AUSTRALIAN HYMENOPTERA CHALCIDOIDAE—VI.

SUPPLEMENT.

BY A. A. GIRault.

MAGNIFICATION AS PREVIOUSLY.

FAMILY PTEROMALIDÆ.

TRIBE PTEROMALINI.

GENUS PTEROMALUS Swederus.

1. PTEROMALUS AUSTRALICUS new species of Girault and A. P. Dodd.

Female:—Length, 3 mm.

Dark metallic blue; second abdominal segment dorsad, brilliant metallic blue; segments 3-5 dorsad, purple; coxa metallic; femora dark brownish; trochanters, knees and tibia, golden yellow; tarsi paler yellow; antennal scape golden yellow; rest of antennae fuscous. Thorax densely punctate; parapsidal furrows almost, or quite, complete; scutellum with a distinct cross-stare. Propodeum rather long, with a neck; distinctly trinicate; spiracles large, oval. Abdomen wider but no longer than the thorax; ovate; second segment occupying fully one third of the surface; third two thirds length of second; fourth one half length of third; 4-6 subequal; seventh longer than sixth. Wings hyaline; venation yellow; marginal and postmarginal veins subequal; stigmatic vein somewhat shorter. Antenna 13-jointed, two ring, three club joints; first funicle joint distinctly longer than the pedivel, one half longer than wide; 2-6 gradually shortening, but the sixth is distinctly longer than wide; club as long as two preceding joints united; first club joint a little the longest of club.

Male:—Not known.

Described from one female caught on foliage of Eucalyptus platyphuia, December 8, 1913 (A. P. Dodd).

Habitat: Gordonvale (Cairns), Queensland.

Type: No. Hy 2263, Queensland Museum, Brisbane, the specimen on a tag, plus a slide bearing the head and a hind leg.

GENUS APLASTOMORPHA Crawford.

1. APLASTOMORPHA AUSTRALIENSIS (Girault).

Neocotolacrus australiensis Girault.

Three females from windows, Innisfail, Queensland, January 11, 1912 (A.A.G.).

Another female at Cairns, Queensland, sweeping the foliage of tea trees, November 1, 1911 and one female from a window, Hambledon Junction (Cairns), November 2, 1911. The general colour is very dark. The abbreviated parapsidal furrows are faint. The postmarginal vein is nearly as long as the marginal; segment 5 of abdomen as long as 2-4 a little longer than

1 See these Memoirs, II, pp. 483-524.
either, longest, 2 and 3 together occupying half of the surface. Femora concolorous. The
general coloration may be brighter in individuals. Common on windows at Gordonvale. On
May 11, 1914, at this latter place, this species was abundant in a box of seed corn infested
with a common grain weevil (Calandra) and obtained from a local grocer. Formerly, I had
seen it abundant in other lots of this corn received from the same grocer and infested with the
same weevil (most probably granaria but not critically examined). The spiracular sulci are
present. Pubescence not especially noticeable. The lateral carina is short, nearly wholly
transverse and originates at the lateral side of the fovea at cephalic margin of propodeum. A
rather common species. Types re-examined.

2. APLASTOMORPHA SAGA new species.

Female:—Length, 2.75 mm.

Rather bright metallic green, the coxae concolorous, the legs white, but the last two pairs
of femora brownish black. Scape reddish brown. Differs from australiensis in having the
lateral carinae complete, not curving to form a cross-carina. Antennae black, the pedicel not
quite as long as the distal funicule joint which is somewhat wider than long, the joint
preceding it quadrate; third club joint much the shortest. Clypeus longitudinally striate.
Marginal, postmarginal, and stigmatic veins are a little longer than with australiensis but of
the same relative lengths. Parapsidal furrows incomplete. Much brighter than australiensis.
Segments 2, 7 and 5 of abdomen longest, 3 and 4 short, none long.

Male:—Unknown.

Described from one female from a gall on Eucalyptus, forest, November 1, 1913. The
specimen of australiensis formerly recorded from miscellaneous galls was this specimen.

Habitat: Gordonvale (Cairns), Queensland. Gall on Eucalyptus.

Type: No. Hg 2763, Queensland Museum, Brisbane, the above female on a tag, the
head and caudal legs on a slide.

"This species is at once distinguished from pulchra Girault and Dodd by having a long
slender abdomen, the latter much longer than the thorax." (A. P. Dodd.)

3. APLASTOMORPHA PULCHRA new species of Girault and A. P. Dodd.

Female:—Length, 2.25 mm.

Agreeing with the generic description, except that the lateral carinae on the propodeum
are present and distinct.

Brilliant metallic blue-green, the coxae concolorous; abdomen suffused with brown; eyes
garnet; rest of legs and antennal scape golden yellow; pedicel and ring-joints dusky yellow;
flagellum black. Wings hyaline, the venation golden yellow. Thorax densely punctate;
parapsidal furrows two thirds complete. Abdomen no longer than the thorax; second segment
occupying almost one third of the surface; third not one half as long; 4-6 subequal, each
longer than third. First funicule joint distinctly longer than the pedicel, distinctly longer than
wide; 2.5 wider than long; club not much longer than wide; ring-joints rather small.

Male:—Not known.

Described from one female caught by sweeping grass and foliage, forest, January 26,
1913 (A. A. Girault).

Habitat: Townsville, Queensland.

Type: No. Hg 2761, Queensland Museum, Brisbane, the specimen on a tag, the head and
and a hind leg on a slide.
4. APLASTOMORPHA FLAVOBASALIS new species of Girault and A. P. Dodd.

**Female:**—Length, 1.90 mm.

Agreeing with the description of *pulchra* Girault and Dodd but the femora are concolorous with the thorax, the rest of the legs white; (specimen not seen); pedicel and ring-joints concolorous with the rest of the flagellum. Abdomen brown, very lightly washed with metallic, the proximal fifth yellow, the incisions of the segments showing as fine yellow cross-strips. The abdomen is rather longer and more slender than with *pulchra*; its second segment occupies a fourth of the surface and the caudal margin of segments 2 and 3 at meson is slightly incised. Joints 2-5 of funicle not wider than long, 5 quadrate; club over twice longer than wide.

**Male:**—Not known.

Described from one female captured by sweeping in a jungle pocket, January, 17, 1913 (A. P. Dodd).

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

**Type:** No. Hy 2765, Queensland Museum, Brisbane, the above specimen on a tag; head and a caudal leg on a slide.

5. APLASTOMORPHA RETICULATA new species of A. P. Dodd.

**Female:**—Length, 2.00 mm.

Dark metallic blue, the coxae and femora concolorous, the base of the abdomen brilliant blue-green, the tibiae and tarsi white; antennal scape yellow; pedicel brown, rest of antenna black. Thorax polygonally reticulate, the reticulation in raised lines, the propodeum more finely so. Propodeum with a median and lateral carina, also a complete cross-carina; spiracular sulci obscure. Abdomen pointed conic-ovate, scarcely longer than rest of body, second segment occupying nearly one fourth of surface, its caudal margin convex, the third one fourth its length, the others lengthening, the seventh quite as long as the second and nearly as long as the two preceding segments united. Wings hyaline, postmarginal vein twice as long as the stigmal and a little longer than the marginal. Pedicel subequal to funicle 3, funicle 1 longest, 5 almost quadrate, first club joint as long as the preceding joint as long as the other two club joints combined.

**Male:**—Not known.

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

**Habitat:** Babinda, Queensland.

**Type:** No. Hy 2766, Queensland Museum, Brisbane, the female on a tag; head and hind legs on a slide.

6. APLASTOMORPHA 5-FASCIATA new species.

**Female:**—Length, 1.00 mm.

Brassy green, the wings hyaline, the coxae concolorous, the scape and legs dull golden yellow, the caudal femora subfuscous, darker. Abdomen dull golden yellow and with five cross-strips counting the fifth at tip, the first a short distance out from base. Antenna dark brown.

Abdomen subpetiolate. Propodeum with a thin, obscure median carina, more like a ruga and more obscure near apex (distal), the lateral carinae complete, distinct, abruptly changing direction from caudo-lateral to caudo-mesal, opposite (mesal of) the spiracle; spiracular sulci present, not very distinct. Thorax including propodeum, finely punctate. Postmarginal vein barely shorter than the marginal, a little longer than the stigmal. Funicles 4 and 5 each a little longer than wide (in *pulchra*, a little wider than long). Pedicel wholly dark brown but mostly yellow as in *pulchra*. Funicle 1 longest, longer than the pedicel, somewhat longer than wide.

From one female caught October 11 (II. Hacker).

**Habitat:** Brisbane, Queensland.

**Type:** No. Hy 2767, Queensland Museum, Brisbane, the specimen on a tag; head and hind legs on a slide.

* Compare Eurydinecipitoides flavobasalis.
MEMOIRS OF THE QUEENSLAND MUSEUM.

TROCH RAPHITELINI.

GENUS NASONIA Girault and Sanders.

1. NASONIA BREVICORNS Girault and Sanders.

The footnote on page 307 of Part VI (these Memoirs, Vol. II, p. 307) refers to this species and not to Muscidiferax raptor Girault and Sanders which I have not seen from Australia.

I took a specimen of *brevicornis* from a window of a wool-house at Brimbank, Queensland, October 3, 1911 and Mr. Edmund Jarvis, Assistant Government Entomologist, sent me six females reared from dipterous pupae at Longreach and Aramac, Queensland, in October, 1913. The host was the sheep fly maggot. The antennae of *brevicornis* are inserted slightly above the ventral ends of the eyes. The spiracular suture is distinct, just lateral of the lateral carina. A common species.

TROCH ROPTROCRERINI.

GENUS PARURIELLA Girault.

This genus is identical in form, or nearly, to the species referred to *Syntaxis*.

1. PARURIELLA HORRIDULA new species.

*Female:*—Length, 1.32 mm.

Like *Syntaxis sepositus* Girault but the antennae differ in that the funicle joints gradually enlarge, joint 1 or 2 smallest, a little wider than long, the others gradually widening. Form identical with the species referred to. Propodeum with a median carina only.

*Male:*—Unknown.

Described from one female captured by sweeping miscellaneous vegetation, October 5, 1911.

*Habitat:* Roma, Queensland.

*Type:* No. Hg 2768, Queensland Museum, Brisbane, the specimen on a tag, the head and hind legs on a slide.

"Similar to *persimilis* but rather stouter, the propodeum still shorter, the lateral carina absent, the funicle more elevated, the first funicle joint smaller" (A. P. Dodd).

2. PARURIELLA PERSIMILIS new species of A. P. Dodd and A. A. Girault.

*Female:*—Length, 1.60 mm.

Very similar to *australeucus* Girault but not so slender, the propodeum distinctly shorter the venation pale yellow, the first two pairs of tibiae white like the tarsi, the caudal tibiae brownish.

*Male:*—Not known.

Described from a female captured by sweeping edge of jungle, December 20, 1912 (A. P. Dodd).

*Habitat:* Kuranda, Queensland.

*Type:* No. Hg 2769, Queensland Museum, Brisbane, the female on a tag, the head and hind legs on a slide.

"In *australeucus*, the lateral carina is weaker cephalad and originates at the caudal apex of the spiracle" (A.A.G.).
GENUS ROPTROCEROPSEUS Girault.

1. ROPTROCEROPSEUS ALBIFES new species of A. P. Dodd and Girault.

   **Female:** Length, 2.30 mm.

   Very dark metallic blue, the abdomen dull greenish, the cephalic coxae and basal half of middle coxae concolorous, rest of legs and antennal scape yellowish white, pedicel and funicle joints yellowish brown, the club lemon yellow. Thorax with fine, polygonal scaly sculpture, not raised, the propodeum rugulose towards the centre, practically smooth for the rest. Abdomen pyriform, depressed above, second segment occupying a third of the surface. Cross-suture of scutellum forntice. Marginal and postmarginal veins subequal, the latter twice as long as the stigmal. Pedicel a little longer than any of the funicle joints, of which the first is somewhat longer than wide, the fifth wider than long; club joints wider than long. Wings hyaline. Mandibles 4-dentate. Lateral carinae of propodeum weaker than the median.

   **Male:** Not known.

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

   **Habitat:** Babinda, Queensland.

   **Type:** No. Hy 2770, Queensland Museum, Brisbane, the above specimen on a tag, the head on a slide.

2. ROPTROCEROPSEUS SIMILIFORMIS new species of Girault and A. P. Dodd.

   **Female:** Length, 1.38 mm.

   Almost exactly similar to albicornis Girault except that the mandibles are 3 and 4-dentate and the first funicle joint is a little wider than long, a little shorter than the pedicel (in the genotype distinctly longer than wide, the pedicel also longer than wide). Hind coxae compressed in both species, the propodeal spiracle minute, round. In the genotype, the stigmal vein is somewhat over half the length of the marginal; in this species the latter seems somewhat longer in relation to the stigmal vein. Compared with type of albicornis.

