

AUSTRALIAN HYMENOPTERA CHALCIDOIDEA—VI.

SUPPLEMENT.¹

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; coxæ metallic; femora dark brownish; trochanters, knees and tibiæ, golden yellow; tarsi paler yellow; antennal scape golden yellow; rest of antennæ fuscous. Thorax densely punctate; parapsidal furrows almost, or quite, complete; *scutellum with a distinct cross-suture*. Propodeum rather long, with a neck; distinctly tricarinate; 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; stigmal vein somewhat shorter. Antennæ 13-jointed, two ring, three club joints; first funicle joint distinctly longer than the pedicel, 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 platyphylla*, December 8, 1913 (A. P. Dodd).

Habitat: Gordonvale (Cairns), Queensland.

Type: No. Hy 2762, 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).

Neocatolaccus 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 3 of abdomen as long as 2, 4 a little longer than

¹ See these Memoirs, II, pp. 103-334.

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 coxæ concolorous, the legs white, but the last two pairs of femora brownish black. Scape reddish brown. Differs from *australiensis* in having the lateral carinæ complete, not curving to form a cross-carina. Antennæ black, the pedicel not quite as long as the distal funicle joint which is somewhat wider than long, the joint preceding it quadrate; third club joint much the shortest. Clypeus longitudinally striate. Marginal, postmarginal, and stigmal 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 species.

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

Type: No. Hy 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 carinæ on the propodeum are present and distinct.

Brilliant metallic blue-green, the coxæ 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 funicle 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 29, 1913 (A. A. Girault).

Habitat: Townsville, Queensland.

Type: No. Hy 2764, Queensland Museum, Brisbane, the specimen on a tag, the head and a hind leg on a slide.

4. APLASTOMORPHA FLAVOBASALIS new species of Girault and A. P. Dodd.²

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; (scape 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-stripes. 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, the head and a caudal leg on a slide.

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

Female:—Length, 2.60 mm.

Dark metallic blue, the coxæ and femora concolorous, the base of the abdomen brilliant blue-green, the tibiae and tarsi white; antennal scape yellow; pedicel brown, rest of antennæ 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 and 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, 1.60 mm.

Brassy green, the wings hyaline, the coxæ concolorous, the scape and legs dull golden yellow, the caudal femora subfuscous, darker. Abdomen dull golden yellow and with five cross-stripes counting the fifth at tip, the first a short distance out from base. Antennæ dark brown. Abdomen subpetiolate. Propodeum with a thin, obscure median carina, more like a ruga and more obscure near apex (distad), the lateral carina complete, distinct, abruptly changing direction from caudo-laterad to caudo-mesad, opposite (mesad of) the spiracle; spiracular sulcus 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 not mostly yellow as in *pulchra*. Funicle 1 longest, longer than the pedicel, somewhat longer than wide.

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

Habitat: Brisbane, Queensland.

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

² Compare *Eurydinoteloides flavibasalis*.

TRIBE RAPHITELINI.

GENUS NASONIA Girault and Sanders.

1. NASONIA BREVICORNIS Girault and Sanders.

The footnote on page 307 of Part VI (these Memoirs, Vol. II, p. 307) refers to this species and not to *Muscidifurax 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 Brisbane, Queensland, October 3, 1911 and Mr. Edmund Jarvis, Assistant Government Entomologist, sent me six females reared from dipterous pupæ at Longreach and Aramac, Queensland, in October, 1913. The host was the sheep fly maggot. The antennæ of *brevicornis* are inserted slightly above the ventral ends of the eyes. The spiracular sulcus is distinct, just laterad of the lateral carina. A common species.

TRIBE ROPTROCERINI.

GENUS PARURIELLA Girault.

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

1. PARURIELLA HORRIDULA new species.

Female:—Length, 1.32 mm.

Like *Systasis sepositus* Girault but the antennæ 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. Hy 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 carinæ absent, the funicle more clavate, 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 *australiensis* Girault but not so slender, the propodeum distinctly shorter the venation pale yellow, the first two pairs of tibiæ white like the tarsi, the caudal tibiæ 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. Hy 2769, Queensland Museum, Brisbane, the female on a tag, the head and hind legs on a slide.

“In *australiensis*, the lateral carina is weaker cephalad and originates at the caudal apex of the spiracle” (A.A.G.).

