibles 6-dentate. Funicle 4 a little the longest, the others subequal, all oval, not much longer than wide. Pedicel about equal to the funicle joints, much shorter than the solid club, which is not of great length.

Described from one female caught by sweeping grass and foliage on edge of jungle, September 20, 1913 (A. P. Dodd).

*Habitat*: Northern Queensland (Kuranda near Cairns).

*Type*: No. Hy 2702, Queensland Museum, Brisbane, the above specimen on a tag, the head and hind legs on a slide.

## TRIBE ELACHERTOIDINI.

The tarsi are 5-jointed, the hind tibial spurs double.

## GENUS DIPARELLOMYIA Girault.

The parapsidal furrows are complete. *Antea*, p. 179, line 10, *postmarginal* should read *submarginal*. A female, forest, type locality, August 20, 1914, was rosaceous coppery instead of dark green but otherwise the same. The cross-suture on scutellum is fine, the latter shining, the scaly sculpture visible but faint.

## TRIBE EULOPHINI.

## GENUS GROTIUSELLA Girault.

The parapsidal furrows are variable, most frequently not reaching the axillæ. *Eulophinusia* is the same as this genus. Antennæ inserted on a level with the ventral end of the eyes. Abdominal segments subequal.

1. **GROTIUSELLA CYDIPPE** (Girault).

*Eulophinusia cydippe* (Girault).

Length, 1.12 mm. This species resembles *Elachertonecremnus circumjectus* Girault in some respects, the body similar and the scutellum and axillæ are similarly margined with golden yellow. But there are two slender hind tibial spurs and the mandibles bear less teeth.

The hind margin of the pronotum is yellow also, but otherwise the color is as described, the abdomen brownish coppery. The propodeum is short, the habitus somewhat as in *Zagrammosoma* and *Gyrolasella*. Thorax flat. One ring-joint. Type re-examined.

The type was taken on March 3, 1912 and is on a tag, a wing and a caudal leg on a slide.

**2. GROTIUSELLA FASCIATIFRONS** Girault.

*Antea*, p. 283, line 5 of the description, *femur* read *tibia*.

**3. GROTIUSELLA FACIES** new species.

*Female*:—Length, 1.25 mm.; slender.

Like *fasciatifrons* Girault but the whole of the face dorsad of the antennæ is yellowish white, with a thin metallic green stripe across some distance above the antennæ and a yellowish white one across just below them, the latter abbreviated laterad, not reaching the eyes. Also, the hind tibia is black nearly to tip (just below knees in the genotype), the band just below knees broad and distinct. Scutum distinctly rather finely scaly reticulate, the scutellum very finely sheened, subglazed and metallic blue. The genotype appears to have a similar sculpture. Propodeum with a thin median carina, the spiracle minute. The stigmal vein is a little shorter than in the wing of the genotype. Abdomen conical, longer than the rest of the body. Mandibles 6-dentate (probably the same in the genotype). Distal half of scape black.

From one female captured in forest, January 7, 1914.

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2703, Queensland Museum, Brisbane, the specimen on a tag; hind legs and head on a slide.

**4. GROTIUSELLA ARGENTIFASCIATA** new species.

*Female*:—Length, about same as the other species.

Characterised by bearing a silvery white stripe across abdomen a little distad of middle, this stripe not quite reaching the lateral margins, distinct but not broad. Legs silvery white, the caudal coxæ concolorous or dark metallic green. Caudal margin of pronotum silvery white. Caudal and lateral margins of scutellum and caudal margin of axillæ, golden yellow, also the vertex except the ocellar area. Occiput all metallic green. Lateral margin of axilla more narrowly golden yellow. Wings hyaline. A line of three spots down face along eye margins, the middle a round spot, the ventral long, joining ventrad the metallic green cheeks and ventral border of face; face dull yellowish white otherwise excepting a cross-stripe of silvery from eye to eye, between the middle and ventral spot of the broken line down the eye margins and some distance above insertion of antennæ or about the middle of the face. Scape white except at apex. Rest of antenna usual. Mandibles 5-dentate. Propodeum with a distinct median carina.

From one female caught in forest, July 9, 1914.

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2704, Queensland Museum, Brisbane, the specimen on a tag with type of *facies*.

The species *cavendishi*, *thoreavini* and *facies* have the median carina on propodeum and doubtless the others with the possible exception of the genotype.