   Described from one female caught by sweeping in forest, February 6, 1913 (A. P. Dodd).

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

   **Type:** No. Hy 2771, Queensland Museum, Brisbane, the above specimen on a tag, the head on a slide.

3. ROPTROCEROPSEUS ALBICORNIS Girault.

Two females, January, 1913 at Gordonvale (Cairns), Queensland, reared from galls on Melaloeze (A. P. Dodd). Rather common.

GENUS URIELLOIDES Girault.

This genus resembles somewhat Aplastomorpha Crawford rather than Neoctolacos Ashmead.

PSEUDANOGMUS new genus of A. P. Dodd and A. A. Girault.

**Type:** The following species.

1. PSEUDANOGMUS FASCIIPENNIS new species of A. P. Dodd. Genotype.

   **Female:** Length, 2 mm. Rather stout and robust.

   Very dark metallic green, the coxae concolorous, the abdomen burnished coppery, rest of legs golden yellow; antennal scape pale yellow, rest of antennae blackish. Both mandibles 4-dentate. Antenna inserted against the mouth, 13-jointed, with three rings and three club
joints. Scape very long and slender, two thirds as long as the face; pedicel slender, much longer than any of the funicle joints which are subequal, each somewhat longer than wide; first two club joints about subequal, as long as wide; ring joints moderately large. Thorax with very fine, dense longitudinal reticulation, the propodeum practically smooth. Parapsidal furrows incomplete. Scutellum with a faint cross suture. Propodeum trirarinate, the carinae very distinct; spiracle small, rounded, situated farther caudad than usual, no spiracular sulci. Abdomen no longer or wider than the thorax, straight beneath, slightly convex above; second segment occupying about a fourth of the surface, the others more or less subequal; caudal margins of all segments straight. Fore wings with a sooty blotch just beneath the curve of the submarginal vein and another beneath apex of stigmal vein; marginal vein twice as long as the stigmal, the latter as long as the postmarginal, the venation distinct.

**Male**:—Not known.

**Habitat**: Mulgrave River, Cairns District, Queensland.

**Type**: No. Hg 2572, Queensland Museum, Brisbane, the female on a tag, the head and hind legs on a slide.

This genus differs from *Vriellaides* Girault in having the antennae inserted against the mouth and both mandibles 4-dentate.

2. **PSEUDANOMUS FUSCIPES** new species.

**Female**:—Length, 1.60 mm.

Very similar to the genotype, being nearly black but the femora are concolorous, the tibia much lighter (brown) and the funicle joints are somewhat wider than long. Mandibles not distinctly seen but one 4-dentate. Flagellum black. Both species are densely, finely scaly punctate, the propodeum shiny.

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

**Habitat**: Brisbane, Queensland.

**Type**: No. Hg 2574, Queensland Museum, Brisbane, the specimen on a tag; head, caudal tibiae and wings on a slide.

"In this genus the abdomen is flat, rounded ovate, wider than the thorax; the head is longer than wide; the antennal club with an apparent fourth joint which is distinct but does not appear to be articulated; the scutellum has not a transverse suture before apex." (A. A. Girault.)

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

**Female**:—Head no wider than the thorax, not much wider than long (cephalic aspect); eyes moderately large. Antenna inserted below the middle of the face, on a line with the basal ends of the eyes; 11-jointed, with three ring joints and a solid club. Mandibles 4-dentate. Pronotum short; parapsidal furrows half complete; scutellum simple. Propodeum short, broad, without a neck, glabrous, trirarinate, the carinae well defined and also with a few irregular longitudinal carinae; spiracles round, no spiracular sulci. Abdomen conic-ovate, scarcely longer than the thorax; second segment the longest, occupying one fourth of the surface, third not one half as long; fourth longer than third; fifth longer than fourth, two thirds as long as second; sixth and seventh each about as long as fourth. Marginal vein twice as long as the stigmal, which is moderately long; postmarginal vein slightly longer than the stigmal.

Female:—Length, 1.75 mm.

Brilliant metallic coppery green, the coxae concolorous; rest of legs (except apical joint of tarsi which is dusky) and the antennae, very pale straw yellow. Wings hyaline, the venation almost white. Thorax, except the smooth propodeum, finely reticulate, the reticulation in raised lines. Pedicel distinctly longer than any of the funicule joints, which are subquadrate, a little wider than long; flagellum gently clavate; club twice as long as wide.

Described from two females caught by sweeping in forest, mainland, near Double Island, December 24, 1911 (A.A.G.).

Habitat: Double Island (Cairns), mainland, Queensland.

Type: No. Hy 2774, Queensland Museum, Brisbane, the specimen on a tag, the head and hind legs on a slide.

Urielomyia new genus.

Female:—Like Uriella Ashmead but the abdomen with the third segment next longest, the second longest, occupying nearly a fourth of the surface and distinctly longer than the third. Mandibles 3 and 4-dentate. Propodeum tricarinate and with a long cross-carina which crosses the median and lateral carinae and passes in front of the rather small, oval spiracle. Parapsidal furrows rather short, nearly complete. Postmarginal and stigmal veins subequal, moderate in length as also the marginal which is about one and two thirds times the length of the stigmal. Antenna 13-jointed with two ring-joints. Scutellum simple. Fronto-lateral transverse. The axilae are not advanced.

Male:—Not known.

Type: The following species.


Female:—Length, 1.85 mm. Robust.

Very dark metallic green, the wings hyaline, the venation, legs, scape and pedicel yellow brown; pedicel dark above. Coxae dark metallic. Thorax densely, finely reticulately scaly. Pedicel somewhat longer than any of the funiculi joints of which the first is a little longer than wide and narrower than the others. 2 and 3 a little longer than 1, the remaining three quadrato. Scape slender. Club without a nipple.

Described from four female specimens captured from the windows of a grocery store, October 30, 1911.

Habitat: Port Douglas, Queensland.

Type: No. Hy 2775, Queensland Museum, Brisbane, the above females on tags (two pins) and a slide with two heads and hind legs.

One female on a window. Thursday Island, Torres Strait, March 14, 1912.

2. Urielomyia Flavicornis new species of Girault and A. P. Dodd.

Female:—Length, 2.00 mm.

Differ from the generic description in being 4-dentate mandibles and in propodeal characters; propodeum with a pair of very short, abbreviated median carinae at base and complete lateral carinae which branch, one branch running obliquely to the caudal margin mesad, the other to the caudal margin laterad; no cross-carina.

Very dark metallic green, the coxae concolorous; abdomen shining metallic coppery; antennae golden yellow; femora and basal half of tibiae yellowish brown; apical half of tibia
and the tarsi (except dusky apical joint) white. Wings hyaline; marginal vein one third longer than the stigma and one fourth longer than the postmarginal. Thorax, including propodeum, punctate; parapsidal furrows half complete. Abdomen conic-ovate, a little longer than the head and thorax united; second segment occupying one fourth of the surface, distinctly longer than the third; 3-7 about subequal. Antennae inserted about middle of face; 13-jointed, with two rings, three club joints; pedicel slender, a little longer than first funicle joint; ring-joints usual; flagellum gently clavate; first and second funicle joints distinctly longer than wide, the sixth subquadrate, a little wider than long; club twice as long as wide, the first joint the longest.

Described from one female caught by sweeping in forest, July 1, 1913 (A. P. Dodd).

Habitat: Northern Queensland (Gordonvale near Cairns).

Type: No. Hy 2776, Queensland Museum, Brisbane, a female on a tag, the head and a hind leg on a slide.

3. URIELLOMYIA HACKERI new species of A. P. Dodd.

Female:—Length, 2.60 mm.

Metalllic green; antennal scape and pedicel, coxae and femora concolorous, the tibiae slightly washed with metallic, the tarsi and most of tibiae yellow; antennal funicle fuscous, the club yellowish. Thorax reticulately punctate; parapsidal furrows incomplete; scutellum simple. Propodeum short, gibbous, with a median and lateral carinae, the median carina dividing caudal; also mesal of the lateral carinae there is another distinct longitudinal carina. Abdomen conic-ovate, depressed above, convex beneath, a little longer than the head and thorax united, segments 2, 3, 6 and 7 about subequal, longest, the third the shortest; base of abdomen smooth and shining, the rest more or less finely scaly. Fore wings hyaline, the marginal vein somewhat longer than the postmarginal, the latter somewhat longer than the stigma. Mandibles 4-dentate, the teeth not acute. Flagellum gently clavate; pedicel longer than any of the funicle joints of which the second is longest, a little longer than wide, the others wider than long; antennae inserted about middle of face.

Male:—Not known.

Described from one female labelled "Brisbane, H. Hacker, 30-8-33."

Habitat: Brisbane, Queensland.

Type: No. Hy 2777, Queensland Museum, Brisbane, the specimen on a tag, the head and hind leg on a slide.

URIELLOPTEROMALUS new genus.

Type: The following species.

1. URIELLOPTEROMALUS SUBPLANITHORAX new species.

Female:—Length, 1.55 mm.

Differs from Uriella Ashmead in bearing axilla which are much advanced, being cephalad of the scutellum; the mandibles are tridentate, the abdomen is no longer than the thorax though conic-ovate, the second segment somewhat the longest, occupying about a fifth of the surface, a third longer than segment 3; the thorax is rather flattened and the postmarginal and stigma veins are rather short, the former a little the longer, the stigma just about a third the length of the marginal, not sessile; marginal vein a fifth shorter than the submarginal. Parapsidal furrows delicate, a third complete from cephalad.
AUSTRALIAN HYMENOPTERA CHALCIDIOIDEA, VI.—GIRAULT.

Dark aneons green with purplish tinges, the wings hyaline, the legs reddish brown except the concolorous coxae. Antennae honey yellow, the funicular joints wider than long but the proximal ones a little longer than the distal ones; scape short, the pedicel barely longer than wide; inner tooth of mandible truncate. Propodeum with a delicate median carina and no others. Head and thorax finely, delicately polygonally scaled. Third club joint not as distinctly separated as are the others. Lateral margins of scutellum subcarinate. Pronotum (dorsal aspect) transverse. Propodeal spiracle separated from caudal part of propodeum by a transverse, obtuse elevation of the surface (not a carina).

Male:—Unknown.

Described from one female captured either by sweeping in the jungle or else from a window in a jungle settlement, December 30, 1911.

Habitat: Yungaburra, Queensland.

Type: No. Hy 3465, Queensland Museum, Brisbane, the above specimen on a tag, the head and hind tibia on a slide.

In Uriellomyia the axilae are not advanced (the genotype examined).

NEROPTROGERUS new genus.

Female:—Agreeing with the description of Roptrocerus Ashmead but the club solid, the antennae thus but 19-jointed. The postmarginal and marginal veins are longer but neither long.

Male:—Unknown.

Type: The following species.

1. NEROPTROGERUS SUBATER new species.

Female:—Length, 1.80 mm. Stout, rather short.

Black metallic green, the wings hyaline, the coxae concolorous, the legs yellowish brown, the cephalic femur concolorous. Scape concolorous with the legs, the pedicel dusky-brown, rest of antennae black. Funicle 1 longest, subequal to pedicel, somewhat longer than wide and widest distal; funicle 2 somewhat wider than long, 3 and following still wider. Funicle joints subpetiolate. Club longer than the two preceding joints united. Head and thorax uniformly densely shagreened (minute papillae crowded together). Cross-stripe of scutellum and parapsidal furrows well-defined, the latter complete. Propodeum subglabrous, the spiracle rather large, round, cephalad. Median carina of propodeum narrow, not straight. Axilae not advanced. Segment 2 of abdomen occupying a third of the surface, caudal margins of all segments straight, 2 glabrous, the others scaly cephalad; segment 3 shortest, transverse.

Described from one female captured in jungle, February, 11, 1914 (A. P. Dodd).

Habitat: Babinda, Queensland.

Type: No. Hy 3778, Queensland Museum, Brisbane, the specimen on a tag; head, fore and hind legs on a slide with type appendages of Heircalophus bifasciatifrons Girault.

TRIBE MERISINI.

GENUS AMICROMELUS Girault.

This genus belongs to the Metastenini of the Micogasteridae instead of the Trydymini as formerly stated by mistake.
TRIBE BRACHYSCELIDIPHAGINI.

GENUS CELOCYBA Ashmead.

1. CELOCYBA VIRIDILINEATA Froggatt.

This species is doubtless a Gyrolorella of the elachertine Eulophidae which see.