GENUS ROPTROCEROPSEUS Girault.

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

Female:—Length, 2.30 mm.

Very dark metallic blue, the abdomen dull greenish, the cephalic coxæ and basal half of middle coxæ 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 foveate. 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 carinæ 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 coxæ 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 *Mcclauca* (A. P. Dodd). Rather common.

GENUS URIELLOIDES Girault.

This genus resembles somewhat *Aplastomorpha* Crawford rather than *Neocatolaccus* Ashmead.

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

Type: The following species.

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

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

Very dark metallic green, the coxæ concolorous, the abdomen burnished coppery, rest of legs golden yellow; antennal scape pale yellow, rest of antennæ blackish. Both mandibles 4-dentate. Antennæ inserted against the mouth, 13-jointed, with three ring 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 tricarinate, the carinae very distinct; spiracle small, rounded, situated further 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.

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

Habitat: Mulgrave River, Cairns District, Queensland.

Type: No. Hy 2772, Queensland Museum, Brisbane, the female on a tag, the head and hind legs on a slide.

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

2. PSEUDANOGMUS FUSCIPES new species.

Female:—Length, 1.60 mm.

Very similar to the genotype, being nearly black but the femora are concolorous, the tibiae 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 scaly.

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

Habitat: Brisbane, Queensland.

Type: No. Hy 2773, 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.)

PARANOGMUS 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. Antennae inserted below the middle of the face, on a line with the ventral 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, tricarinate, 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.

1. PARANOGMUS PALLIDICORNIS new species of Girault and A. P. Dodd. Genotype.

Female:—Length, 1.75 mm.

Brilliant metallic coppery green, the coxæ concolorous; rest of legs (except apical joint of tarsi which is dusky) and the antennæ, 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 funicle 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.

URIELLOMYIA 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 carinæ 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 is also the marginal which is about one and two third times the length of the stigmal. Antennæ 13-jointed with two ring-joints. Scutellum simple. Pronotum transverse. The axillæ are not advanced.

Male:—Not known.

Type: The following species.

1. URIELLOMYIA RESOLUTA new species. Genotype.

Female:—Length, 1.85 mm. Robust.

Very dark aneous green, the wings hyaline, the venation, legs, scape and pedicel yellow brown; pedicel dark above. Coxæ dark metallic. Thorax densely, finely reticulately scaly. Pedicel somewhat longer than any of the funicle 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 quadrate. 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 plus) and a slide with two heads and hind legs.

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

2. URIELLOMYIA FLAVICORNIS new species of Girault and A. P. Dodd.

Female:—Length, 2.60 mm.

Differs from the generic description in bearing 4-dentate mandibles and in propodeal characters; propodeum with a pair of very short, abbreviated median carinæ at base and complete lateral carinæ 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 coxæ concolorous; abdomen shining metallic coppery; antennæ golden yellow; femora and basal half of tibiæ yellowish brown; apical half of tibiæ

and the tarsi (except dusky apical joint) white. Wings hyaline; marginal vein one third longer than the stigmal 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. Antennæ inserted about middle of face; 13-jointed, with two ring, 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.

Metallic green; antennal scape and pedicel, coxæ 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, glabrous, with a median and lateral carina, the median carina dividing caudad; also mesad of the lateral carina there is another distinct longitudinal carina. Abdomen conic-ovate, depressed above, convex beneath, a little longer than the head and thorax united, segments 2, 5, 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 stigmal. 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; antennæ inserted about middle of face.

Male:—Not known.

Described from one female labelled "Brisbane, H. Hacker, 10-8-13."

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, 1.65 mm.

Differs from *Uriella* Ashmead in bearing axillæ 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 stigmal veins are rather short, the former a little the longer, the stigmal 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.

Dark æneous green with purplish tinges, the wings hyaline, the legs reddish brown except the concolorous coxæ. Antennæ honey yellow, the funicle 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 scaly. 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:—Not known.

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 a hind tibia on a slide.

In *Uriellomyia* the axillæ are not advanced (the genotype examined).

NEROPTROCERUS new genus.

Female:—Agreeing with the description of *Roptrocerus* Ashmead but the club solid, the antennæ thus but 10-jointed. The postmarginal and marginal veins are longer but neither long.

Male:—Unknown.

Type: The following species.