**5. GROTIOSELLA THOREAUINI** new species.

*Female*:—Length, 1.30 mm. Hind tibial spurs short, unequal.

Dark metallic green, the wings hyaline, the legs white, except the dusky caudal femora centrally, the caudal tibiae just below knees for half way to apex and middle tibiae just below knee at proximal fourth. Head pale whitish except occiput and center of vertex broadly. Antennae yellowish, the scape and pedicel whitish, the pedicel dusky (or metallic?) above. Mandibles with two outer acute longer teeth, then obliquely truncate and with four minute comblike teeth. Body marked with golden yellow as follows:—A rather large spot on each side of meson of neck of pronotum; an oblique line down scutum on each side (distad along mesal margins of the axillae, the latter cephalad of the scutellum) like parapsidal furrows but constricted at about cephalic fourth; all margins of scutellum except at meson of base; lateral and caudal margins of axillae, the caudal yellow joining the long oblique streak on scutum at its apex; mesopostscutellum; a stripe on abdomen just out from base, bluntly incised at meson of cephalic margin and at each lateral running more narrowly to base; two cross-stripes distad of this both broadly interrupted along the meson; a broader, complete stripe distad of these and a little distad of middle; a similar stripe next but broadly interrupted at meson and a little shortened laterad; then a complete stripe of same length and still some distance from apex. Propodeum glabrous at meson, with a median carina and no others; scaly laterad. Thorax densely scaly, the pubescence very sparse. Antennal club apparently 2-jointed but closer scrutiny shows that no articulation is present; ring-joint extremely short; funicle 1 longest, subquadrate, larger than the globular pedicel, the following joints distinctly wider than long, each widening a little in succession.

Coloured like species of *Gyrolasella* for which I mistook it.

Respectfully dedicated to Henry David Thoreau.

Described from one female taken by sweeping bushes, October 10, 1913 (G. F. Hill).

*Habitat*: Port Darwin, Northern Territory.

*Type*: No. Hy 2705, Queensland Museum, Brisbane, the female on a tag; head and hind tibiae on a slide.

**6. GROTIOSELLA PEARSONI** new species.

*Female*:—Length, 1.35 mm.

Very similar to *hyatti* but the cheeks are green and the stripe down the face along the eyes is first interrupted dorsad of middle and for the second time, a little ventrad of middle, some distance dorsad of ventral end of the eye; the legs are wholly lemon yellow, the apex of postscutellum is metallic green rather broadly, the whole of base of scutellum is metallic green; the venter and sides of abdomen are deep golden yellow; moreover, the broken cross-stripes of abdomen are rather spots (counted as stripes, there are but five—the first and last complete stripes, the fourth consisting of two round marginal spots, the third a rather broad stripe interrupted at meson, the second two wider than long marginal spots); first stripe rather broad, incised at meson of cephalic margin. Propodeum glabrous except laterad of spiracle. Otherwise as in *hyatti*.

From one female captured in the same place as *hyatti*, described below, on May 9, 1914.

*Habitat*: Chindera (Tweed River), New South Wales.

*Type*: No. Hy 2706, Queensland Museum, Brisbane, the specimen on a tag with type of *hyatti*, head and caudal tibiae on a slide.

Dedicated to Karl Pearson.

**7. GROTIUSELLA HYATTI** new species.

*Female*.—Length, 1.15 mm.

Agrees with the description of *thoreauini*, except as follows: The caudal tibiae dorsad are all black except at tip, the caudal femora are all black and the middle femur is dusky; the face bears a stripe down each side along the eyes, broken just ventrad of middle and again near the end of the eye; this stripe curves around onto the cheek; the scrobes are dark metallic green to vertex; the antennae are black, proximal half of scape white, its distal half dusky; the mandibles are about 7-dentate; the caudal margin only of pronotum is yellow; other yellow markings the same but base of mesopostscutellum is not yellow (nor so in *thoreauini*), the first stripe of abdomen is narrowly interrupted at meson and the central complete cross-stripe is absent (stripe 4 from base—six stripes in all, seven in the other species; of the six all interrupted at meson except the last); the second stripe (interrupted at meson) is thin; there is a dot of yellow distad of stripe 6, on each side of immediate apex. The propodeum is wholly scaly. Funicle 1 is subequal to the pedicel. Otherwise as in the species named. Compared with type of *thoreauini*.