2. CELOCYBA VARIFASCIATA new species.

Female:—Length, 1.25 mm.

Golden yellow, the thorax orange yellow, the wings hyaline. Parapsidal furrows, cephalic and caudal margins of propodeum, tip of ovipositor valves, thorax just caudo-lateral of each axilla around their margins and the following abdominal markings black: A crescent across meson before tip and four transverse stripes between this and base, all four interrupted about half way to lateral margin on each side so that they are composed of two transverse marginal spots and a transverse spot across the meson. Mandibles tridentate. Distal tarsal joint and club dusky black, the club solid, the antennae 11-jointed; first two funicle joints subequal, like ring-joints, the third larger but still like a ring-joint. Venation yellow; post-marginal and stigmal veins subequal, each a little longer than the marginal. Fore wings with a broad hairless line from base of marginal vein, closed caudad. Caudal wings finely densely ciliate, with about eleven lines of cilia where broadest. Vertex, pro- and mesonotum with numerous but not dense black hairs. Legs as in acinaca. Propodeum transverse.

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

Habitat: Upper Tweed River, New South Wales.

Type: No. Hy 2779, Queensland Museum, Brisbane, the specimen on a slide.

GENUS ISOPLATA Girault.

"The antennae in the species are only 12-jointed, no ring joints, not jointed out well below the middle of the face." (A. P. Dodd.)

Types of geniculata re-examined (A. P. Dodd and A.A.G.).

1. ISOPLATA FLORIOEA new species of A. P. Dodd and Girault.

Female:—Length, 1.50 mm.

Similar to geniculata Girault but all coxae metallic, funicle 1 not narrower than the others, the funicle joints all wider than long, the pedicel is shorter than in the genotype yet longer than any of the funicle joints, the club stouter, its joints much wider than long (longer than wide in geniculata).

Male:—Unknown.

Described from three females in the collection of the Queensland Museum, labelled "From flowers of Bacopa, April 22, 1913, H. Hacker."

Habitat: Brisbane, Queensland.

Type: No. Hy 2780, Queensland Museum, Brisbane, the above specimens on a tag, two heads on a slide.

SUBFAMILY EUNOTINÆ.

GENUS EURYCRANIUM Ashmead.

1. EURYCRANIUM BÆUSOMORPHA new species.

Female:—Length, 0.85 mm. Short and robust, resembling the Bæus and the genus Hadronotus Faeder in form.

Apparently differing from the genotype in bearing a cross-suture near apex of scutellum and perhaps in other characters as below.
Dark metallic green, the wings hyaline; the wide, thin, triangular head, the short, flattened, rounded (dorsal aspect) abdomen and the legs (paler) deep golden, or orange, yellow, the antenna pale yellow. Lateral ocelli far distant from the eye margins. Antennas inserted at the mouth, 8-jointed, the club enlarged, solid; the scape slender, long; the pedicel of usual length, much longer than any of the funicle joints all of which are wider than long, 5 largest, each enlarging in succession, 5 twice the length of 1 and much wider. Proximal joint of hind tarsus abruptly longer than the others, the tibial spur normal. Mandibles slender, tridentate, the teeth slender. Thorax finely reticulate scaly; the convex cross-suture of scutellum delicate; propodeum subconical, coarsely foveate. Second segment of abdomen occupying somewhat over a third of the surface; second and third combined, occupying nearly two thirds. Pronotum large, transverse-quadrate, the scutum shorter than the scutellum; parapsidal furrows complete. Postmarginal vein slightly longer than the stigmal, both slender but of moderate length, the marginal distinctly longer than either. Thorax very sparsely pubescent. No ring-joint. Described from one female caught in forest, December 20, 1913 (A. P. Dodd).

Habitat: Gordonvale (Cairns), Queensland.

Type: No. Hy 2781, Queensland Museum, Brisbane, the specimen on a tag, the head and hind tibiae on a slide.

PAREUNOTUS new genus.

Female:—In Ashmead's table running to Aesysis Howard, the antennae being 10-jointed, strongly clavate, the club solid; antennae inserted below the middle of the face. Mandibles tridentate. Hind tibial spur normal, rather stout. Face inflexed. Postmarginal and stigmal veins long and slender, the former a little the longer, the marginal a little shorter than the stigmal, about three times longer than wide or somewhat more. Hind coxae large. Axilla widely separated. Parapsidal furrows deep. Propodeum transverse, the postscutellum overhanging it. A broad oblique hairless line from apex of submarginal vein. Hind femur compressed. Scutellum with a faint cross-suture indicated before apex. Scutellum distinctly shorter than the scutum; the postscutellum triangular, tolerably large.

Male:—Not known.

Type: The following species:

1. PAREUNOTUS FLAVICORPUS new species.

Female:—Length, about 0.98 mm.

Palo honey yellow and finely scaly. A stripe across cephalic margin of propodeum, the indicated cross-suture of scutellum and cephalo-lateral ends of the axilae dark purplish black. Wings hyaline. First three funicle joints like ring-joints but each enlarging, 3 not a third the length of 4 which with 5 and 6 are distinctly wider than long and subequal, subtransverse; funicle 7 is longer than 6, still much wider than long. Club short.

Described from one female captured in forest, December 26, 1912.

Habitat: Capveille (Pentland), Queensland.

Type: No. Hy 2782, Queensland Museum, Brisbane, the specimen on a slide.

What I thought was the abdomen of this specime, which had become separated, bore six distinct purplish black cross-stripesthe, the first at base and all intersected by a median longitudinal stripe. Valves of ovipositor are black. Abdomen conic-ovate, none of the segments greatly lengthened.

MUSCIDEA new genus.

Female:—In Ashmead's table runs to this genus which was formerly without status, the genotype being undescribed. I adopt the name for the following species. Head wider than long, the antennae 9-jointed with one very short ring-joint, the club solid and as long as the funicle and much wider. Mandibles small, acute. Hind tibial spur normal for the family.
MEMOIRS OF THE QUEENSLAND MUSEUM.

Postmarginal vein absent, the stigmal long but somewhat shorter than the marginal. Scutellum simple. Second segment of abdomen occupying only a third of the surface, together with the third segment which is shorter, occupying one half. Fourth segment transverse linear. Propodeum at apex contracted into a short neck which appears like a petiole but is not considered so. Pronotum about half the length of the scutum. Postscutellum short, crescentic, forcate, the scutellum at apex very broadly or flatly convex. Propodeum with a short median carina between its neck and the apex of postscutellum on either side of which are forses arranged transversely. Abdomen depressed, ovate, as long as the thorax. Hind femur swollen. Parapsidal furrows distinct. Occiput concave. Pronot broad. Propodeal spiracle minute, round. Head lenticular.

Male:—Not known.
Type: The following species.

1. MUSCIDEA BRUNNEIVENTRIS new species.

Female:—Length, 1.30 mm.
Black with a purplish tinge, the wings hyaline, the abdomen, legs and antennae yellowish brown, the head and thorax reticulated, shining, the propodeum forcate. Distal third of abdomen above sordid. Lateral wing of propodeum (at the spiracle and for some distance around) glabrous. Funicle 5 longest and widest, distinctly wider than long as are the others, 1 smallest, 2 longer, 3 and 4 subequal, still longer but distinctly smaller than 5 which is much shorter than the normal pedicel.

Described from one female captured in forest, August 7, 1913.

Habitat: Gordonvale (Cairns), Queensland.

Type: No. Hg 2733, Queensland Museum, Brisbane, the specimen on a tag; head, a fore wing, middle and hind tibia on a slide.

MUSCIDEOPSIS new genus.

Female:—Like Muscidea but the mandibles tridentate, the postmarginal and stigmal veins well developed, not very long but distinct, the postmarginal vein somewhat longer than the stigmal and two thirds the length of the marginal. Scutellum with a punctate cross-furrow. The second abdominal segment occupies about one half of the surface. Otherwise about the same but the pronotum is not more than a fourth the length of the scutum. Habitus of a beine proctotyphoid. Abdominal segments following 2 transverse linear.

1. MUSCIDEOPSIS GOLDSMITHII new species. Genotype.

Female:—Length, 1 mm.
Dark metallic blue, the abdomen, legs and antennae honey yellow, the wings hyaline, the venation pale yellow. Body polished; frons with scattered minute setigerous punctures. Cephalic coxe bluish. Parapsidal furrows punctate. Scutellum about as long as the scutum. Thorax with a few long setae from minute punctures. Neck of propodeum appearing from above like a short, stout abdominal petiole. Ring-joint minute; pedicel distinctly longer than any of the funicle joints of which 5 is largest, thrice the size of 1 and distinctly wider than long; all funicle joints wider than long, widening distad; club three fourths the length of the funicle. Scape slender. Propodeum with strong, irregular carinæ.

Male:—Not known.

Described from one female taken by sweeping along a jungle-clad forest streamlet, March 23, 1914.

Habitat: Gordonvale (Cairns), Queensland.

Type: No. Hg 2734, Queensland Museum, Brisbane, the specimen on a tag, the head and two hind tibiae on a slide.

Dedicated to Oliver Goldsmith.
MUSCIDEMYIA new genus.

Female:—Agrees with the description of *Muscidea* Girault but the postmarginal vein is somewhat longer than the stigmal, the scutellum is without a cross-suture, the abdomen is conico-ovate, longer than the thorax and the mandibles are 3- and 4-dentate, long and slender. Otherwise the same except as noted below.

1. MUSCIDEMYIA NIGRICYANE new species. Genotype.

Female:—Length, 0.80 mm. Small, graceful, the abdomen pointed.

Very dark metallic blue-black, the abdomen dark metallic green, the wings hyaline; middle and caudal tibiae very pale orange yellowish, the tips of tibiae and the tarsi white. Scape white, the pedicel black, rest of antennae brown. Thorax reticulate scaly, the propodeum smooth, very short, the spiracle minute, round, the propodeum shorter at the meson, nonearinate. Abdominal segments not lengthened, the abdomen normal. Stigmal vein with a rather large knob. Pedicel stout, longer than any of the funicule joints which widen distally, 5 largest. Ring joint small. Club large, its joints distinct, wider than the funicule but not as long. Funicule 2 shortest, transverse, 1 globular. Flagellum armed with stiff setae.

Male:—Not known.

Described from one female taken in jungle along the Herbert River, April 6, 1914 (A. P. Dodd).

Habitat: Halifax, Queensland.

Type: No. Hg 2785, Queensland Museum, Brisbane, the specimen on a tag; head and hind tibiae on a slide with type appendages of *Neomphaloidella brevis* Girault.

GENUS ANYSIS Howard.

"Antenna as with *Aphobactus*, except that funicule joint 2 is twice as long as 1; 3, 4 and 5 subequal in length, increasing in width, and each slightly shorter than 2. Eyes naked; head very broad; occiput strongly concave, its superior margin acute. Thorax well arched; parapsidal sutures meeting axillary sutures; scutellum broad at base, somewhat lengthened, extending over metanotum to vertical plane of base of abdomen, not cross-furrowed. Petiole distinct but very short; abdomen without basal tufts; second segment scarcely half the length of the abdomen. Marginal vein of fore wings three times longer than stigmal, postmarginal about as long as stigmal or slightly shorter; basal nervure not distinct. Basal nervure of hind wings extending at an acute angle toward base of wing. Spur of hind tibia short."

1. ANYSIS AUSTRALIENSIS Howard. Female. Genotype.

"Length, 1.7 mm.; expanse, 3.8 mm.; greatest width of fore wings, 74 mm. General color blue-black, slightly metallic, glistening. Head and thorax with short, sparse, yellowish pile; face delicately shagreened and with fine sparse punctures; mesonotum similarly punctured; metanotum, pleura, and abdomen smooth; metanotum with a median longitudinal rounded carina. Antennae light brown, tip of club darker, pedicel and tip of scape above black; all femora nearly black in middle, lighter at each end; tibiae brown. Wing veins dark brown, fore wings infuscated, hind wings hyaline."

Habitat: West Australia. Associated with Coccids.

Types: Most probably in the United States National Museum at Washington, D.C., U.S.A.
MEMOIRS OF THE QUEENSLAND MUSEUM.

SUBFAMILY SPHEGIGASTERINÆ.

TRIBE ASAPHINI.

GENUS ORMYROMORPHA Girault.

This genus belongs to the Asaphini; the abdomen bears a very short petiole.

1. ORMYROMORPHA GLABRA new species.

Female:—Length, 1.70 mm.