1. NEROPTROCERUS SUBATER new species.

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

Black metallic green, the wings hyaline, the coxæ concolorous, the legs yellowish brown, the cephalic femur concolorous. Scape concolorous with the legs, the pedicel dusky-brown, rest of antenna black. Funicle 1 longest, subequal to pedicel, somewhat longer than wide and widest distad; 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 papillæ crowded together). Cross-suture 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. Axillæ 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* 2778, Queensland Museum, Brisbane, the specimen on a tag; head, fore and hind legs on a slide with type appendages of *Hetreulophus bifasciatifrons* Girault.

TRIBE MERISINI.

GENUS AMICROMELUS Girault.

This genus belongs to the Metastenini of the Miscogasteridæ instead of the Trydymini as formerly stated by mistake.

W.

TRIBE BRACHYSCELIDIPHAGINI.

GENUS CŒLOCYBA Ashmead.

1. CŒLOCYBA VIRIDILINEATA Froggatt.

This species is doubtless a *Gyrolasella* of the elachertine Eulophidæ which see.

2. CŒLOCYBA 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-laterad 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 antennæ 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 *acineta*. 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 antennæ in this genus are only 12-jointed, two ring, three club joints, the ring-joints small. The antennæ are inserted well below the middle of the face.” (A. P. Dodd.)

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

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

Female:—Length, 1.50 mm.

Similar to *geniculata* Girault but all coxæ 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 *Bæckeia*, 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 *Bæinæ* and the genus *Hadronotus* Foerster 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 antennæ pale yellow. Lateral ocelli far distant from the eye margins. Antennæ 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 *Anysis* Howard, the antennæ being 10-jointed, strongly clavate, the club solid; antennæ 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 coxæ large. Axillæ 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.

Pale honey yellow and finely scaly. A stripe across cephalic margin of propodeum, the indicated cross-suture of scutellum and cephalo-lateral ends of the axillæ 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: Capeville (Pentland), Queensland.

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

What I thought was the abdomen of this specimen, which had become separated, bore six distinct purplish black cross-stripes, 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 antennæ 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.

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, foveate, 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 foveæ arranged transversely. Abdomen depressed, ovate, as long as the thorax. Hind femur swollen. Parapsidal furrows distinct. Occiput concave. Frons 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 antennæ yellowish brown, the head and thorax reticulated, shining, the propodeum foveate. 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. *Hy* 2783, 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 bæine proctotypoid. Abdominal segments following 2 transverse linear.

1. MUSCIDEOPSIS GOLDSMITHII new species. Genotype.

Female:—Length, 1 mm.

Dark metallic blue, the abdomen, legs and antennæ honey yellow, the wings hyaline, the venation pale yellow. Body polished; frons with scattered minute setigerous punctures. Cephalic coxæ bluish. Parapsidal furrows punctate. Scutellum about as long as the scutum. Thorax with a few long setæ 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 25, 1914.

Habitat: Gordonvale (Cairns), Queensland.

Type: No. *Hy* 2784, Queensland Museum, Brisbane, the specimen on a tag, the head and two hind tibia on a slide.

Dedicated to Oliver Goldsmith.

MUSCIDEOMYIA new genus.

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

1. **MUSCIDEOMYIA NIGRICYANEA** 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, noncarinate. Abdominal segments not lengthened, the abdomen normal. Stigmal vein with a rather large knob. Pedicel stout, longer than any of the funicle joints which widen distad, 5 largest. Ring-joint small. Club large, its joints distinct, wider than the funicle but not as long. Funicle 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. *Hy 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.

“Antennae as with *Aphobetus*, except that funicle 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 axillar 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.

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 rugæ 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 coxæ 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.

ORMYROMORPHELLA 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. ORMYROMORPHELLA BIARGENTINOTATA new species.

Female:—Length, 3 mm.

Dark æneous green, the wings trifasciate, the antennæ brownish yellow, also first two pairs of knees, first two tibiæ at tips, first two pairs of tarsi, cephalic tibiæ except dorsad 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 antennæ only 11-jointed; club indistinctly 3-jointed, the flagellum clavate, the first funicle joint like a ring-joint. Like *Asaphoideus* 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 stigmal 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 *Asaphoideus*. 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 coxæ black; antennæ 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 *Asaphoideus 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 carinæ 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 *Asaphoideus 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 2788, 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 antennæ pale straw yellow, the cephalic coxæ concolorous with the body. Caudal half of pronotum, the abdomen and the scutellum caudad 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 antennæ slenderer.