From one female captured on sand-ridges near coast, forest, May 13, 1914 (A. P. Dodd).  
*Habitat*: Chindera (Tweed River), New South Wales.

*Type*: No. Hy 2707, Queensland Museum, Brisbane, the specimen on a tag; head and caudal tibiae on a slide.

Dedicated to Alpheus Hyatt.

**8. GROTIUSELLA CAVENDISHI** new species.

*Female*.—Length, 1 mm.

Differs from the genotype in that the pronotum is wholly concolorous, the yellow bordering of the scutellum encroaches upon the cephalic margin but is separated rather broadly at the meson, the fore wings bear a distinct substigmal spot and the ventral third of the face is bright lemon yellow, crossed by two metallic green stripes, the ventral one through the antennal insertions. Also the funicle joints are all distinctly wider than long, the flagellum subcompressed and the mandibles are about 10-dentate. Femora black, the tibiae so just below the knees. Antennae black except proximal half of the short scape. Vertex with a yellow line across cephalic margin, the line interrupted at the meson. Facial margins of eyes more or less yellowish. Caudal tibiae black except at tip.

From one female captured sweeping foliage and grass in a swamp, May 14, 1914 (A. P. Dodd).

*Habitat*: Chindera (Tweed River), New South Wales.

*Type*: No. Hy 2708, Queensland Museum, Brisbane, the specimen on a tag; head and caudal tibiae on a slide.

**NOTANISOMORPHELLA** new genus.

**1. NOTANISOMORPHELLA PROSERPINENSIS** (Girault). Genotype.

*Asympicsiella proserpinensis*; *Notanisomorphella australiensis*, nomen nudum.

*Antea*, p. 287. Length, 2.10 mm. Second club joint terminating in a nipple which bears a short stout spine at apex. Pedicel shorter than any of the funicle joints. First club joint as long as the distal funicle joint. Scape long, slender. The original female was taken at Gordonvale, jungle pocket, May 15, 1913 (A. P. Dodd). A second female of the same date at Kuranda. The lateral line of fovea leads directly from the spiracle. Type re-examined.<sup>20</sup>

<sup>20</sup> No lateral carina on propodeum.



## MEMOIRS OF THE QUEENSLAND MUSEUM.

## GENUS NECREMNOIDES Girault.

The scutellum bears two grooved lines. Parapsidal furrows delicate, not quite complete, leading off cephalad. Type of genotype re-examined.

**1. NECREMNOIDES FULVIPROPODEUM** new species.

*Female*:—Length, 1.15 mm.

Like the genotype but the abdomen with a short petiole and the marginal vein is somewhat longer; otherwise very similar in form and so forth.

Dark metallic green, the propodeum, postscutellum and abdominal petiole chestnut brown, the abdomen suffused with brownish, especially ventrad. Wings hyaline. Propodeal spiracle small, perfectly round, the lateral carina slender. All of each leg light yellow, also the scape, the rest of antenna blackish; pedicel not quite as long as funicle 4 which is somewhat the shortest joint of the funicle; antenna nearly as in the genotype. Mandibles 4-dentate.

*Male*:—Not known.

Described from one female captured by sweeping in forest, foothills, July 9, 1913 (A.P.D.).

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 3463, Queensland Museum, Brisbane, the above specimen on a tag, the head and hind tibiae on a slide.

The antennae in this genus apparently bear a 3-jointed club but the small conical third joint (which ends in a short, stout spine) does not appear to be articulated.

Types of *tricarinatus* re-examined.

**2. NECREMNOIDES TRICARINATUS MANDIBULARIS** new variety.

Similar to the typical form but the abdomen is brownish yellow at base ventrad, one mandible 5-dentate as in the typical form but the other bears only two large teeth laterad and an inner truncation in this new variety, in the typical form three large teeth laterad and an inner truncation. In *fulvipropodeum* both mandibles are 4-dentate, the teeth gradually smaller mesad.

From one female, June 26, 1914, caught in forest.

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2709, Queensland Museum, Brisbane, the specimen on a tag.

**2. NECREMNOIDES FLAVIVENTRIS** Girault.

Belongs to *Notanisomorphomyia* which see.

## GENUS NOTANISOMORPHOMYIA Girault.

**1. NOTANISOMORPHOMYIA FLAVIVENTRIS** (Girault).

*Necremnoides flaviventris* Girault.

