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WITH NINE PLATES.

(Plates xxii.-xxx.)

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NEW FOSSORIAL HYMENOPTERA FROM AUSTRALIA AND TASMANIA.

BY ROWLAND E. TURNER, F.Z.S., F.E.S.

Family THYNNIDÆ.

Subfamily RHAGIGASTERINÆ.

RHAGIGASTER JUBILANS, sp.n.

♂. Niger; scapo, pronoto, tegulis, abdomine pedibusque rufo-testaceis; alis pallide flavo-hyalinis, venis basi testaceis, apice fuscis. Long. 11 mm.

♂. Clypeus with a carina from the base to the apex. Head rugosely punctured on the front, more finely on the vertex, the interantennal prominence broadly rounded at the apex, a strong transverse carina below the anterior ocellus extending to the eyes. Pronotum very shallowly emarginate anteriorly, the anterior angles slightly prominent. Thorax shining, sparsely punctured, the mesopleuræ more coarsely and closely punctured. Median segment more finely punctured than the thorax, shorter than the scutellum, twice as broad as long, very steeply sloped posteriorly. Abdomen slender, very sparsely punctured, the segments constricted at the base; seventh dorsal segment trilobed at the apex, the median lobe the longest and subtuberculate; the hypopygium consisting of a single recurved aculeus. Third abscissa of the radius about half as long again as the second; first recurrent nervure received at three-fifths from the base of the second cubital cell, second at about one-eighth from the base of the third cubital cell.

Hab.—Borroloola, Northern Territory.

Type in Victorian National Museum.

The colour is very distinct from any other species of the genus; the form of the seventh dorsal segment is also distinct.

Rhagigaster lævigatus Sm., occurs in the same locality.

EIRONE CELSISSIMA, sp.n.

♂. Niger; mandibulis, clypeo, antennis articulis 4 apicalibus, pronoto macula magna utrinque, scutello macula magna mediana antice trilobata, femoribusque macula apicali flavis; pedibus pallide ferrugineis flavo intaminatis: segmentis abdominalibus secundo, tertio, quartoque totis, primo apice, quinto basi, septimoque apice rufo-ferrugineis; alis hyalinis, venis nigris. Long. 15 mm.

Var. abdomine nigro, segmento septimo apice solo rufo-ferrugineo.

♀. Rufo-castanea; abdomine bruneo, gracillimo, subeylindrico. Long. 9 mm.

♂. Clypeus convex, depressed and truncate at the apex; mandibles stout, strongly bidentate at the apex. Head not produced behind the eyes; third joint of the flagellum a little longer than the first and second combined. Head very minutely and closely punctured; the posterior ocelli twice as far from the eyes as from each other. Pronotum strongly rounded at the anterior angles, the anterior margin raised. Mesonotum closely, scutellum less closely punctured with a transverse, coarsely punctured groove at the base, truncate at the apex; postscutellum shining and almost smooth. Median segment rounded, almost smooth, finely rugulose on the sides. Abdomen fusiform, shining, very sparsely punctured; hypopygium subtruncate, with an apical fringe of fulvous hairs. Second and third abscissæ of the radius about equal in length; second recurrent nervure received at the middle of the third cubital cell; the subdivision of the first cubital cell only indicated by a scar.

♀. Head rectangular, a little broader than long, smooth and shining, with a short longitudinal sulcus between the antennæ. Thorax and median segment smooth and shining; the pronotum much narrower than the head, about one-third longer than broad, a little narrowed anteriorly; scutellum small, narrower than the pronotum, very little larger than the dorsal surface of the mesopleuræ; median segment slightly longer than the pronotum and scutellum combined, narrow at the base, nearly twice as wide at the apex. Abdomen shining, with a few small scattered punctures, very slender, narrowed at the extremities; sixth dorsal segment pointed.

Legs short, the posterior femora serrate, intermediate coxæ scarcely separated.

Hab.—Mt. Wellington, Tasmania, 2,200 ft.; January, 1♂; March, ♂♀ in cop.

The male is the type.