The same as the genotype but smaller, the abdomen is impunctate and almost glabrous (cephalic half of segments after 3 faintly scaly), the propodeum bears many two-thirds complete rugae from cephalic margin and which Anastomose, the distal margin of middle stripe of fore wing is also convexed. Propodeum with a distinct neck. Funicle joints increasing slightly in succession distad. Postmarginal vein slightly longer than the stigmal. Pubescence normal in all three species, or nearly so. Segment 2 of abdomen somewhat longer than 3, not especially long. Tuft of pubescence on propodeum laterad of the spiracle. Caudal coxa imperial purple. Postmarginal and stigmal veins elongate, subequal to marginal. Antennæ inserted below the middle of the face, at the clypeus.

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

Habitat: Brisbane, Queensland.

Type: No. Hy 2786, Queensland Museum, Brisbane, the specimen on a tag; head and hind leg on a slide.

ORMYROMORPHIELLA new genus.

Differs from Ormyromorpha in that the scutellum bears a distinct cross-suture before apex. Postmarginal and stigmal veins subequal, elongate, a little shorter than the marginal. Abdominal petiole distinct but short. Antennæ inserted at the clypeus. Head convex, a little wider than long. Mandibles tridentate.

1. ORMYROMORPHIELLA BIARGENTINOTATA new species.

Female:—Length, 3 mm.

Dark aeneous green, the wings trifasciata, the antennæ brownish yellow, also first two pairs of knees, first two tibiae at tips, first two pairs of tarsi, cephalic tibiae except dorsal and intermediate three joints of caudal tarsi. First joint of middle tarsus and a transverse dash from each lateral margin, base of segment 3 of abdomen, silvery white. Thorax finely scaly reticulate, the scutellum distad of transverse suture and the postscutellum glabrous, the propodeum densely, rather minutely or finely rugulose. Head scaly like the scutum. Cephalic third of segments of abdomen after 3, scaly. Petiole wider than long, glabrous (dorsad); base of meson of segment 2 of abdomen with about five short sulci. Hind coxa scaly, the caudal femur rather stout. Third or apical stripe of fore wings no longer than the proximal, the large middle stripe from whole of postmarginal vein, its distal margin passing a little distad of apex of stigmal vein. Ring joints increasing in length distad; funicle 1 longest, quadrate, a little over half the length of the pedicel.

From one female caught by sweeping forest uplands, May 30, 1914 (A. P. Dodd).

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

Type: No. Hy 2787, Queensland Museum, Brisbane, the specimen on a tag; head, a fore wing and a hind tibia with slide type of Ormyromorpha glabra.
HOLASAPHES new genus.

Female:—Head wider than the thorax, lenticular, the occiput concave; running to Asaphes Walker but the antennae only 11-jointed; club indistinctly 3-jointed, the flagellum clavate, the first funicle joint like a ring-joint. Like Asaphoides Girault but the hind tibial spurs rather long and stout (somewhat stouter than normal in the other genus) and the postmarginal vein is twice or more the length of the marginal which is plainly not twice the length of the stigma and the ovipositor and valves are distinctly extruded for a third or less the length of the abdomen. The punctate line across scutellum is rather distant from the apex in both genera and it is the fourth abdominal segment which is much the longest in both genera; also in both, the pronotum is subequal to the short scutum. Petiole in this new genus rather shorter than with Asaphoides. Type of latter re-examined (type of niger).

With the habitus of a Torymid and somewhat of a Eurytomid.

1. HOLASAPHES GREGI new species. Genotype.

Female:—Length, 1.67 mm., excluding the short ovipositor.

Black, rather shining, the wings hyaline, the legs reddish brown, paler at the articulations and tarsi, the coxae black; antennae concolorous with the legs; last funicle joint widest, the joints not much unequal in length, the pedicel much longer than any of the funicle joints. Mandibles strongly tridentate, the teeth subequal (in Asaphoides niger, the lateral tooth is distinctly the longest, the mesal one smallest). Thorax finely, transversely polygonally scaly, the scutellum uniformly sculptured, the abdomen smooth; lateral carine rather close to median on propodeum, curved, joining the median a short distance before apex; a deep, curved spiracular sulcus runs directly from the small spiracle. (Spiracular sulcus also present in Asaphoides niger but straighter). Segment 2 of abdomen longer than 3. Pronotum with a faintly indicated line of punctures across distad of middle.

Described from one female captured March 9, 1912 in forest.

Habitat: Horn Island, Torres Strait.

Type: No. Hy 7783, Queensland Museum, Brisbane, the specimen on a tag; head and hind tibiae on a slide.

2. HOLASAPHES EMERSONI new species.

Female:—Length, 1 mm., excluding ovipositor which is exerted for a length equal to a third that of the abdomen.

Very dark shining metallic blue-green, nearly black, the fore wing with a more or less obscure yellowish stain under the marginal and stigmal veins, and which does not extend further caudad than the middle; legs and antennae pale straw yellow, the cephalic coxae concolorous with the body. Caudal half of pronotum, the abdomen and the scutellum caudal of the transverse groove, glabrous. Otherwise as in the genotype, or nearly, but the club is distinctly 3-jointed, the head not as large and the antennae slenderer.

Male:—No. known.

Described from one female captured in a jungle pocket, March 1, 1914.

Habitat: Gordonvale (Cairns), Queensland.

Type: No. Hy 7789, Queensland Museum, Brisbane, the specimen on a tag; head, hind legs and a fore wing on a slide.
TUBE SPHEGIGASTERINI.

The Australian genera of this tribe may need thorough revision. The genera are difficult to define.

GENUS SYNTOMOPUS Walker.

1. SYNTOMOPUS AUSTRALIENSIS Girault.

The propodeum bears three distinct carinae, a median and two lateral. The type is probably a female, stated to be a male in the original description. It has been re-examined. The type measures 1.75 mm., is on a slide and was captured at Kuranda, Q., December 18, 1912.

GENUS MERISMUS Walker.

1. MERISMUS SQUAMOSUS new species.

*Female:* Length, 1.20 mm.

Dark purplish, the wings hyaline, the stigmal vein about half the length of the marginal, the postmarginal distinctly longer than the stigmal. Legs yellowish brown, also the scape. Thorax reticulate scaly, the scutellum distad of the transverse line glabrous. Propodeum long, with a short neck, strongly tricarinate. Second abdominal segment occupying somewhat over half of the surface, deeply semicircularly emarginate, the third segment not half its length. Mandibles 4-dentate. Petiole a little longer than the hind coxae. Club long, with an apparent fourth joint near tip, the distal funicle joints quadrate, funicle 1 subequal to the pedicle, somewhat longer than wide. Antennae 13-jointed with two ring-joints. Pronotum transverse, its cephalic margin subacute.

*Male:*—Not known.

Described from one female captured by sweeping in forest, April 7, 1913.

*Habitat:* Gordonvale (Cairns), Queensland.

*Type:* No. H.P. 2790, Queensland Museum, Brisbane, the specimen on a tag, the head and hind legs on a slide.

2. MERISMUS SCUTELLARIS new species of A. P. Dodd and A. A. Girault.

*Female:*—Length, 1.75 mm.

Dark metallic green, the legs (including the coxae) and antennal scape golden yellow, rest of antenna black. Scutum and propodeum densely reticulated, the parapsides, axilae and scutellum almost smooth, and shining. Scutellum with a very distinct cross-suture and also with a deep oval fossa or depression in its centre. Propodeum long, strongly tricarinate. Abdomen short, convex above, straight beneath, the petiole as long as the hind coxae, the second segment occupying over half of the surface, its caudal margin straight. Wings hyaline; marginal vein scarcely longer than the postmarginal and twice as long as the stigmal. Mandibles 4-dentate. Pedicle somewhat longer than any of funicle joints which are subquadrate, a little longer than wide, club joints longer than wide.

Described from one female caught sweeping foliage and grass along the Mulgrave River, mostly jungle, March 30, 1913 (A.A.G.).

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

*Type:* No. H.P. 2791, Queensland Museum, Brisbane, the specimen on a tag, the head and hind leg on a slide.
Genus POLYCOSTOIDES Girault.

1. POLYCOSTOIDES TENNYSONI Girault.

A female May 14, 1914 by sweeping in forest, Gordonvale. General color black. The fore wings are a little stained proximad. The suture across scutellum is really a ridge and has the appearance of being the apical margin. Type re-examined. The latter is a female on a tag, the head and hind legs on a slide. It measures 2.59 mm. and was taken April 13, 1913.

Genus HYPOPTEROMALUS Ashmead.

1. HYPOPTEROMALUS VIRIDESCENS (Walsh).

In the detailed description of this North American species given in the Bulletin of the Wisconsin (U.S.A.) Natural History Society, x (1912), on page 25, second line from bottom, Cephalic aspect should read Dorsal aspect.

2. HYPOPTEROMALUS DUBIOUS new species of Girault and A. P. Dodd.

Female:—Length, 1.25 mm.

Differing from the detailed generic description (see Bulletin of Wisconsin (U.S.A.) Natural History Society, vol. x, 1-2, June, 1912) in lacking the median carina of the propodeum and the obscure cross-suture on the scutellum; the first funicle joint is small, like a ring joint and much smaller than the second; and the abdomen, viewed from lateral aspect, is not almost triangular, its ventral margin being but gently convex.

Very dark metallic green, almost black; the propodeum (except at meson) and the abdomen much brighter green, the latter suffused with brown; coxae and femora brown; tibiae, tarsi and antennal scape golden yellow; rest of antennae fuscous. Wings hyaline, venation as in Hypopteromalus viridesceus (Walsh). Mandibles 3 and 4-dentate, the teeth acute. Head somewhat wider than thorax; thorax rather short and broad, not much longer than wide; scutum fully twice as wide as long, the parapsidal furrows only indicated anteriorly; scutellum, viewed from lateral aspect, distinctly convex. Propodeum rather short and broad; lateral carinae inconspicuous; spiracles not large, with rather delicate spiracular sulci. Thorax rather finely reticulated, the reticulation in raised lines. Abdomen somewhat shorter and narrower than thorax; petiole short; second segment occupying one third of the surface; remaining segments about subequal. Pedicel distinctly longer than any of the funicle joints; first funicle joint small; second distinctly larger; 2-6 subquadrate, wider than long; club barely twice as long as wide, the three club joints about subequal.

Described from one female caught by sweeping in forest, August 13, 1913 (A. A. Girault).

Habitat: Gordonvale (Cairns), Queensland.

Type: No. Hy 2795, Queensland Museum, Brisbane, the specimen on a tag, the head and a hind leg on a slide.

SPHEGIPTEROSEMA new genus.

For diagnosis, see antea (these Memoirs, II), p. 323. The genotype is a new species. It measures 1.90 mm. and was taken in May, 1913. Its type is on a tag, the head and hind legs on a slide.

1. SPHEGIPTEROSEMA AUSTRALIENSIS new species of Girault and A. P. Dodd.

Female:—Length, 2.50 mm.

Head and thorax very dark metallic green, almost black, the coxae colorless; rest of legs bright golden yellow; abdomen metallic purplish, its petiole yellow; antennal scape and pedicel yellow, rest of antenna black. Antennae 33-jointed, with two ring and three club
joints; flagellum gently clavate; first funicle joint somewhat shorter than the second and only a little longer than wide; 4-6 wider than long; club longer than two preceding joints united; first two club joints subequal, third smaller. Wings hyaline; venation golden yellow; marginal and postmarginal veins about subequal, each one third longer than the stigmal, which is slightly curved. Thorax with fine, polygonal reticulation, the reticulation in raised lines. Parapsidal furrows faint but complete. Scutellum with an obscure, transverse groove before apex. Propodeum rather short, broad, scaly, without a median carina but there is a shallow lateral sulcus on each side of meson, running obliquely from the cephalic margin, the lateral margin of each sulcus carinated and thus forming the lateral carinae; spiracle elliptical, with a deep sulcus running obliquely from its caudal margin. Abdomen viewed from the lateral aspect, straight above, convex beneath; viewed from the dorsal aspect, it is conico-ovate, no longer than the thorax; petiole no longer than the hind coxae; second segment occupying over one third the surface; third and fourth subequal, each about one half as long as the second; fifth and sixth distinctly shorter than the fourth; eighth conical. Head no wider than long, no wider than the thorax. Mandibles 3 and 4-dentate.

Described from one female captured by sweeping in jungle, June 7, 1913 (A. P. Dodd).

Habitat: Gordonvale (Cairns), Queensland.

Type: No. Hy 5723, Queensland Museum, Brisbane, the specimen on a tag, the head and a hind leg on a slide.

SPHEGIPTEROSEMELLA new genus.

For diagnosis, see antea (these Memoirs, II), p. 324. The males have the legs more uniformly fuscous. The types are five females on a card, a head, several antennae and hind legs on a slide. They were reared from bombycid cocoons, April 7, 1911. Petrosema unicolor new species is the genotype.