A second female was captured by sweeping grass in forest, type locality, April 6, 1914. The antennae are 11-jointed, the club 2-jointed, a third joint indicated by a very small nipple-like projection ending in a spur. Lateral carina of propodeum narrow. Propodeal spiracle round, very minute. Antennae concolorous with the legs. Abdomen dorsad flat, with a short petiole. Lateral carina of propodeum running from meso-caudal edge of spiracle and there is more or less of a sulcus just laterad of the carina and thus directly from the spiracle. The

broken marginal stripe of abdomen extends not quite to tip. Funicle 1 a little over twice longer than wide, 2 and 3 each a little shorter than 1, 4 ovate, distinctly shorter than 1. Antennæ inserted somewhat below the middle of the face, the latter smoother ventrad of antennæ. Club 1 the longer. Postmarginal vein somewhat longer than the stigmal. Scutum with some silvery pubescence. Type re-examined.

**2. NOTANISOMORPHOMYIA PERSIMILIS** new species of A. P. Dodd and Girault.

*Female*.—Length, 1.80 mm.

Very similar to the genotype but dark metallic purplish, the legs golden yellow; scutum and scutellum with rather weaker reticulation, the reticulation cephalad on the scutum (in *albicoxa* Girault the scutum and scutellum are wholly densely reticulated); wings stained yellowish; cross-carina of propodeum joining the median carina at cephalic fourth (in the middle in *albicoxa*); mandibles with 6 teeth.

From one female captured by sweeping grass and foliage on edge of jungle, December 19, 1912 (A. P. Dodd).

*Habitat*: Kuranda, Queensland.

*Type*: No. Hy 2710, Queensland Museum, Brisbane, the specimen on a tag, the head on a slide.

The reticulation is similar in both species (coarse, raised lines) but in *persimilis* somewhat less prominent and gradually disappears cephalad on the scutum. (A. A. Girault.)

GENUS **ALOPHOMORPHA** Girault.

Synonym: *Diaulomyia* Girault.<sup>27</sup>

**1. ALOPHOMORPHA PULCHRA** Girault.

Length, 2 mm. In the original description, line 6, *scutellum* should read *scutum*. Head sculptured like the axillæ. Scape white, rest of antenna black. Abdomen sculptured like the propodeum (except segment 2). The *type* was captured May 26, 1913 and is on a tag, an antenna and hind leg on a slide.

Segment 2 of abdomen a sixth or less the length of the abdomen, a little the longest; stigmal vein a third the length of the marginal. The scutellum is sculptured as is usual for the body sculpture in the Tetrastichini. A large fovea at caudal margin of propodeum, caudo-mesad of spiracle. Caudal femur compressed. Type re-examined.

**EULOPHOMORPHA** new genus of A. P. Dodd.

*Female*.—Head, cephalic aspect, not much wider than long; viewed from above no wider than thorax. Mandibles with about nine or ten small teeth; antennæ inserted near the mouth, 10-jointed, with two ring, three funicle and three club joints; funicle joints not compressed; club wider than funicle. Marginal vein as long as submarginal, many times longer than the short stigmal, the latter as long as the postmarginal. Posterior tibiae with two rather long apical spurs. Pronotum short, scutum rather long; axillæ much advanced, scutellum simple; propodeum with a distinct median carina, no lateral carinæ but there are rather delicate spiracular sulci and caudo-laterad of the spiracle there are some blackish bristles. Abdomen sessile, convex above, straight beneath, no longer than the head and thorax united and no wider than thorax, second segment the longest, occupying scarcely a third of the surface; ovipositor somewhat exserted.

<sup>27</sup> This is not true. *Diaulomyia* is characterized by the compressed funicle and club but otherwise closely resembles *Alophomorphella asperitergum*. The smoky blotch on the fore wing of the genotype is separated a little from the marginal vein. A female of the genotype at Tweed Heads (Tweed River), New South Wales, 500 feet, May 3, 1914 (A. P. Dodd).

**1. EULOPHOMORPHA FLAVICORNIS** new species of A. P. Dodd. Genotype.

*Female*:—Length, 1.75 mm.

Dark metallic green, the scutum and scutellum brilliant coppery, the legs, antennæ and venation, wholly clear lemon yellow, the wings hyaline. Pedicel not much longer than funicle 1 which is not twice as long as wide, 2 and 3 shortening, 3 subquadrate; club not twice as long as wide, first and second club joints of equal length, the third smaller; first ring-joint small. Thorax, including propodeum, finely scaly; second abdominal segment smooth, the rest very finely scaly.