The male specimen, taken in March, has the abdomen almost entirely black. There is another specimen of the typical form of the male with red on the abdomen in the Tasmanian Museum, taken at a lower elevation. The species is easily distinguished by the yellow apical joints of the antennæ in the male. It belongs to the group of *E. ichneumoniformis*, Sm., but is larger and more robust than any of the related species. Two species of *Ichneumonidæ*, taken freely in the same locality, also have the apical portion of the antennæ yellow and the abdomen red, and though rather smaller, closely resemble this *Eirone*.

Subfamily THYNNINÆ.

ARIPHRON BICOLOR Erichs.

Ariphron bicolor Erichs., Arch. f. Naturg. viii., p.264, 1842, ♀.

Ariphron rigidulus Turn., Proc.Linn. Soc. N. S. Wales, xxxii., p.274, 1907, ♂.

Taken in cop., by Mr. Lea, at Ulverston, Tasmania. I do not believe the Victorian record for the male is correct. I took several males at Eaglehawk Neck in Tasmania, flying round and settling on a fallen Eucalyptus log, which contained a nest of *Myrmecia* ants. I searched the ants' nest as far as possible, hoping to find the female, but was not successful.

ARIPHRON PETIOLATUS Sm.

Thynnus petiolatus Sm., Cat. Hym. B.M. vii., p.36, 1859, ♂.

♀. Nigra, punctata; pygidio integro; antennis tuberculisque antennalibus fusco-testaceis; mandibulis fusco-ferrugineis. Long. 8 mm.

♀. Mandibles falcate, not bidentate; head shining, closely microscopically punctured, with larger scattered punctures, a little broader anteriorly than long, but a little longer than the posterior breadth, an obscure, short, frontal sulcus, the antennal

tubercles moderately developed. Thorax rather closely punctured; the pronotum broader than long, deeply excavated on the sides anteriorly; median segment a little shorter than the pronotum. Abdomen broader than the thorax; the basal segment punctured rugose, second segment with a basal transverse carina, the basal half transversely rugulose, the apical half and the remaining segments closely and rather finely punctured. Pygidium simple, not truncate or compressed, clothed with fulvous hairs on the sides and in the middle. Fifth ventral segment with a small tubercle on each side near the apical angles.

Hab.—Brisbane (Hacker), October. In the Australian and Queensland Museums.

TACHYNOMYIA AURIFRONS Sm.

Aelurus aurifrons Sm., Cat. Hym. B.M. vii. p.55, 1859, ♂.

♀. Nigra, crasse punctata, cinereo-pilosa; antennis pedibusque fusco-ferrugineis. Long. 18 mm.

♀. Head fully half as broad again as long, moderately convex and strongly rounded at the posterior angles; the front very coarsely punctured, the punctures more or less confluent longitudinally, the vertex smooth and shining. Thorax shining, sparsely but strongly punctured; the pronotum nearly twice as broad anteriorly as long, narrowed posteriorly; median segment about as long as the pronotum, rather more sparsely punctured and strongly broadened posteriorly. First and second dorsal segments of the abdomen closely punctured, the punctures confluent longitudinally and forming shallow, irregular striæ. Segments 3-5 shining, sparsely and shallowly punctured, sixth dorsal segment finely longitudinally striated; ventral segments shining, minutely punctured.

Hab.—Albany, W.A. (Masters), ♂♀ in cop.

The female has not been previously described.

PHYMATOTHYNNUS PYGIDIALIS, sp.n.

♂. Niger, cinereo-pilosus, punctatus; abdomine nitido; clypeo late emarginato; hypopygio apice obtuse rotundato, haud dentato; alis hyalinis, leviter infuscatis, venis fuscis. Long. 13 mm.

♀. Fusco-nigra; flagello mandibulisque fusco-testaceis, pedibus testaceis; segmento dorsali secundo fusco-ferrugineo, transverse ruguloso. Long. 10 mm.