Male.:—Not known.

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

Habitat: Gordonvale (Cairns), Queensland.

Type: No. Hy 2789, Queensland Museum, Brisbane, the specimen on a tag; head, hind legs and a fore wing on a slide.

TRIBE 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 carinæ, 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 coxæ. Club long, with an apparent fourth joint near tip, the distal funicle joints quadrate, funicle 1 subequal to the pedicel, somewhat longer than wide. Antennæ 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. *Hy* 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 coxæ) and antennal scape golden yellow, rest of antennæ black. Scutum and propodeum densely reticulated, the parapsides, axillæ and scutellum almost smooth, and shining. Scutellum with a very distinct cross-suture and also with a deep oval fovea or depression in its centre. Propodeum long, strongly tricarinate. Abdomen short, convex above, straight beneath, the petiole as long as the hind coxæ, 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. Pedicel 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. *Hy* 2791, Queensland Museum, Brisbane, the specimen on a tag, the head and hind leg on a slide.

GENUS POLYCYSTOIDES Girault.

1. **POLYCYSTOIDES 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 2.50 mm. and was taken April 13, 1913.

GENUS HYOPTEROMALUS Ashmead.

1. **HYOPTEROMALUS 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. **HYOPTEROMALUS DUBIUS** 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; coxæ and femora brown; tibiae, tarsi and antennal scape golden yellow; rest of antennæ fuscous. Wings hyaline, venation as in *Hypopteromalus viridescens* (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 2792, 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 coxæ concolorous; rest of legs bright golden yellow; abdomen metallic purplish, its petiole yellow; antennal scape and pedicel yellow, rest of antennæ black. Antennæ 13-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 carinæ; 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 conic-ovate, no longer than the thorax; petiole no longer than the hind coxæ; 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 2793, 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 antennæ and hind legs on a slide. They were reared from bombycid cocoons, April 7, 1911. *Peterosema 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.

Like *prima* Girault but the abdomen is not darker than the thorax; the coxæ are concolorous; the pedicel is colored like the flagellum; the scape is golden yellow; the abdominal petiole is short, much shorter than the hind coxæ; 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; coxæ concolorous; rest of legs bright golden yellow; scape yellow; rest of antennæ black. Wings hyaline. Antennæ 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 coxæ; 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 fovea 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 2795, Queensland Museum, Brisbane, the specimen on a tag, the head on a slide.

GENUS EURYDINOTELOIDES Girault.

Synonym: *Polycysteloides* Girault.1. **EURYDINOTELOIDES FLAVIBASALIS** new species.*Female*:—Length, 2.50 mm.

Agrees with the generic description excepting that the lateral carinæ 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 tegulæ, knees, tibiæ, tarsi, scape and pedicel yellowish brown, the posterior tibiæ and tarsi pale; rest of antennæ dusky. Base of abdomen above broadly (somewhat over half of segment 2 dorsad) 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 subquadrate; 1 plainly longer than wide and longest of the funicle. 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 2796, Queensland Museum, Brisbane, the specimen on a tag, the head and hind tibiæ 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 sinus on the second abdominal segment; the petiole is twice as long as the hind coxæ; propodeum without a median carina but with complete, delicate lateral carinæ; 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.

Dark metallic green, the coxæ concolorous; rest of legs, abdominal petiole and antennal scape golden yellow; rest of antennæ 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. POLYCYSTELLA PETIOLATA new species of Girault and A. P. Dodd.

Female:—Length, 2 mm.

Like *abdominalis* but the lateral carinæ on the propodeum are distinct not delicate; there is a distinct sulcus 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 (scarcely longer than the third and not equal to one third of the surface in *abdominalis*). 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 *antea*, p. 320.

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 coxæ suffused with metallic. In the type, the femora and tibiæ 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; coxæ concolorous; femora and antennal scape and pedicel bright brownish yellow; tibiæ 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 tibiæ are uniformly rich reddish brown (the tibiæ 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 cephalo-laterad, 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 carinæ 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. Antennæ 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 2800, 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 tibiæ 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 tibiæ and tarsi white, the caudal coxæ 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 tibiæ reddish just below knees. The middle coxæ 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 2801, Queensland Museum, Brisbane, the specimen on a tag; hind tibiæ and head on a slide with slide type of *Aplastomorpha 5-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 *antea*, p. 322.