From one female taken by sweeping in jungle, December 28, 1913 (A. P. Dodd).

*Habitat*: Harvey's Creek (Cairns), Queensland.

*Type*: No. Hy 2711, Queensland Museum, Brisbane, the specimen on a tag; head and a hind leg on a slide.

**PARDIAULOMYIA** new genus of Girault and A. P. Dodd.

*Female*:—Like *Eulophinusia* Girault in all structures excepting that the antennæ bear two ring-joints and the habitus is different being like that of the Entedonini, the very short abdominal petiole heightening the effect. Parapsidal furrows only slightly indicated cephalad. Propodeum of usual length, with a thin median carina, a slight sulcus on each side of it and a sulcus in the place of the lateral carina. Marginal and submarginal veins about equal, the stigmal somewhat less than a third the length of the marginal and somewhat shorter than the postmarginal. Segment 2 of abdomen distinctly the longest, occupying about a fourth of the surface. Hind tibial spurs slender, much unequal. Mandibles 7- to 8-dentate. Thorax convex.

*Male*:—Not known.

*Type*: The following species.

**1. PARDIAULOMYIA SPADICEIPES** new species.

*Female*:—Length, 1.05 mm.

Aeneous black, the wings hyaline, the second abdominal segment and the propodeum metallic blue, the legs, except the coxæ proximad, yellow-brown, also the antennæ, the scape and pedicel whitish. Thorax except propodeum, coarsely polygonally reticulated, the lines raised. Pronotum a little longer than transverse, not especially long. Antennæ inserted on a line with the ventral ends of the eyes, the scape long and slender, the pedicel about equal to funicle 1 which is longest by a little, longer than wide, funicle 4 subquadrate; club much longer than any of the preceding joints except the scape, solid, without a prominent terminal nipple. Antennæ cylindrical.

Described from two females taken by sweeping jungle growth along a forest streamlet, June 10 and 14, 1913 (A.P.D.).

*Habitat*: Gordonvale (Cairns), Queensland.

*Types*: No. Hy 3464, Queensland Museum, Brisbane, the foregoing specimens on a tag, the head and hind tibia on a slide.

**DIAULOMORPHELLA** new species.

*Female*:—Like *Diaulomorpha* Ashmead but apparently differing in having the head different, it being no longer than wide and the stigmal vein is much shorter, it being about a fourth the length of the marginal and plainly shorter than the postmarginal; also, the post-scutellum is distinctly less than half the length of the scutellum. Antennæ inserted below the middle of the face, 9-jointed, one ring, two club joints. Mandibles 9-dentate. Propodeum reticulated, with a median carina and no others, the carina with a narrow sulcus on each side of it. Abdomen with a short petiole, conic-ovate, the second segment not much longer than the others. An impression just mesad of spiracle, cephalic margin of propodeum. Axillæ much

advanced, the parapsidal furrows very short, cephalad only. Scutellum with two delicate grooved lines. Marginal vein a little shorter than the submarginal. Pronotum transverse-linear (dorsal aspect).

*Male*:—Not known.

*Type*: The following species.

**1. DIAULOMORPHELLA CYANEIPURPUREA** new species.

*Female*:—Length, 1.55 mm.

Dark metallic purple-blue, the wings hyaline, the petiole, tip of scape and legs except coxæ, distal half of caudal femur above, hind tibiæ outwardly along proximal half and front femora beneath, which are purplish; hind coxa white toward tip. Mesoscutum densely reticulated, the lines raised; the scutellum finer, with the sculpture of *Tetrastichus*. Grooves of scutellum delicate. Reticulation of propodeum not raised, the region shiny. Pedicel very short, like a cup; funicle 1 longest, 4 shortest yet plainly longer than wide, larger and a little longer than either of the club joints, the distal of the two latter ending in a distinct seta. Flagellum dusky yellowish brown; proximal half of pedicel purplish.

*Male*:—Not known.

Described from one female captured by sweeping in jungle, May 19, 1913 (A.P.D.).

*Habitat*: Kuranda, Queensland.

*Type*: No. Hy 2712, Queensland Museum, Brisbane, the foregoing specimen on a tag, the head and hind legs on a slide.