♂. Mandibles broad, bidentate at the apex, the inner tooth very broad and blunt; clypeus widely emarginate, with a carina from the base to the apex, closely punctured. Antennæ no longer than the thorax and median segment combined, the apical joints strongly arcuate beneath. Head and thorax closely and not very finely punctured, more finely on the vertex and median segment than elsewhere; the thorax as broad as the head, the anterior margin of the pronotum slightly raised. Abdomen shining, somewhat flattened, very sparsely and indistinctly punctured, fusiform; hypopygium not very small, short, and broadly rounded at the apex, without an apical spine; seventh dorsal segment rugose. Second abscissa of the radius longer than the third, second recurrent nervure received by the third cubital cell at a distance from the base equal to half the length of the second transverse cubital nervure.

♀. Head large, slightly convex, nearly half as broad again anteriorly as long, broadly rounded at the anterior angles, very minutely punctured, with larger scattered punctures and an obscure frontal sulcus. Thorax finely and sparsely punctured, the pronotum nearly half as broad again as long, almost rectangular; scutellum much narrowed posteriorly. Median segment opaque, as long as the greatest breadth, longer than the pronotum, very narrow at the base, strongly broadened towards the apex, the posterior slope oblique. Abdomen shining, sparsely punctured, second dorsal segment coarsely transversely rugulose; with two strong transverse carinæ at the apex, separated by a deep groove. Pygidium simple; the sixth dorsal segment finely rugose, with a strong longitudinal carina, narrowly rounded at the apex, shorter than the ventral plate, which is narrowly truncate at the apex. Ventral segments coarsely but shallowly punctured. There is a very small tubercle at the base of each antenna.

Hab.—Near Melbourne.

This species is nearest to *P. nitidus* Sm., in the unarmed hypopygium of the male, but in *P. nitidus* the hypopygium is much

smaller. The female differs much from *P. nitidus* in the shape of the head and thorax. It is not improbable that the present species is *Lophocheilus distinctus* Guér., but the description of that species is too poor for recognition.

The male is the type.

Type and type of female in the Victorian National Museum.

PSAMMOTHYNNUS KERSHAWI, sp.n.

♂. Niger; clypeo, mandibulis, orbitis oculorum, margine anteriore pronoti angustissime, tegulisque basi flavis; segmentis abdominalibus secundo, tertio quartoque, primo dimidio apicali quintoque lateribus, femoribus, tibiis tarsisque rufo-testaceis; mesopleuris macula magna flava antice; alis hyalinis, venis fuscis. *Var.* Pronoto omnino nigro. Long. 12 mm.

♂. Clypeus large, convex, broadly truncate at the apex; the interantennal prominence well defined, and narrowly rounded at the apex. Antennæ shorter than the thorax and median segment combined, the apical joints feebly arcuate beneath. Front rugosely punctured, vertex and thorax finely and rather closely punctured. Median segment rounded, shallowly punctured. Abdomen flattened, long and slender, much narrowed to the base; the segments slightly constricted at the base, shining and very sparsely punctured, clothed with whitish pubescence on the sides. Hypopygium deeply emarginate at the apex, the apical angles produced into spines, a tuft of long hairs at the apex. Second recurrent nervure received at about one-third from the base of the third cubital cell; third abscissa of the radius a little longer than the first and second combined.

Hab.—King Island, Bass' Straits (J. A. Kershaw), December.

This is not quite a typical *Psammothynnus*, the antennal joints being less strongly arcuate beneath, and the second recurrent nervure being received further from the base of the third cubital cell than in *P. depressus* Westw. One specimen has the coloured portion of the abdomen fusco-ferruginous instead of rufo-testaceous.

Type in the Victorian National Museum.

Aberration nigricans.

♂. Several specimens in the same collection, captured at the same time, have the abdomen entirely black.

Aberration atripes.

♂. A male in the Victorian National Museum, from Bacchus Marsh, Victoria, has the legs black.

NEOZELEBORIA LACTEIMACULATA, sp.n.

♀. Fusca; segmentis abdominalibus margine apicali pallido-testaceis; segmento dorsali secundo transverse quadricarinato, macula sub oculis pallide flava. Long. 8 mm.