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

Female:—Length, 1.90 mm.

Like *æneus* Girault but the legs (including the coxæ) are golden yellow, the antennal scape golden yellow, pedicel and ring-joints brown, rest of antennæ black; second funicle joint a little shorter than first, the fifth longer than wide, not subquadrate. Abdominal segments as in *æneus*. 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 2802, 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)."

² *Antea*, II, p. 320, line 6 of the description of *fusciventris*, *Catolaccus* 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 carinæ on the long propodeum.

Dark metallic green, the abdomen bluish, the legs and antennal scape white, the front coxæ somewhat dusky, pedicel brown, rest of antennæ 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 carinæ of propodeum, the propodeum laterad of the carina, the axillæ 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 2803, 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 carinæ 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 coxæ concolorous; rest of legs and antennal scape and pedicel golden yellow, rest of antennæ 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 coxæ; fourth segment occupying a half of the surface (excluding petiole). Antennæ 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 clavate, the joints gradually decreasing in length but the last joint plainly longer than wide; the club as long as the two preceding joints united.

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 coxæ 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 coxæ 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 coxæ 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 caudad at meson with very slight notches. Segment 5 of abdomen transverse sublinear, not half the length of segment 4. Antennæ 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 (Cairns), 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 *Epipolycystus* Girault but the fifth abdominal segment is not transverse-sublinear 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 carinae, longer at the spiracle which is situated just above and cephalad of a "gully." 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 concolorous, the legs reddish brown; abdomen shining, polished; head and thorax uniformly punctate. Pedicel longer than first funicle joint, the antennae black; funicle 1 longest of the funicle, somewhat longer than wide; funicle 5 quadrate. Club simple.

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

Habitat: Gordonvale (Cairns), Queensland.

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

CRYPTOPRYMNOIDES new genus.

Female:—Petiole of abdomen enlarged at base, short, about two thirds the length of the hind coxae. Antennae 13-jointed with two ring-joints, the club 3-jointed. Propodeum short, punctate, without carinae or a neck, the spiracle minute and with an indefinite spiracular sulcus. 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. CRYPTOPRYMNOIDES RABIOSUS new species. Genotype.

Female:—Length, 1.50 mm.

Very dark metallic green, the wings hyaline; antennae black; legs concolorous, the knees and tarsi (except distal joint) pale. Mandibles with the inmost tooth somewhat truncate. Funicle 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. Antennæ 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 carinæ; also deep, distinct spiracular sulci running its whole length. Abdominal petiole long and slender, fully twice as long as the hind coxæ; 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; coxæ concolorous; rest of legs and antennal scape golden yellow; all femora and posterior tibiæ dusky at the centre; rest of antennæ 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 *Eurydinotomorpha* Girault and *Polycysteloides* Girault. Head not wider than thorax, no longer than wide. Mandibles 4-dentate. Antennæ 13-jointed, with three ring and three club joints, the funicle 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 carinæ 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 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 coxæ concolorous, the abdomen brighter, first two pairs of femora brownish, rest of legs and antennal scape golden yellow, rest of antennæ 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 *Eurydinotomorpha* Girault but differing from both these genera in bearing a noncarinate propodeum. Antennæ 13-jointed with three ring and three club joints. Parapsidal furrows one third complete. Scutellum simple. Propodeum punctate, rather long, without carinæ or sulci. Abdominal petiole 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 stigmal. Mandibles not seen.

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

Female:—Length, 2.60 mm.

Dark metallic green, the posterior coxæ and base of other coxæ concolorous, rest of legs and antennal scape and pedicel golden yellow; rest of antennæ black. Thorax, including propodeum, densely punctate. Wings hyaline. Pedicel subequal to last funicle joint, which is distinctly longer than wide, funicle 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 2812, 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 tegulæ 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. Antennæ 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 mesad of the spiracles and thus forming short lateral carinæ; spiracle 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 stigmal. Mandibles 3 and 4-dentate.

1. PTEROSEMIGASTRA CENONE new species of Girault and A. P. Dodd. Genotype.

Female.—Length, 2.10 mm.