**PARDIAULOMELLA** new genus.

Differs from *Diaulomella* in bearing two ring-joints. In this genus, the axillæ are much advanced; form slender; casually the club appears 2-jointed.

**1. PARDIAULOMELLA CONSONUS** new species. Genotype.

*Female*:—Length, 2.65 mm.

Remarkably like *Opheliminus grotiusi* but the parapsidal furrows are less evident near the advanced axillæ, the triangular dorsal yellow spot on abdomen is directly at base, no dark metallic coloration intervening, the mandibles are 7-dentate and the propodeum has a different sculpture, reticulate-punctate, the punctures smaller than those of the rest of the thorax (in *grotiusi*, the thorax is similarly reticulate-punctate yet the propodeum is only reticulated, shining and scaly); in this species the propodeum is longer, the median carina less raised, fading out caudad. The stigmal vein also is longer, less plainly only half the length of the postmarginal while the fore wings are slightly embrowned throughout. The antennæ are similar or nearly.

*Male*:—Not known.

From one female captured in September (F. P. Dodd).

*Habitat*: Kuranda, Queensland.

*Type*: No. Hy 2715, Queensland Museum, Brisbane, the female on a tag; hind legs and head on a slide.

**GENUS ASYMPIESIELLA** Girault.

The antennæ bear two ring-joints.

**1. ASYMPIESIELLA NELSONENSIS** (Girault).

Length, 5.10 mm.; male, 2.85 mm. Associated with *Mestocharoides cyaneus* in a gall on a forest bush. The types were reared November 30, 1912 and consist of two pairs on tags (four pins) and a head on a slide.

A female, forest, type locality, May 27, 1914 and another by sweeping forest on sand-ridges near coast, Chindera, New South Wales, May 8, 1914 (A. P. Dodd). The scape is white along proximal two thirds; mandibles 6-dentate. Coxæ metallic on proximal half, long; the general color may be aneous green. The median carina of propodeum extends not quite half way to apex from base.

**A. ASYMPIESIELLA NELSONENSIS GRACILIS** new variety.

*Female*:—Length, 3 mm.

Exactly similar to the typical form, but very much smaller and dark metallic green; the distal funicle joint is shorter, being only slightly longer than wide, while the proximal club joint is barely longer than the distal (in the typical forms somewhat longer). The mandibles 6-dentate in both forms, the two outer teeth largest, subequal. In both the coxæ are concolorous at base, the thorax reticulate-punctate, the propodeum showing reticulation delicately, the postscutellum more distinctly. Antennæ with two ring-joints, the first short; first three funicle joints distinctly compressed. Compared with types of typical form.

From one female captured by sweeping among bushes, October 10, 1914 (G. F. Hill).

*Habitat*: Port Darwin, Northern Territory.

*Type*: No. Hy 2713, Queensland Museum, Brisbane, the female on a tag.

**2. ASYMPIESIELLA LONGIVENTRIS** new species.

*Pseudopheliminus* and *Pseudophelinus longiventris*, *nomina nuda*, in *antea*, pp. 286-287, 291.

Differs from *nelsonensis* in being more slender, the mandibles 7-dentate, the scape wholly white. Length, 3 mm. The type was taken April 13. Compared with type of *nelsonensis*.

**3. ASYMPIESIELLA SUPERBUS** new species.

*Female*:—Length, 2.70 mm.

Vertex of head thin. Antennæ inserted below middle of face, 10-jointed, two ring-joints, four funicle joints, two club joints. Marginal vein long, as long as submarginal, stigmal vein moderately long, postmarginal two and a half times the length of stigmal, scarcely half the length of the marginal. Scutum longer than pronotum, as long as wide; axillæ advanced; scutellum simple. Propodeum rugulose, without carinæ. Abdomen sessile, conic-ovate, no longer than head and thorax united, first segment longest, equal to nearly a third of surface. The abdomen is shorter than in the genotype. Bright metallic green, the thorax coppery; legs (except apical joint of tarsi) and basal half of antennal scape very pale straw yellow; rest of antennæ black. Wings hyaline. Scutum and scutellum with dense, scaly reticulation, the reticulation in raised lines. Pedicel short, scarcely longer than wide, funicle 1 fully three times as long as pedicel, second and third funicle joints subequal, each a fourth shorter than 1, 4 somewhat shorter than 3, club a little longer than preceding joint.

From two females caught by sweeping forest, August 5, 1913 (A. P. Dodd).