♂. Niger; mandibulis, clypeo, macula utrinque supra basin antennarum, marginibus oculorum apice anguste interruptis, pronoto marginibus, mesonoto macula, scutello macula mediali, postscutello, segmentoque mediano linea angusta longitudinali flavis; segmentis dorsalibus 1-5 macula laterali utrinque albo-lactea; pedibus fusco-ferrugineis; alis subhyalinis, venis fuscis, costa testacea. Vertice macula utrinque fusco-ferruginea. Long. 13 mm.

♀. Mandibles falcate, with a very small tooth on the inner margin about two-thirds from the base. Head more than half as broad again anteriorly as long, flattened and thin, narrowed and very broadly rounded posteriorly; subopaque and very finely shagreened; eyes small and oval, not touching the base of the mandibles; a very short frontal sulcus from between the antennæ. Thorax and median segment finely shagreened; the pronotum a little longer than broad, raised and subtuberculate in the middle of the anterior margin, with a very short longitudinal sulcus on the raised portion; scutellum and median segment combined no longer than the pronotum. Abdomen shining, very sparsely punctured; first dorsal segment very narrowly transversely depressed at the apex; second with four transverse carinæ, including the raised apical margin; fifth ventral segment sparsely punctured. Pygidium lanceolate, very slightly widened at the apex, with a tuft of long, pale, fulvous hairs on each side. Legs and antennæ fusco-ferruginous.

♂. Clypeus slightly produced, the apical margin distinctly but shallowly emarginate. Antennæ no longer than the thorax and

median segment combined, the apical joints distinctly arcuate beneath. Front closely and rather strongly punctured, vertex and thorax more finely and closely punctured, sparsely clothed with cinereous hairs. Median segment rounded. Abdomen shining, very shallowly punctured, the dorsal segments somewhat flattened and not constricted at the base. Hypopygium short, rounded, as broad as long, with a minute spine at the apex. Second abscissa of the radius nearly as long as the third; first recurrent nervure received at two-thirds from the base of the second cubital cell, second at about one-seventh from the base of the third cubital cell.

Hab.—Kuranda, N. Queensland; July, ♂♀ in cop.

This species approaches more nearly to *Agriomyia* than most of the genus, the structure of the pygidium in the female being very similar. But the male clypeus and antennæ are those of *Neozeleboria*, also the first dorsal and fifth ventral segments of the female.

DORATITHYNNUS SPRYI, sp.n.

♂. Flavus; fascia lata transversa infra ocellis, antennis, vertice, mesonoto basi fasciæque longitudinali utrinque, segmento mediano fasciæ longitudinali utrinque, segmentis abdominalibus basi in medio latissime, segmento septimo, tibiis intermediis et posticis subtus, tarsisque posticis et intermediis nigris; alis hyalinis, venis nigris, stigmatibus testaceo. Long. 13 mm.

♂. Clypeus convex, long, truncate at the apex, the labrum projecting and emarginate. Head small and thin, the antennæ shorter than the thorax and median segment combined, the joints not arcuate. Head and thorax finely and closely punctured, scutellum, median segment and abdomen much more sparsely punctured. Pronotum longer than the scutellum, narrowed anteriorly, the anterior margin raised and widely and shallowly emarginate; scutellum broadly truncate at the apex; the median segment rounded. Abdomen slender, somewhat flattened, the segments moderately constricted near the base, third and fourth ventral segments tuberculate at the apical angles, fifth ventral segment armed with a long and stout spine at the apical angles; hypopygium short, armed with three short, stout apical spines,

the middle spine the longest, the sides parallel. Seventh dorsal segment broadly truncate at the apex. Second abscissa of the radius longer than the third; second recurrent nervure received at about one-eighth from the base of the third cubital cell.

Hab. —South Australia, 24 miles west of Kycherling Soak, on the railway from Port Augusta to Coolgardie; 2 males.

Type in the Victorian National Museum.

Allied to *D. orientalis* Turn., but has the clypeus much longer, and the hypopygium much broader with the spines more strongly developed, the pronotum is longer, and the yellow colouring much more extensive. The lengthening of the clypeus seems to be characteristic of many of the desert *Thynnidae*, and is associated with a longer and more or less exposed labrum.