Very dark metallic purplish, the coxæ 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 clavate, 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 NIGRIFLAGELLUM new species of Girault and A. P. Dodd.

Female.—Length, 1.75 mm.

Dark metallic green, the coxæ concolorous; abdomen suffused with brown, the first segment bright metallic blue-green; femora dusky brown; tibiæ, tarsi and antennal scape golden yellow; pedicel dusky brown; flagellum black. Differing from *cenone* 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, 13-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 coxæ, longer than wide, vertical; segment 2 occupying nearly a third of surface, almost twice as long as 3. Differing from *Polycysteloides* 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.

1. PARAPOLYCYSTUS PULCHRICORNIS new species. Genotype.

Female.—Length, 2 mm. Short, stout. Head and thorax very dark metallic green, almost black; coxæ and first two pairs of femora concolorous; posterior femora and all tibiæ 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. Antennæ gently clavate. 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. Hy 2815, 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, *pulchricornis*, but the abdomen is bright burnished coppery, all the legs (except the coxæ) are blood red, antennæ 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 *pulchricornis*).

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

Habitat: Stradbroke Island, Southern Queensland.

Type: No. Hy 2816, Queensland Museum, Brisbane, the specimen on a tag, the head and hind legs on a slide.

In this genus the antennæ 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 *clavicornis*. 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 coxæ (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 carinæ 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 æneous, the wings hyaline, the coxæ concolorous, the rest of the legs and all of each antenna pale yellow, the club dusky. Head and thorax densely scaly, also the petiole, rest of abdomen highly polished. Venation pale. Antennæ 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; pedicel 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. Hy 2817, 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 antennæ 13-jointed with three ring-joints, the club 3-jointed (but with a distal, tubercle-like fourth joint, the antennæ 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 coxæ, 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 tegula, yellowish brown; femora washed with metallic. Rest of antenna black, the coxæ concolorous. Head and thorax reticulate punctate, the abdomen polished, without sculpture. Pedicel slightly longer than funicle 1, which is slightly the longest of the funicle, 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 nematoceros, dipterous pupæ on the tip of a leaf. The pupæ 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 antennæ.

TRIGONOGASTRELLA new genus.

Female.—Head (cephalic aspect) a little wider than long, the antennæ inserted in the middle of face, 13-jointed with two ring-joints, the club 3-jointed, the antennæ slender. Parapsidal furrows half complete. Both mandibles 4-dentate. Scutellum simple. Propodeum punctate, with a complete median carina and straight spiracular sulci, the spiracle cephalic, small, round-oval. Petiole of abdomen distinctly projecting caudad of hind coxæ which are inserted farther cephalad; petiole distinctly longer than wide. Segment 2 of abdomen notched at the meson caudad, longest, 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 antennæ filiform.

1. TRIGONOGASTRELLA 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 funicle 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 subelongate, 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 antennæ.

Later, three more specimens from the same collections.

ACROCLISELLA new genus.

Female.—Similar in shape to *Paracroclisis* 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 carinæ 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 *Acroclisoides* Girault and Dodd; also the much longer petiole and slender body. In the table of genera runs to *Lomonosoffiella* but the scutellum lacks the cross-suture and is as in *Paracroclisis*. 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 coxæ and the scape dull honey yellow; center of abdomen along meson dorsad suffused with yellow. Antennæ 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, petiole, propodeum, axillæ, pronotum laterad and scutum cephalad, scaly reticulate; rest of thorax punctate, the scutellum a little coarser than scutum. Parapsidal furrows punctate, terminating caudad in an oval fovea which is narrowly separated from the mesal ends of the axillæ, 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 forming a cross-carina laterad of the lateral carina.

Described from one female.

Habitat: Queensland.

Type: No. Hy 2820, 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 *Apteroosemoidea* Girault but differs as follows: The antennæ 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 carinæ but a fold or carina runs from the caudo-mesal part of the spiracle, latero-caudad, then crossing caudad of the spiracle and joining at apex another fold running meso-caudad from cephalo-lateral angle and forming a U at whose mouth lies the spiracle. Propodeum of nearly uniform length. Abdominal petiole not half the length of the hind coxa. Third ring-joint as long as the other two combined. Otherwise like *Apteroosemoidea*. Parapsidal furrows obtuse.