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2714, Queensland Museum, Brisbane, a female on a tag; head and a hind leg on a slide.

*Antea*, p. 288, line 20, *specimen* should be plural.

TRIBE HEMIPTARSENINI.

GENUS NECREMNOMYIA Girault.

The scutellum is simple, the form slender, the axillæ much advanced. Type of genotype re-examined.

1. **NECREMNOMYIA VARISCUTUM** new species.

*Female*:—Differs from *saintpierrei* in the following characters only: The femora are dusky only about their middles, all white in cephalic legs; the funicle joints are all longer than wide, not subglobular; and the raised polygonal sculpture of the scutum is finer and disappears broadly along the meson and cephalad, the surface opaque. In the genotype, this sculpture is uniform and distinct. In both species the postmarginal vein is a little longer than the short stigmal. Casually, the club appears 2-jointed.

From one female taken in jungle, November, 1913 (A. P. Dodd).

*Habitat*: Harvey's Creek (Cairns), Queensland.

*Type*: No. Hy 2716, Queensland Museum, Brisbane, the female on a tag.

GENUS SYMPIESONECREMNUS Girault.

This genus is exactly similar to *Neocremnomyia* except that the form is more robust, the median carina of propodeum paired, the caudal tibial spur stout, the mandibles with several more teeth and the flagellum is subcompressed, the distal two funicle joints with short petioles. The venation is identical. Genotype re-examined (type).

1. **SYMPIESONECREMNUS ÆNELLA** new species of A. P. Dodd.

*Female*:—Length, 1.40 mm.

Like *boasi* Girault but smaller, the sculpture finer, the propodeum smooth and with a single median carina; abdomen slenderer; tibiae, tarsi and posterior femora yellow, the first two pairs of femora brownish; scape and pedicel fuscous, the flagellum dark yellow-brown, funicle joints subequal; otherwise the same or nearly.

From one female taken sweeping jungle along a road, February 23, 1912 (A.A.G.).

*Habitat*: Rossville, Cooktown.

*Type*: No. Hy 2717, Queensland Museum, Brisbane, the specimen on a tag; head and hind legs on a slide.

The club appears 2-jointed but the transverse constriction at about distal third is not articulated (A. A. Girault).

GENUS ASCOTOLINX Girault.

Removed from the Elachertini. Scutellum with no cross-groove before apex but the lateral grooves join around the apical margin. The axillæ are advanced, the parapsidal furrows only cephalad, obscure. Carinae of propodeum very distinct, the lateral ones broadly curved. Pronotum transverse quadrate. Postmarginal and stigmal veins rather short, the marginal over five times the length of stigmal. Axillæ advanced a third the way up the scutum. Type of genotype re-examined.

1. **ASCOTOLINX FUNERALIS** Girault.

Length, 1.63 mm. Abdominal segments except 2, finely scaly except caudad on each. Club with a terminal seta. Scape slender. The *type* was captured May 8, 1913 and is on a tag, the head and cephalic legs on a slide.

## PRONECREMNUS new genus of Girault and A. P. Dodd.

*Female*.—Antennæ 11-jointed, two ring-joints, four funicle joints, three club joints. Mandibles with two large and about five small teeth. Scutellum without grooves. Parapsidal furrows only indicated anteriorly. Propodeum not short, smooth, with a distinct median carina, the lateral carinæ absent. Abdomen sessile, conic-ovate, rather long and pointed. Fore wings without regular rows of discal cilia. Submarginal vein distinctly broken; marginal vein very long, one third longer than submarginal, stigmal vein very short, postmarginal two and a-half times the length of stigmal. A genus closely resembling *Secodella* Girault of the Omphalini.

## 1. PRONECREMNUS SPECIOSUS new species of Girault and A. P. Dodd. Genotype.

*Female*.—Length, 1.50 mm.

Dark metallic blue; the coxæ concolorous, trochanters and tibiæ dark brownish black, the tarsi (except apical joint which is dark-brownish black) pale straw yellow. Antennæ wholly black. Scutum and scutellum with polygonal reticulation, the reticulation in raised lines. Pedicel longer than wide, distinctly shorter and narrower than funicle 1, which is somewhat longer than 2, 2.4 as wide as long. Club a little longer than funicle 1; first and second joints wider than long. Wings hyaline.

From one female taken sweeping jungle, May 19, 1913 (A. P. Dodd).