GENUS EURYDINOTELLA Girault.

1. EURYDINOTELLA VIRIDICOXA new species.

Female:—Length, 1.30 mm. For rest of diagnosis, see antea (these Memoirs, II), p. 319.

Described from a female captured by sweeping in forest along the banks of Cape River, December 27, 1913.

2. EURYDINOTELLA PUNCTATA new species.

Female:—Length, 1.85 mm.

Liko prima Girault but the abdomen is not darker than the thorax; the coxae are concolorous; the pedicel is colored like the flagellum; the scape is golden yellow; the abdominal petiole is short, much shorter than the hind coxae; the third abdominal segment is slightly shorter than the second and the postmarginal vein is twice as long as the stigmal and as long as the marginal. At once differing from viridicoxa Girault in having a punctate propodeum.

Described from one female caught by sweeping in forest and slight jungle, June 27, 1913 (A.A.G.).

Habitat: Gordonvale (Cairns), Queensland.

Type: No. Hy 2794, Queensland Museum, Brisbane, the specimen on a tag, the head on a slide.
Genus Eurydinota Foerster.

1. Eurydinota Pulchra new species of Girault and A. P. Dodd.

Female:—Length, 1.60 mm.
Dark metallic blue; coxae concolorous; rest of legs bright golden yellow; scape yellow; rest of antennae black. Wings hyaline. Antennae 13-jointed, with two ring-joints, the club-3-jointed; pedicel a little longer than first funicle joint; funicle joints gradually widening toward the apex; first slightly shorter than second; second and third a little longer than wide; 4-6 somewhat wider than long; first and second club joints about subequal, each somewhat wider than long. Marginal vein fully three times as long as postmarginal; stigmal vein shorter than postmarginal. Thorax densely polygonally reticulated, the reticulation in raised lines; parapsidal furrows incomplete; scutellum simple. Abdomen no longer than the head and thorax united; no wider than the thorax; petiole nearly as long as the hind coxae; second segment the longest, occupying one third of the surface, a little more than twice as long as third segment; the others all shorter than the third. Propodeum short and broad, with short, distinct spiracular sulci, a short abbreviated median carina and a circular foramen on each side of meson cephalad.

Male:—Not known.

Described from one female caught by sweeping on edge of jungle, May 22, 1913 (A. P. Dodd).

Habitat:—Kuranda, Queensland.

Type: No. Hy 2765, Queensland Museum, Brisbane, the specimen on a tag, the head on a slide.

Genus Eurydinoteoloides Girault.

Synonym: Polycestoides Girault.

1. Eurydinoteoloides Flavibasalis new species.

Female:—Length, 2.50 mm.

Agrees with the generic description excepting that the lateral carinae of the propodeum are entire and there is no cross-carina; there is also a narrow spiracular sulcus.

Dark brassy green, the wings hyaline, the tegulae, knees, tibiae, tarsi, scape and pedicel yellowish brown, the posterior tibia and tarsal pale; rest of antennae dusky. Base of abdomen above broadly (somewhat over half of segment 2 depressed) and the dorsal incisions very narrowly and more or less obscurely, bright yellow. Whole of thorax rather finely, densely punctate. Propodeal spiracle small, round. Funicle joint 1 a little longer than the pedicel; 5 subquadrangle; 1 plainly longer than wide and longest of the funicules. Club ovate, without a terminal seta.

Compare Aplastomorpha flavobasalis.

Described from one female caught by Mr. F. P. Dodd on flowers in October.

Habitat:—Kuranda, Queensland.

Type: No. Hy 2766, Queensland Museum, Brisbane, the specimen on a tag, the head and hind tibiae on a slide.

Genus Polycystella Girault.

1. Polycystella Abdominalis new species of Girault and A. P. Dodd.

Female:—Length, 1.95 mm.

Differing from the generic description in lacking the sinuses on the second abdominal segment; the petiole is twice as long as the hind coxae; propodeum without a median carina but with complete, delicate lateral carinulae; the spiracle is small; at least one mandible tridentate; and the postmarginal vein is over twice the length of the stigmal and one fourth longer than the marginal.
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Dark metallic green, the coxae concolorous; rest of legs, abdominal petiole and antennal scape golden yellow; rest of antennae black. Wings hyaline, the venation golden yellow. Thorax (including the propodeum) punctate. Abdomen short, convex above and beneath; the third segment viewed from the side, rising abruptly from the second.

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

Habitat: Northern Queensland (Gordonvale near Cairns).

Type: No. Hy 2797, Queensland Museum, Brisbane, a female on a tag.

2. POLYCOstellA PetiOLATA new species of Girault and A. P. Dodd.

Female:—Length, 2 mm.

Like abdominata but the lateral carine on the propodeum are distinct not delicate; there is a distinct suture running obliquely from the caudal margin of the spiracle; the postmarginal vein is no longer than the marginal; the abdominal petiole is metallic; and the fourth segment occupies one half of the surface and is as long as the second and third combined (seemingly longer than the third and not equal to one third of the surface in abdominata). Mandibles not seen; funicle joints subquadrate.

Described from one female caught by sweeping in forest August 4, 1913 (A. A. Girault).

Habitat: Gordonvale (Cairns), Queensland.

Type: No. Hy 2798, Queensland Museum, Brisbane, the specimen on a tag.

EURYDINOTOMORPHA new genus.

For diagnosis, see anterior, p. 329.

1. EURYDINOTOMORPHA PAX new species.

A female of this species was caught by sweeping in jungle, Gordonvale, near Cairns, July 31, 1913 (A. P. Dodd). “The legs in this specimen are wholly golden yellow, the coxae suffused with metallic. In the type, the femora and tibiae are darker, but not much darker than the tarsi. The median carina of propodeum, in both specimens, is one third complete from base.” (A. P. Dodd.)

The pubescence is quite normal.

2. EURYDINOTOMORPHA GRANDIS new species.

Female:—Length, 4 mm.

Dark metallic brassy green; the abdomen somewhat brownish; coxae concolorous; femora and antennal scape and pedicel bright brownish yellow; tibiae and tarsi (except apical joint) white. Wings hyaline, the venation dark. Otherwise like the genotype but the joints of the flagellum are longer and the propodeum has a short neck and lacks the abbreviated median carina.

Described from one female caught by sweeping in jungle, November 15, 1913 (A. P. Dodd).

Habitat: Harvey’s Creek (near Cairns), Queensland.

Type: No. Hy 2799, Queensland Museum, Brisbane, the specimen on a tag, the head and hind legs on a slide.

3. EURYDINOTOMORPHA BASALIS new species.

Female:—Length, 4.15 mm.

Very similar indeed to grandis but differing in that the abdomen ventrad is reddish brown (in grandis the middle of the abdomen rather broadly—nearly a third of the surface—dorsad is reddish) and the femora and tibiae are uniformly rich reddish brown (the tibiae are white in grandis); rest of abdomen dark metallic blue-green. The abdomen dorsad is
very finely transversely lineolated, segment 2 glabrous, segment 3 lineolated only cephalolaterad, 4 only laterad; similarly sculptured in *grandis* and in the genotype but less densely in the latter; in all three segment 7 is as long as 2; in the genotype, segment 3 is only about half the length of 4, in *grandis* only slightly shorter while in *basalis* 3 and 4 are subequal and more transverse, each somewhat shorter than with *grandis*. In all three, the lateral carinae are present, with a more or less distinct fovea just mesad of its origin; lateral carina short, curved mesad around the fovea. Pedicel (in *basalis*) wholly black. Antennae and mandibles as in *grandis*. Segment 7 is pilose dorsad in all three species and all three bear a short neck at apex of the conical propodeum.

Described from one female caught in forest May 22, 1914.

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2200, Queensland Museum, Brisbane, the female on a tag with type of *grandis*.

4. **EURYDINOTOMORPHA INCERTA** new species.

Same as *pax* but lacks the median carina (*pax* has the middle coxa lemon yellow), the sculpture of the scutellum is denser but especially the parapsides which are scaly punctate, rather coarsely scaly in *pax*; also the tibiae are white. Differs from *fusciventris* in having the abdomen wholly dark metallic green, the general color of the thorax much more brassy. From *grandis* in having the abdomen of uniform color and from *basalis* in that the abdomen is wholly metallic, the tibiae and tarsi white, the caudal coxae metallic only laterad (wholly metallic in *basalis*). In all the species there is a fold passing obliquely across caudad of spiracle and joined to the short lateral carina. Hind tibiae reddish just below knees. The middle coxae are like the legs.

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

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

*Type*: No. Hy 8801, Queensland Museum, Brisbane, the specimen on a tag; hind tibia and head on a slide with slide type of *Aplastomorpha s-fasciata*.

The genotype measures 3 mm. and was captured October 28, 1911, by sweeping. Its type is a female on a tag and a slide bearing the head and the hind legs.2

**PSEUDOSPHEGIGASTERUS** new genus.

For diagnosis, see *ante*, p. 322.

1. **PSEUDOSPHEGIGASTERUS FLAVIPES** new species of Girault and A. P. Dodd.

*Female*:—Length, 1.90 mm.

Like *anceus* Girault but the legs (including the coxae) are golden yellow, the antennal scape golden yellow, pedicel and ring-joints brown, rest of antennae black; second funicle joint a little shorter than first, the fifth longer than wide, not subquadrate. Abdominal segments as in *anceus*. Mandibles plainly 3- and 4-dentate.

Described from one female caught by sweeping in jungle, November 13, 1913 (A. P. Dodd).

*Habitat*: Gordonvale and Harvey’s Creek (Cairns), Queensland.

*Type*: No. Hy 2202, Queensland Museum, Brisbane, the specimen on a tag, the head on a slide. Type locality Gordonvale.

A second female was subsequently found labelled “Sweeping in jungle, Harvey’s Creek, near Cairns, November 15, 1913 (A. P. Dodd).”

1 *Antea*, II, p. 320, line 6 of the description of *fusciventris*, *Catalicoccus* read *Aplastomorpha*. 
2. **Pseudosphegigasterus Albipes** new species of A. P. Dodd and A. A. Girault

*Female:*—Length, 2.70 mm.

Differs from the generic description in bearing an obscure cross-carina on the scutellum and in having complete lateral carinae on the long propodeum.

Dark metallic green, the abdomen bluish, the legs and antennal scape white, the front coxae somewhat dusky, pedicel brown, rest of antennae black.

Wings hyaline; stigmal vein half as long as the postmarginal, the latter distinctly shorter than the marginal. Thorax polygonally reticulate, the reticulation in raised lines, rather coarser between the carinae of propodeum, the propodeum laterad of the carinae, the axilla and scutellum caudad of the suture very finely scaly. Abdomen rather broader than the thorax, conic-ovate, the second segment occupying about one third of the surface. Mandibles 3- and 4-dentate. Funicle joints all longer than wide, the first distinctly the longer, the fifth as long as the pedicel, the club with a terminal spur.

Described from one female caught in jungle, February 11, 1914 (A. P. Dodd).

*Habitat:* Babinda, Queensland.

*Type:* No. Hy 3303, Queensland Museum, Brisbane, a female on a tag; head and hind leg on a slide.

The genotype is a new species. It measures 1.25 mm. and was taken March 12, 1912. The type is on a tag, the head and hind legs on a slide.

**GENUS PARACROCLISIS** Girault.

1. **Paracroclisis Washingtoni** Girault.

The distal three segments of the abdomen dorsad are finely scaly. *Type* re-examined.

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

*Female:*—Like *Paracroclisis* Girault but the propodeum is short, its spiracles are small and rounded, its lateral carinae absent; the postmarginal vein is a fourth longer than the marginal, the latter slightly thickened; stigmal vein nearly as long as marginal, straight, with a large round knob; the fourth abdominal segment not twice as long as the second. Also, the petiole is only a little longer than wide. Head very large.

1. **Acroclisoides Megacephalus** new species of Girault and A. P. Dodd. *Genotype.*

*Female:*—Length, 1.60 mm.

Head and thorax dark metallic green; first two pairs of coxae concolorous; rest of legs and antennal scape and pedicel golden yellow, rest of antennae black; abdomen dark metallic blue. Fore wings hyaline, with an obscure dusky spot just beneath knob of stigmal vein. Head much wider than the thorax, the vertex narrow, the frons directed cephalad, mandibles 4-dentate. Pronotum very short. Parapsidal furrows complete, distinct. Scutellum as in *Paracroclisis*. Propodeum scaly. Abdominal petiole not slender, not as long as hind coxae; fourth segment occupying a half of the surface (excluding petiole). Antennae 13-jointed, with two ring and three club joints; pedicel scarcely longer than wide, the first funicle joint distinctly longer than pedicel and twice as long as wide. Funicle not elavate, the joints gradually decreasing in length but the last joint plainly longer than wide; the club as long as the two preceding joints united.
AUSTRALIAN HYMENOPTERA CHALCIDIOIDEA, VI.—GIRAULT. 335

Described from one female caught by sweeping in jungle, November 1, 1913 (A. P. Dodd).