1. PARAPTEROSEMOIDEA SPURCIPENNIS new species.

Female.—Length, 1.35 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 midlongitudinal arm. There are also two subhyaline cross-stripes, the first just proximad of the cross-stripe, the second just distad of it, between the cross-stripe and the substigmal 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 2818, Queensland Museum, Brisbane, the specimen on a tag; head, hind legs and a fore wing on a slide.

PARATRIGONOGASTRA new genus.

Female.—Agreeing with the description of *Paracroclisis* 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 coxæ, the propodeum is nonearinate but with distinct spiracular sulci and the postmarginal vein is not quite twice the length of the stigmal, barely shorter than the marginal. Otherwise the same.

1. PARATRIGONOGASTRA VOLTAIREI new species.

Female.—Length, 1.40 mm.

Dark æneous green, the wings hyaline; scape pale; coxæ 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 coxæ 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 DIPARINÆ.

GENUS PANSTENON 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. PANSTENON 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 antennæ are very similar except that in this species the joints are a little longer (in both the joints shorten distad, 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 *australensis* the joints are all somewhat 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 rugulose; cephalic part of scutum, pronotum and head scaly (sculptured as in *bellicosus* except that in that species the scutellum is not punctate but rather coarsely 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.

EPILELAPS new genus.

With a distinct lelapine habitus. Hind tibial spurs single. Fore wings nearly as in the *Entedoninae*, the submarginal vein broken and somewhat shorter than the long marginal, the postmarginal longer than the stigmal, only moderate in length. Fore wings rather slender, with long marginal cilia. Antennæ inserted slightly ventrad of middle of the face, 13-jointed with one ring-joint (but in the genotype, funicle 1 is distinctly wider than long), the club 3-jointed, wider than the funicle. Axillæ rather widely separated. Parapsidal furrows complete. Club rather abruptly formed. Wings without a pattern, hyaline or subhyaline. Mandibles tridentate. Other structures as in *Lelaps*.

1. EPILELAPS 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 antennæ but the club black; pedicel 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-laterad, distad of middle. Abdomen glabrous. Pronotum separated, transverse. A common species.

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

Type: No. Hy 2822, Queensland Museum, Brisbane, one female on a tag, a hind leg and the head on a slide.

2. EPILELAPS PONDEROSA new species. Female.

Length, 1.35 mm. Much like the genotype but the wings slightly embrowned throughout, the abdomen dorsad 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 2823, 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 type. The postmarginal vein is twice the length of stigmal, the latter rather short. Abdominal petiole longer than wide but shorter than the long caudal coxæ. Original description verified.

PSEUDIPARA new genus.

Female.—Differs from *Epilelaps* 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 caudad, meeting just before apex and incomplete. Differs from *Panstenon* and *Dipara* in having seven funicle joints and only one ring-joint which is large. Petiole of abdomen a little longer than the hind coxæ. Otherwise like *Epilelaps*. Postmarginal vein over thrice the length of the stigmal. Club solid, the antennæ inserted on the middle of the face.

1. PSEUDIPARA ALBICLAVA 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 width, 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 striæ laterad. Abdomen glabrous, the petiole with strong longitudinal carinæ; second segment occupying two thirds of the surface. Propodeum with a distinct neck and with a few interlacing cross and longitudinal carinæ which form very large fovea-like areas; no true median and lateral carinæ. Abdomen conic-ovate. Axillæ 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 2824, Queensland Museum, Brisbane, the specimen on a tag; head, pair of wings and two hind tibiae on a slide.

SUBFAMILY SPALANGIINÆ.

SPALANGIOMORPHA new genus.

1. SPALANGIOMORPHA FASCIATIPENNIS new species.

For diagnosis, see *antea*, 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 *Chalcitelloides nigrithorax* to Girault.

GENUS SPALANGIA Latreille.

1. SPALANGIA GROTIUSI Girault.

The cross-line of foveæ 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 laterad 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 laterad; 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 *grotiusi*. Funicle 1 over twice the length of 2 which is oval, the others gradually lengthening. Pedicel shorter than funicle 2. Type re-examined.

4. SPALANGIA PARASITICA new species. Female.

Exactly similar to *grotiusi* 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 *grotiusi* differ from the other two species in having the propodeum laterad of the lateral line of foveæ, densely rugoso-punctate. The punctate lines on the head are alike in all four species.

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

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