*Habitat*: Kuranda, Queensland.

*Type*: No. Hy 2718, Queensland Museum, Brisbane, the female on a tag; head and posterior legs on a slide.

The table of genera, *antea*, p. 294, should be altered to conform with the foregoing; line 2, *with* should read *without*.

## HETREULOPHINI new tribe.

Differs from the Hemiptarsenini in having all tarsi 5-jointed and tridentate mandibles.

## HETREULOPHIUS new genus.

*Female*.—Head (cephalic aspect) a little longer than wide, the antennæ inserted on a level with the eyes, 11-jointed with one distinct ring-joint, the club solid. Parapsidal furrows represented by the usual constriction of the scutum cephalad as in many of the Eulophini. Axillæ triangular, advanced wholly (or nearly) cephalad of the scutellum, the latter squarely truncate behind, the postscutellum continuous with its outline and forming a rounded apex (the scutellum thus appears to have a distinct cross-suture before apex). Scutellum with two grooved lines, one on each side rather far laterad but in the dorsal aspect. Propodeum normal, with a median carina and no others. Venation normal, the marginal vein somewhat shorter than the submarginal, the stigmal of moderate length, with a slender, distinct neck, about a third the length of the marginal, the postmarginal elongate, twice the length of the stigmal. Abdomen much as in the eupelmene genus *Anastatus*, the ovipositor extruded for a short distance and turned up. Abdomen subsessile, widening distad. Habitus of the Ophelinini.

**1. HETREULOPHUS BIFASCIATIFRONS** new species. Genotype.

*Female*.—Length, 1.30 mm. Ovipositor about a sixth the length of the abdomen, its proximal two thirds white, rest black.

Orange yellow, the abdomen pale whitish yellow, dorsad washed with purple except proximad; pronotum washed with purple. Face with two interrupted metallic purple lines across a little above the antennæ, the lines separated for some distance and parallel; dorsal head lightly purplish, lemon yellow ventrad. Propodeum and axillæ washed with purplish, also more lightly, cephalic scutum. Legs orange yellowish, the cephalic and intermediate tibiæ purple, the hind coxa also but white toward and at tip. Hind knees white, the hind tibiæ purple dorsad. Antennæ yellowish brown, the last three joints jet black; scape long and slender; pedicel longer than any of the funicle joints; ring-joint a little wider than long; first three funicle joints distinctly narrower than the distal three, 1 longest, about twice longer than its width but really not much longer than 7 which is a little longer than wide and subequal to the three joints proximad of it (taken separately). Club without a terminal nipple; not quite as long as the united lengths of the three preceding joints. Hind tibial spur normal, small, the hind femur compressed. Scutum rather coarsely scaly; rest of thorax more finely so, the scutellum densely, finely lineolated, bearing four large isolated, black setæ. Fore wings with marginal cilia and a small clump of short, stiff black setæ upon the apex of the submarginal vein, embrowned from a crescentic cross-stripe of deeper color a little proximad of the clump, the infuscation broken—across extreme apex by hyalininess; against the submarginal vein by a round hyaline spot adjoining which proximad is a somewhat smaller fuscous spot (a similar spot opposite at caudal margin) and by a longer than wide hyaline area under the marginal vein. Discal cilia present on the hyaline areas as on the infuscated region. Legs simple.

From one female taken in jungle, February 10, 1914 (A. P. Dodd).

*Habitat*: Babinda, Queensland.

*Type*: No. Hy 2719, Queensland Museum, Brisbane, the specimen on a tag; head and hind legs on a slide.

In the table of subfamilies, *antea*, pp. 294-295, omit the Aphelinini; line 9, insert *usually* before *4-jointed*. In the Elachertinae, the axillæ are frequently not advanced; p. 295, line 4, omit the word *incomplete*; line 8, omit the first two words; line 9, omit words 2-8; lines 10 and 12, *five* should read *none*; line 12, omit all words in parentheses following the semi-colon; line 16 omit the interrogation point.

All the members of this family as soon as obtained should be killed by immersion in alcohol and preserved in that medium until the specimens are ready for study. The head should be mounted separately in balsam after being removed and divided into two by pressing a needle or ordinary insect-pin along the face between the antennal bulbs. In this way, assurance of seeing the ring-joints, which must be pressed out, is made. Shrivelling is to be avoided. Accuracy is an essential in descriptions.