_Habitat:_ Gordonvale (Cairns), Queensland.

_Type:_ No. _Hy_ 2804, Queensland Museum, Brisbane, the specimen on a tag, the head on a slide.

2. **ACROCLISOIDES LATICEPS** new species of A. P. Dodd and A. A. Girault.

_Female:_—Length, 1.75 mm.

Very similar to _megacephalus_ but the hind coxa also concolorous, the fore wings hyaline, the postmarginal vein no longer than the marginal, the pedicel only suffused with yellow, the last three funicle joints yellow, ringed with black apically, the abdomen longer, oval, the fourth segment occupying less than a half of the surface, the abdomen not squarely cut off behind it as in _megacephalus_. All three species have very large, 4-dentate mandibles.

_Described from one female caught in forest, January 27, 1914 (A. P. Dodd)._  
_Habitat:_ Gordonvale (Cairns), Queensland.

_Type:_ No. _Hy_ 2805, Queensland Museum, Brisbane, the specimen on a tag, the head on a slide.

3. **ACROCLISOIDES MAJOR** new species of A. P. Dodd and A. A. Girault.

_Female:_—Length, 2.50 mm.

Similar to the genotype but much larger, all coxae concolorous, rest of legs and antennal scape and pedicel lemon yellow, fore wings hyaline; head large but only a little wider than the thorax, the vertex not narrow, mandibles very large, petiole of abdomen yellow, not longer than hind coxa nor half as long as rest of abdomen, segments 2-4 subequal, the remaining segments very short and hidden; stigmal vein somewhat longer than the marginal and a little shorter than postmarginal; funicle joints longer.

_Described from one female caught by sweeping edge of jungle, December 20, 1912 (A. P. Dodd)._  
_Habitat:_ Kuranda, Queensland.

_Type:_ No. _Hy_ 2806, Queensland Museum, Brisbane, the specimen on a tag, the head on a slide.

EPIPOLYCYSTUS new genus.

_Female:_—Like _Neopolycystus_ Girault but the club lacks the nipple-like fourth joint (or at least it is barely indicated) and is only 2-jointed, the fourth segment of abdomen is a little longer than the second, the third a little shorter, the three combined occupying two thirds of the surface. Also the propodeum is quite different in shape, being conical, very short at the spiracle (in _Neopolycystus_ nearly as long from the spiracle as along the meson, the short neck making the difference), long at meson. Segments 2 and 3 of abdomen canted at meson with very slight notches. Segment 5 of abdomen transverse sublinear, not half the length of segment 4. Antennae 12-jointed with three ring-joints.

1. **EPIPOLYCYSTUS ASILUS** new species. Genotype.

_Female:_—Length, 1.30 mm.

Dark metallic green, the wings hyaline; all of each leg and the scape yellow-brown, also first two ring-joints which are smaller than the third. Funicle joints more or less equal, enlarging slightly distad, each a little wider than long, the pedicel distinctly longer. Head
and thorax polygonally reticulated, the lines not raised, the propodeum a little smoother. Third ring-joint distinctly larger than the other two.

Described from one female captured on a window, October 25, 1913 (A. P. Dodd).

**Habitat:** Gordonvale (Caïns), Queensland.

**Type:** No. Hy 2807, Queensland Museum, Brisbane, the specimen on a tag, the head and a hind leg on a slide.

**NEOPOLYCYSTELLA** new genus.

**Female:**—Similar in all details to *Epipolygystus* Girault but the fifth abdominal segment is not transverse-sublineal but long, longer than the third, over half the length of segment 4 which is longest. Postmarginal vein somewhat shorter than the marginal. Propodeum with lateral carinæ, longer at the spiracle which is situated just above and cephalad of a ‘gulley.’ Segment 3 of abdomen not half the length of segment 4. Head a little wider than long (cephalic aspect), the antennal club 3-jointed.

### 1. NEOPOLYCYSTELLA SICARIUS new species. Genotype.

**Female:**—Length, 2.10 mm.

Dark metallic green, the wings hyaline, the coxae concorormous, the legs reddish brown; abdomen shining, polished; head and thorax uniformly punctate. Pedicel longer than first funicule joint, the antennæ black; funicule 1 longest of the funicule, somewhat longer than wide; funicule 5 quadrate. Club simple.

Described from one female captured by sweeping in the forest, December 2, 1912 (A. P. Dodd).

**Habitat:** Gordonvale (Caïns), Queensland.

**Type:** No. Hy 2808, Queensland Museum, Brisbane, the specimen on a tag, the head on a slide.

**CRYPTOPRYMNIOIDES** new genus.

**Female:**—Petiole of abdomen enlarged at base, short, about two thirds the length of the hind coxae. Antennæ 13-jointed with two ring-joints, the club 3-jointed. Propodeum short, punctate, without carinæ or a neck, the spiracle minute and with an indefinite spiracular suture. Segments 2, 4, and 5 of abdomen subequal, longest, segment 2 occupying about a sixth of the surface, 3 shorter than it, the caudal margins of all straight, segment 6 not much shorter than the others. Both mandibles strongly 4-dentate. Parapsidal furrows absent. Pronotum transverse. Scutellum simple. Marginal vein short, the postmarginal and stigmal veins long, the postmarginal slightly longer, the stigmal slightly shorter, than the marginal. Abdomen ovate.

### 1. CRYPTOPRYMNIOIDES RABIOSUS new species. Genotype.

**Female:**—Length, 1.50 mm.

Very dark metallic green, the wings hyaline; antennæ black; legs concorormous, the knees and tarsi (except distal joint) pale. Mandibles with the inner tooth somewhat truncate. Funicule joints all a little wider than long, subquadrate. Thorax densely polygonally reticulated, the reticulation in raised lines.

Described from one female captured by sweeping miscellaneous vegetation along the Pioneer River, October 19, 1911 (A.A.G.).

**Habitat:** Mackay, Queensland.

**Type:** No. Hy 2809, Queensland Museum, Brisbane, the above specimen on a tag, plus a slide bearing head and a hind leg.
ASYNTOMOPUS new genus of Girault and A. P. Dodd.

_Female:_—Head not much wider than the thorax. Mandibles plainly tridentate, the outer tooth long and curved. Antennae 13-jointed, two ring-joints, three club joints. Pronotum not especially large. Parapsidal furrows complete, distinct. Scutellum with a cross-suture before the apex. Propodeum long, punctate, with a distinct median and true lateral carinae; also deep, distinct spiracular sulci running its whole length. Abdominal petiole long and slender, fully twice as long as the hind coxa; second segment the longest, occupying nearly one third of the surface (excluding the petiole); segments 3-5 subequal, each one half as long as the second; caudal margins of segments straight. Postmarginal and marginal veins subequal; stigmal vein very oblique, two fifths as long as the marginal.

1. **ASYNTOMOPUS FLAVISCAPUS** new species of Girault and A. P. Dodd. Genotype.

_Female:_—Length, 2.75 mm.

Dark metallic blue-green; coxae concolorous; rest of legs and antennal scape golden yellow; all femora and posterior tibiae dusky at the centre; rest of antennae black. First funicle joint twice as long as wide, distinctly longer than the pedicel; 2-6 gradually shortening, the sixth as long as the pedicel and longer than wide; club as long as the two preceding joints united. Wings hyaline.

Described from one female caught by sweeping in jungle, August 31, 1913 (A.A.G.).

_Habitat:_ Gordonvale (Cairns), Queensland.

_Type:_ No. _Hy 2810_, Queensland Museum, Brisbane, the specimen on a tag, the head and hind legs on a slide.

TRIPOLYCYSTUS new genus of A. P. Dodd.

_Female:_—In Girault's table of genera (1913), running near _Enyaliomorphpha_ Girault and _Policysteliae_ Girault. Head not wider than thorax, no longer than wide. Mandibles 4-dentate. Antennae 13-jointed, with three ring and three club joints, the funicules joints subquadrate. Pronotum short. Parapsidal furrows half complete. Scutellum with a deep cross-suture before apex. Propodeum rather long, with a distinct neck, with lateral carinae and narrow spiracular sulci; median carina absent. Abdominal petiole very short, hidden by the propodeal neck. Abdomen conic-ovate, no longer than thorax, depressed above, convex beneath; second segment occupying a third of the surface, third and fourth subequal, the others shortening. Marginal vein somewhat thickened, postmarginal as long as marginal, stigmal distinctly shorter.

_Type:_ The following species.

1. **TRIPOLYCYSTUS SULCATUS** new species of A. P. Dodd.

_Female:_—Length, 1.75 mm.

Very dark metallic green, the coxae concolorous, the abdomen brighter, first two pairs of femora brownish, rest of legs and antennal scape golden yellow, rest of antennae black. Wings hyaline. Thorax polygonally reticulated, the reticulation in raised lines, the propodeum punctate. Pedicel a little longer than any of the funicle joints of which the first is smallest, a little wider than long, the others slightly longer than wide; first club joint longest of the club.

Described from one female caught on a window, February 17, 1914 (A. P. Dodd).

_Habitat:_ Gordonvale (Cairns), Queensland.

_Type:_ No. _Hy 2811_, Queensland Museum, Brisbane, the specimen on a tag; head and hind legs on a slide.
POLYCYSTOMYIA new genus of A. P. Dodd.

*Female:*—In Girault's table of genera (see Memoirs of Queensland Museum, vol. II) running close to Polycysteloides Girault and *Kuryakauromorpha* Girault but differing from both these genera in bearing a noncarinate propodeum. Antennae 13-jointed with three ring and three club joints. Parapsidal furrows one third complete. Scutellum simple. Propodeum punctate, rather long, without carina or sulci. Abdominal petiolo very short; abdomen conic-ovate, depressed above, gently convex beneath, no longer than the head and thorax united; second segment occupying barely one fourth of surface, 3-5 subequal, each barely half as long as 2, 7 somewhat lengthened. Marginal vein somewhat longer than the postmarginal, the latter almost twice as long as the stigmatic. Mandibles not seen.

1. **POLYCYSTOMYIA PUNCTATA** new species of A. P. Dodd. Genotype.

*Female:*—Length, 2.60 mm.

Dark metallic green, the posterior coxae and base of other coxae concolorous, rest of legs and antennal scape and pedicel golden yellow; rest of antennae black. Thorax, including propodeum, densely punctate. Wings hyaline. Pedicel subequal to last funicle joint, which is distinctly longer than wide, without carina 1 distinctly longer than the pedicel, the others gradually shortening; club no wider than funicle, as long as two preceding joints united; first two club joints subequal; ring-joints increasing in size, the first small.

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

*Habitat:* Gordonvale (Cairns), Queensland.

*Type:* No. Hy 2312, Queensland Museum, Brisbane, the specimen on a tag, the head on a slide.

PTEROSEMELLA new genus.

For diagnosis, see antea, p. 317. The genotype is a new species. It measures 1.85 mm. and its types are six males on a card, the head and hind legs on a slide. The tegulae are pallid.

**GENUS MERISMOMORPHA** Girault.

1. **MERISMOMORPHA ACUTIVENTRIS** Girault.

The type measures 1.50 mm., is a female on a tag and was captured May 18, 1913.

PTEROSEMIGASTRA new genus of Girault and A. P. Dodd.

*Female:*—Head no wider than the thorax. Antennae 13-jointed, with two ring and three club joints. Pronotum not long; scutum with complete parapsidal furrows; scutellum with a delicate cross-suture. Propodeum scaly, with a distinct median carina, also a cross-carina, the lateral ends of which curve abruptly cephalad, joining the cephalic margin medially of the spiracles and thus forming short lateral carinae; spiral small and rounded, without distinct spiracular sulci. Petiole of abdomen short and stout. Abdomen conic-ovate, longer than the thorax, straight above, convex beneath; second segment occupying one third of the surface; third and fourth segments subequal, each one half shorter than the second; fifth half as long as the third; sixth and seventh subequal, each as long or slightly longer than the fourth. Ovipositor exerted for a length equal to one third that of the abdomen. Marginal vein one third longer than the postmarginal, the latter twice as long as the stigmatic. Mandibles 3 and 4-dentate.

**Female:**—Length, 2.10 mm.

Very dark metallic purplish, the coxae concolorous, the second abdominal segment brilliant metallic blue-green; rest of legs, antennal scape and funicle joints 4–6, bright golden yellow; rest of antennæ dusky yellow. Wings hyaline. Pedicel distinctly longer than any of the funicle joints; funicle joints slightly elavate, almost subequal; 1–5 longer than wide, the sixth quadrate; club as long as the two preceding joints combined; first club joint as long as the other two combined.

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

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

**Type:** No. *Hy* 2813, Queensland Museum, Brisbane, a female on a tag, the head and hind legs on a slide.

2. *PTEROSEMIGASTRA NIGERFLAGELLUM* new species of Girault and A. P. Dodd.

**Female:**—Length, 1.75 mm.

Dark metallic green, the coxae concolorous; abdomen suffused with brown, the first segment bright metallic blue-green; femora dusky brown; tibia, tarsi and antennal scape golden yellow; pedicel dusky brown; flagellum black. Differing from *genone* in having the marginal and postmarginal veins subequal, each over twice as long as the stigmal; abdomen slightly convex above, the second segment not occupying one fourth of the surface, 3 not a half the length of 2, 4 nearly twice as long as 3, 5 a little longer than 4 and subequal to 2, 6 subequal to 4; funicle joints all longer than wide, the first the smallest.

Described from one female caught in jungle, July 31, 1913 (A. P. Dodd).

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

**Type:** No. *Hy* 2814, Queensland Museum, Brisbane, the specimen on a tag, the head on a slide.

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

**Female:**—Head much wider than the thorax; antennæ inserted on about the middle of the face, 18-jointed with three ring-joints, three club joints; third ring-joint much longer than the other two and as long as wide. Mandibles tridentate. Parapsidal furrows half complete. Scutellum carinated posteriorly. Propodeum scaly, with a median carina and a distinct cross-carina; very deep, distinct spiracular sulci, the mesal margin of the sulci delicately carinated. Marginal vein two thirds longer than the postmarginal and twice as long as the stigmal. Abdomen short, scarcely as long as thorax; petiole shorter than hind coxae, longer than wide, vertical; segment 2 occupying nearly a third of surface, almost twice as long as 3. Differing from *Polyeycteidae* Girault in having tridentate mandibles, a longer marginal vein, distinct spiracular sulci, a carinated caudal margin of the scutellum, a shorter abdomen and a longer second abdominal segment. The cross-carina on scutellum is at caudal margin as seen from direct dorsal aspect and has analogy to the cross-suture frequently found in this place but is not one as usually understood.


**Female:**—Length, 2 mm. Short, stout. Head and thorax very dark metallic green, almost black; coxae and first two pairs of femora concolorous; posterior femora and all tibiae and tarsi bright golden yellow; abdomen metallic green, not bright but much brighter than thorax; scape, pedicel and ring-joints golden yellow; funicle suffused with brown; club black. Wings hyaline. Antenna gently elavate. Pedicel a fourth longer than funicle 1, the latter not as long as combined length of ring-joints, one third longer than wide, 2 as long as 1, 3–5 shorter, wider than long; club nearly as long as three preceding joints united, first joint the largest.
The form and sculpture of this species is so clear-cut as to appear to have been chiselled out by a sculptor. The head is large.

Described from one female caught in jungle July 31, 1913 by sweeping (A. P. Dodd).

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

**Type:** No. Hy8215, Queensland Museum, Brisbane, the specimen on a tag; head and hind leg on a slide.

A second female same place, August 20, 1914 (A.A.G.).

2. **PARAPOLYCYSTUS CLAVICORNIS** new species of A. P. Dodd.

**Female:**—Length, 3 mm.

Similar to the genotype, *polychoricornis*, but the abdomen is bright burnished coppery, all the legs (except the coxa) are blood red, antennae rather darker, the third ring-joint is much larger, distinctly longer than wide and the raised reticulation of the thorax is coarser, segments 2-4 of abdomen excised at meson of caudal margin (only second and third in *polychoricornis*).

Described from one female labelled "Stradbroke Island, H. Hacker, November 5, 13."

**Habitat:** Stradbroke Island, Southern Queensland.

**Type:** No. Hy8216, Queensland Museum, Brisbane, the specimen on a tag, the head and hind legs on a slide.

In this genus the antennae are clavate, the club much enlarged, the third ring-joint enlarged and forming a transition between the ring and funicle joints, more especially so in *clavicorns*. The petiole is vertical and from a distinct knob-like neck of the propodeum. Head convex, round from cephalic aspect.

**POLYCYSTELOMORPHA** new genus.

**Female:**—Running to *Polycystoides* Girault but both mandibles 4-dentate, the petiole of abdomen slender, distinctly much longer than the hind coxa (nearly twice longer), the parapsidal furrows distinct and complete, narrow, the scutellum simple, the form shorter, the body of the abdomen no longer than the thorax, convexed as in *Polycystella*, the second segment occupying somewhat over half of the surface. Propodeum tricarinate, long, the lateral carinae curved, the spiracle minute, round, without a definite sulcus. Mandibles deeply cleft. Post-marginal vein shorter than the marginal, the well-developed stigmal vein a third shorter, curved; the postmarginal not especially long for that vein and really somewhat (a third) shorter than the marginal which is of moderate length but not long. Club solid; two ring-joints. Pronotum transverse.

1. **POLYCYSTELOMORPHA FLAVIFEMUR** new species. Genotype.

**Female:**—Length, 1.15 mm.

Dark aeneous, the wings hyaline, the coxa concolorous, the rest of the legs and all of each antennae pale yellow, the club dusky. Head and thorax densely seply, also the petiole, rest of abdomen highly polished. Venation pale. Antennae inserted on a level with the ventral ends of the eyes (or thereabouts), rather distant from the clypeus; joints 2 and 3 of funicle longest, a little longer than wide, 1 barely longer than wide, 5 subquadrate, 6 wider than long; pedecell a little longer than funicle 2; club wider, without a terminal spine. A fovea at cephalic margin of propodeum near base of lateral carina.

Described from one female captured in forest, August 10, 1913 by sweeping (A. P. Dodd).

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

**Type:** No. Hy8217, Queensland Museum, Brisbane, the specimen on a tag, the head and hind tibiae on a slide.
NEOPOLYCYSTUS new genus.

Male:—Head (cephalic aspect) round, the mandibles 3- and 4-dentate, the antennae 13-jointed with three ring-joints, the club 3-jointed (but with a distal, tubercle-like fourth joint, the antennae 14-jointed). Parapsidal furrows two-thirds complete from cephalad. Scutellum simple. Propodeum punctate, noncarinate but with moderately short, complete spiracular sulci and a fovea at cephalic margin half way to spiracle from meson; spiracle not large. Postmarginal vein as long as the marginal, the stigmal a third or more shorter. Petiole slender, distinctly longer than the hind coxa, the second abdominal segment next longest of the segments, occupying about a fourth of the surface, its caudal margin convex, the third segment as long as the second, the fourth longest, occupying half of the surface and inclosing all of the rest. Pronotum transverse-linear. Fore wings with short marginal fringes.

1. NEOPOLYCYSTUS INSECTIFURAX new species. Genotype.

Male:—Length, 1.75 mm.

Dark metallic green, the wings hyaline, the scape, legs, cephalic coxa (more or less) and the tegulae, yellowish brown; femora washed with metallic. Rest of antenna black, the coxae concolorous. Head and thorax reticulate punctate, the abdomen polished, without sculpture. Pedicel slightly longer than funicle 1, which is slightly the longest of the funiculi, barely longer than wide, the fifth or distal joint plainly wider than long; distal club joint simple.

Described from four specimens selected at random from sixteen on a card in the collections of the National Museum of Victoria at Melbourne, labelled ‘‘29. Ringwood, Victoria. 18-12-03.’’ and mounted with a flower-like cluster of red nematocerous, diploerous pupae on the tip of a leaf. The pupae bore two terminal horns cephalad. The pteromalids emerged through a single, large, round hole in the side of each pupa.

Habitat: Ringwood, Victoria.

Types: In the National Museum, Melbourne, the above specimens; a slide with a head, hind legs and antennae.

TRIGONOCASTRELLA new genus.

Female:—Head (cephalic aspect) a little wider than long, the antennae inserted in the middle of face, 13-jointed with two ring-joints, the club 3-jointed, the antennae slender. Parapsidal furrows half complete. Both mandibles 4-dentate. Scutellum simple. Propodeum punctate, with a complete median carina and straight spiracular sulcus, the spiracle cephalic, small, round-oval. Petiole of abdomen distinctly projecting caudad of hind coxa which are inserted further cephalad; petiole distinctly longer than wide. Segment 2 of abdomen notched at the meson caudad, long, occupying somewhat over a third of the surface, segment 4 half its length, distinctly longer than 3 which is short. Postmarginal vein elongate, as long as the marginal, the stigmal distinctly shorter than either, about half the length of the postmarginal, slender.

Male:—The same but the spiracular sulcus is curved and shallower, cylindrical oval instead of conic-ovate, the antennae filiform.

1. TRIGONOCASTRELLA PARASITICA new species. Genotype.

Female:—Length, 1.35 mm.

Dark metallic green, the wings hyaline, the scape except at tip, tibiae, knees, tarsi and femora (more or less) yellowish brown, the femora washed with metallic. Head and thorax punctate confluent. Scape slender, distal club joint simple, pedicel subequal to funicule 1 which is somewhat longer than wide, the following joints gradually shortening.
Male:—The same but the femora wholly yellow-brown and the scape; also, the funicle joints are subequal, the first about twice the length of the pedicel, not as long as the club, the sixth distinctly longer than the pedicel, distinctly shorter than 1.

Described from two male, one female, specimens on a card in the collections of the National Museum of Victoria at Melbourne, labelled "31. Bred from leaves of Artichoke, 12.92."

Habitat: Melbourne, Victoria.

Types: In the National Museum, Melbourne, the above specimens and a slide with the female head, hind leg and male antennae.

Later, three more specimens from the same collections.

ACROCLISELLA new genus.

Female:—Similar in shape to Paracoloclis Girault but segment 4 of abdomen is not enlarged, a little shorter than segment 2, the mandibles are 3- and 4-dentate and the propodeum bears lateral carina which about the middle curve in to the median carina, the spiracle oval moderate. Postmarginal vein elongate, over twice the length of the stigmal but a little shorter than the rather long marginal. The longer marginal vein and different mandibles separate it from Acrocliseodes Girault and Dodd; also the much longer petiolo and slender body. In the female runs to Lomonostridae but the scutellum lacks the cross-suture and is as in Paracoloclis. True spiracular sulci absent.

1. ACROCLISELLA PERPLEXA new species.

Female:—Length, 2.30 mm.

Dark metallic green, the wings hyaline, the venation dusky, the legs except coxae and the scape dull honey yellow; center of abdomen along meson dorsad suffused with yellow. Antennae black. Mandibles white, reddish brown at tip. Pedicel shorter than funicle 1 which is longest, wider distad, nearly one and a half times longer than wide at apex, joints 2-4 subequal, somewhat longer than wide, 6 quadrate, 5 subequal to pedicel. Cephalic margin of clypeus near lateral ends emarginate. Head, parapsides, petiolo, propodeum, axilla, pronotum lateral and scutum cephalad, scaly reticulate; rest of thorax punctate, the scutellum a little coarser than scutum. Parapsidal furrows punctate, terminating caudal in an oval fovea which is narrowly separated from the mesal ends of the axillae, thus incomplete. Abdomen subglabrous, segment 3 at meson of caudal margin with a slight notch, segment 2 depressed. Propodeum with a distinct neck; a large fovea just caudo-mesad of the spiracle, its caudal boundary froming a cross-carina lateral of the lateral carina.

Described from one female.

Habitat: Queensland.

Type: No. Hy 2880, Queensland Museum, Brisbane, the specimen on a tag; antenna and hind legs on a slide.

PARAPTEROSEMOIDEA new genus.

Female:—In my table of genera runs to Apterosemoidea Girault but differs as follows: The antennae are inserted below the middle of the face, on or a little below the ventral ends of the eyes, the mandibles are 4-dentate, the abdomen is convexed ventrad. The propodeum without true carina but a fold or carina runs from the caudo-mesal part of the spiracle, latero-caudal, then crossing caudal of the spiracle and joining at apex another fold running meso-caudal from cephalo-lateral angle and forming a U at whose mouth lies the spiracle. Propodeum of nearly uniform length. Abdominal petiolo not half the length of the hind coxa. Third ring-joint as long as the other two combined. Otherwise like Apterosemoidea. Parapsidal furrows obtuse.
1. PARAPTEROSEMOIDEA SPURCIPENNIS new species.

Female:—Length, 1.25 mm.

Dark metallic green, the legs and scape yellow-brown, the abdomen reddish brown, dark coppery rather broadly at apex and with a not broad metallic stripe across base (also appearance of a narrow dusky stripe across distal edge of segments 2 and 3). Flagellum black; first two ring-joints yellowish; funicle 1 somewhat longer than wide, longest, a little shorter than the pedicel; funicle 5 wider than long, subequal to 2, 3 and 4. Joint 1 of caudal tarsus much longer than any of the others. Fore wing lightly embrowned throughout and with a distinct darker, rather broad cross-stripe from proximal two thirds of the marginal vein and a dark, longer than wide, rectangular area from apex of stigmal vein; the two are obscurely connected by a short mid-longitudinal arm. There are also two subhyaline cross-stripping, the first just proximal of the cross-stripe, the second just distal of it, between the cross-stripe and the submarginal area. Under the submarginal vein a darker longitudinal streak caudad. Fore wing with broad hairless line but this is closed cephalad by about six lines of discal cilia. Head and thorax with usual sculpture, finely punctate. Segments 2 and 3 of abdomen caudad at meson with very slight traces of incisions, the abdomen polished except at apex.

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

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

Type: No. Hy 2815, Queensland Museum, Brisbane, the specimen on a tag; head, hind legs and a fore wing on a slide.

PARATRIGNOASTRA new genus.

Female:—Agreeing with the description of Paracrocis Girault and running to that genus in my table of genera but differing at once in having segment 4 greatly lengthened, enclosing all but two of the rest of the segments and occupying somewhat over half of the surface (in the other genus four segments are distinct distad of 4). Also, the parapsidal furrows are only a third complete from cephalad, segment 3 of abdomen is a little longer than 2 and is straight caudad at meson, the petiole is about twice the length of the hind coxae, the propodeum is noncarinate but with distinct spinacral sulci and the postmarginal vein is not quite twice the length of the stigmal, barely shorter than the marginal. Otherwise the same.

1. PARATRIGNOASTRA VOLTAERAE new species.

Female:—Length, 1.40 mm.

Dark greenish green, the wings hyaline; scape pale; coxal concolorous, rest of legs reddish brown. Pedicel a little pale, subequal to funicle 1 which is longest, somewhat longer than wide; funicle 6 somewhat wider than long, 5 subquadrate; club wider, the articulations not very distinct. Thorax reticulately punctate, including the propodeum. Hind coxae and petiole finely scaly. Abdomen glabrous. Propodeum with a more or less distinct fovea at cephalic margin about half way to spiracle from the meson. Abdomen conic-ovate. Mandibles 4-dentate. Described from one female captured by miscellaneous sweeping, March 29, 1914 (A. P. Dodd).

Habitat: Halifax ( Ingham), Queensland.

Type: No. Hy 2819, Queensland Museum, Brisbane, the specimen on a tag.

SUBFAMILY DIPARINAe.

GENUS PANTSTAGON Walker.

The Australian species have the parapsidal furrows not quite complete, two large ring-joints and a large pronotum. Types of bellicosus, gracilis and australiensis re-examined.

1. PANTSTAGON CLARUS new species.

Female:—Length, 2.60 mm.

Somewhat like bellicosus but stouter and the abdomen is light yellowish brown with a distinct pattern as follows: It is margined conspicuously but not very broadly with metallic
purple from base to a little beyond middle, the tip above is purple and is preceded by a cross-
stripe of purple; between this cross-stripe and the end of the marginal stripe there is along
the margin a dot of purple (bellicosus has the abdomen brown and margined all around with
blackish purple, the distal fourth or somewhat more, purplish). The antennae are very similar
except that in this species the joints are a little longer (in both the joints shorten distal, 1
being somewhat longer than six which is only a little longer than wide); in gracilis 2 and 3
are subequal and somewhat the longest, longer than 6; in australiacus the joints are all some-
what longer than wide and subequal. In gracilis, the abdomen is margined somewhat as in
this species but more obscurely, the colors dull and the pattern obscured. Scutum and scutellum
scaly punctate, the propodeum rugose; ephallic part of scutum, pronotum and head scaly
(sculptured as in bellicosus except that in that species the scutellum is not punctate but rather
crassely scaly).

Described from one female captured in forest, April 12, 1914.

Habitat: Gordonvale (Cairns), Queensland.

Type: No. Hy 2821, Queensland Museum, Brisbane, the specimen on a tag; head and
hind legs on a slide.

A second female was obtained same place, May 21, 1914.

EPELELAPS new genus.

With a distinct lepaphine habitus. Hind tibial spurs single. Fore wings nearly as in the
Estenominae, the submarginal vein broken and somewhat shorter than the long marginal, the
postmarginal longer than the stigmus, only moderate in length. Fore wings rather slender, with
long marginal cilia. Antenna inserted slightly ventral of middle of the face, 13-jointed with
one ring-joint (but in the genotype, funicle 3 is distinctly wider than long), the club 3-jointed,
widener than the funicle. Axilla rather widely separated. Parasidal furrows complete. Club
rather abruptly formed. Wings without a pattern, hyaline or subhyaline. Mandibles tridentate.
Other structures as in Lelaps.

1. EPELELAPS HYALINIPENNIS new species. Female. Genotype.

Length, 1.75 mm. Black, the wings hyaline, the abdominal petiole, neck of propodeum
and the abdomen ventrad, yellowish brown. Legs yellow, also the antennae but the club black;
pedeate elongate, one ring-joint, the funicle joints all more or less subquadrate. Scutellum
distad of transverse suture (or distal third) longitudinally striate. Thorax scaly punctate,
the propodeum rugose, with a tooth dorso-lateral, distad of middle. Abdomen glabrous. Prono-
tum separated, transverse. A common species.

Habitat: Gordonvale (Cairns), Queensland. Jungle, June 7, 1913, two females.

Type: No. Hy 2825, Queensland Museum, Brisbane, one female on a tag, a hind leg and
the head on a slide.

2. EPELELAPS PONDEROSA new species. Female.

Length, 1.35 mm. Much like the genotype but the wings slightly embrowned throughout,
the abdomen dorsal is black only at proximal and distal thirds, the proximal funicle joint is
transverse like a ring-joint yet twice the length of the ring-joint and the distal funicle joint
is blackish. Segment 2 of abdomen over half the length of that region. Mandibles tridentate.

Habitat: Gordonvale (Cairns), Queensland. Jungle, June 16, 1913.

Type: No. Hy 2825, Queensland Museum, Brisbane, the above specimen on a tag, the
head and appendages on a slide with the type of Aphelinus nox Girault.

A second female was taken in the jungle at Gordonvale, July 24, 1913. Compared with
this, the postmarginal vein is twice the length of stigmus, the latter rather short. Abdominal
petiole longer than wide but shorter than the long caudal coxae. Original description verified.
PSEUDIPARA new genus.

Female.—Differ from Epilepsis in lacking the cross-suture on the scutellum, in having the marginal fringes of the fore wing of nearly normal length, the postmarginal vein elongate and the parapsidal furrows convergent caudal, meeting just before apex and incomplete. Differ from Pansensten and Dipara in having seven funicle joints and only one ring-joint which is large. Petiole of abdomen a little longer than the hind coxae. Otherwise like Epilepsis. Postmarginal vein over thrice the length of the stigmal. Club solid, the antennæ inserted on the middle of the face.

1. PSEUDIPARA ALBIGLAVA new species. Genotype.

Female.—Length, about 2 mm. Slender.

Dark metallic purplish, the legs and scape yellow, wings uniformly slightly dusky; club white; funicle and pedicel black. Pedicel slightly longer than funicle 1 which is longest and somewhat over twice longer than wide, 2:4 subequal, each a little shorter than 1, 5 and 6 subequal, a little shorter, 7 a little shorter than 6, distinctly longer than wide. Third tooth of mandible obtuse, the other two acute. Ocelli nearly in a straight line, distant from the eyes. Marginal fringes of fore wing a little longer than usual, about a seventh of the greatest wing length, not as long as some of the bristles from the venation. Marginal vein twice or more the length of the submarginal. Parapsidal furrows not attaining pronotum, running off laterad. Thorax delicately scaly; scutellum subglabrous but with longitudinal striae laterad. Abdomen glabrous, the petiole with strong longitudinal carinae; second segment occupying two thirds of the surface. Propodeum with a distinct neck and with a few interlacing cross and longitudinal carinae which form very large focus-like areas; no true median and lateral carinae. Abdomen conic-ovate. Axilla widely separated. Pronotum not especially large. Hind wings dusky; both wings clearer toward base.

Described from one female captured in forest, sweeping at a height from 2,500 to 3,000 feet (Mt. Pyramid), June 3, 1913 (A. P. Dodd).

Habitat: Gordonvale (Cairns), Queensland.

Type: No. Hy 2821, Queensland Museum, Brisbane, the specimen on a tag; head, pair of wings and two hind tibiae on a slide.

SUBFAMILY SPALANGHINÆ.

SPALANGIOMORPHA new genus.

1. SPALANGIOMORPHA FASCIATIPENNIS new species.

For diagnosis, see ante, pp. 333-334.

Male.—Antennæ filiform, 11-jointed, with one ring-joint, the distal funicle joint a little longer than wide, a little longer than the pedicel; funicle 1 distinctly longer than wide; club solid. Club and distal two joints of funicle black; rest of antenna pale yellowish. Club much longer than the funicle joints. Mandibles 4-dentate. Abdomen, lateral aspect, globular, the petiole longer than the caudal coxa. Postmarginal and stigmal veins more or less equal, the marginal cilia rather short, not as long as the stigmal vein.

Described from one male taken from the window of a grocery store, Port Douglas, Queensland, October 30, 1911. A female also, captured in a similar situation at Halifax (Ingham), Queensland, February 25, 1913.

The head resembles that of an ant, the antennæ inserted far down near the clypeus. Abdominal petiole moderate. The female genotype measures 1.35 mm., and was captured at Port Douglas, October 30, 1911 from the window of a grocery store. Its type is the female on a tag, the head, hind legs and a fore leg on a slide with the type appendages of Chalcidellodes nigrithorax to Girault.
MEMOIRS OF THE QUEENSLAND MUSEUM.

GENUS SPALANGIA Latreille.

1. SPALANGIA GROTUSI Girault.

The cross-line of foveae on distal scutellum is much more distinct than in australiensis, punctate; there is a distinct cross-line of punctures on scutum a little cephalad of middle and caudad of this line a deep puncture at meson and a smaller one lateral near lateral margin; the scutellum lacks the lateral longitudinal line of pin-punctures and other pin-punctures. Scutum glabrous and without other sculpture, practically. Face with a few scattered minute punctures. Type re-examined.

2. SPALANGIA AUSTRALIENSIS Girault.

The lateral margin of propodeum is smooth. Scutellum with a curved lateral longitudinal line of five pin-punctures from inner apex of axilla to cross-line of pin-punctures. The scutum is very finely alutaceous. Pronotum faintly sculptured like the abdomen and with scattered pin-punctures. A line of punctures on propodeum parallel to lateral margin from the spiracle to caudal margin. Scutum glabrous lateral; with a mesal foveolate impression with a faint median carina through it. Type re-examined.

3. SPALANGIA VIRGINICA Girault.

The scutellum also lacks the fine punctures elsewhere. Propodeum faintly scaly. Abdominal petiole distinctly longer. Head about as in grotius. Funicle 1 over twice the length of 2 which is oval, the others gradually lengthening. Pedicel shorter than funicule 2. Type re-examined.

4. SPALANGIA PARASITICA new species. Female.

Exactly similar to grotius but the scutum is distinctly longer, not distinctly wider than long, the cross-line of punctures somewhat distad of middle. Funicle 1 is a little wider than long, barely longer than 2 and plainly not half the length of the pedicel. Segment 4 of abdomen occupying nearly half of the surface.

Described from one female captured by sweeping in vicinity of canefields, Herbert River, April 2, 1914 (A. P. Dodd).

Habitat: Ingham, Queensland.

Type: No. Hy 2825, Queensland Museum, Brisbane, the above female on a tag.

Later, a female was found which had been captured in jungle, July 23, 1912 at Goondi near Innisfail (Johnstone River).

Both the species parasitica and grotius differ from the other two species in having the propodeum lateral of the lateral line of foveae, densely rugoso-punctate. The punctate lines on the head are alike in all four species.

Only the abdomen of the Pteromalidae, as a rule, shrinks after death, so that it is important to examine it closely just after taking the specimen from alcohol. The Eumenidae, Aspholini and Merisini need careful comparison.

There are some interesting parallelisms in this family with the Lepidoptera and other groups of the Mecogasteridae. Forms seem to be repeated in widely divergent groups.

ANTHONY JAMES CUMMING, Government Printer, Brisbane.