GUERINIUS CONFUSUS Sm.

Thynnus confusus Sm., Cat. Hym. B.M. vii. p.13, 1859, ♂.

Thynnus sulcifrons Sm., Cat. Hym. B.M. vii. p.43, 1859, ♀.

Tachynothynnus confusus Turn., Wystman, Gen. Insect., cv. p.50, 1910, ♂.

Tachynothynnus sulcifrons Turn., Wystman, Gen. Insect., cv. p.50, 1910, ♀.

A pair in the Australian Museum, taken in copulâ, by Mr. Masters, at Albany.

The name *Guérinius* Ashm., must stand for this genus, as pointed out by Rohwer.

ZASPILOTHYNNUS CAMPANULARIS Sm.

Thynnus campanularis Sm., Trans. Ent. Soc. London, 1868, p.232, ♂.

Thynnus leachiellus Olliff, Mem. Austral. Mus. ii. p.98, 1889 (nec Westwood).

Olliff identified this wrongly; the species taken on Lord Howe Island being *T. campanularis* Sm.

ZASPILOTHYNNUS RHYNCHIOIDES, sp.n.

♂. Niger; capite, fascia transversa inter oculos excepta, pronoto, mesopleuris antice, pedibus anticis, segmentisque abdominalibus tribus apicalibus aurantiacis; alis flavis basi et apice in-

fuscatis, venis ferrugineis; antennis fusco-ferrugineis, apice nigris. Long. 21 mm.

♂. Clypeus pointed at the base, deflexed and broadly truncate at the apex, finely longitudinally striated. Interantennal prominence broad, the antennæ of even thickness throughout and inserted nearer to the eyes than to each other. Head and mesopleuræ finely and closely punctured, subopaque; thorax finely and sparsely punctured, shining, scutellum with a strong median carina, postscutellum very broadly rounded and projecting slightly beyond the base of the posterior truncation of the median segment, the surface of which is distinctly concave, shining and not very finely punctured. Abdomen finely and rather sparsely punctured, more closely at the base than at the apex; first segment the broadest, vertically truncate anteriorly; sixth ventral segment with a spine on each side at the apical angles; hypopygium with a blunt lobe on each side at the base, thence broadly triangular with a stout apical spine. Seventh dorsal segment with a flattened lamina. First recurrent nervure received at three-fifths from the base of the second cubital cell, second at about one-tenth from the base of the third cubital cell. Third abscissa of the radius a little longer than the first and second combined. The pronotum is widely emarginate anteriorly, the anterior margin raised with a deep transverse groove behind it.

Hab.—Borrooloola, Northern Territory; January.

Type in Victorian National Museum.

The colouring recalls *Rhynchium superbum*. The species belongs to the typical *interruptus*-group of *Zaspilothynnus*, and is perhaps closer to *Z. excavatus* Turn., than to any other species. The colouring of the head and pronotum is similar to that of the West Australian *Z. ochrocephalus* Sm., but the colour of the wings and abdomen is very distinct.

Family PSAMMOCHARIDÆ (olim POMPILIDÆ).

CALOPOMPILUS ALICIÆ, sp.n.

♀. Nigra; segmento primo, basi excepto, segmento dorsali secundo, apice excepto, femoribus, tibiis tarsisque rufo testaceis; mandibulis fusco-ferrugineis; alis flavo-hyalinis, apice infuscatis, fusco late bivittatis. Long. 11-15 mm.

♀. Clypeus moderately convex, about twice and one-half as broad as long, the apical margin almost transverse, very finely punctured at the base, more coarsely and sparsely at the apex. Antennæ rather stout, a little longer than the thorax and median segment combined, the second joint of the flagellum as long as the first and third combined. Posterior ocelli nearly twice as far from the eyes as from each other, very little further from each other than from the anterior ocellus. Front divided by an obscure longitudinal sulcus, without any prominence at the base of the antennæ. Head and thorax subopaque; the posterior margin of the pronotum forming a broad arch; median segment opaque, divided by a distinct longitudinal sulcus which becomes less distinct on the posterior slope. Abdomen shining, very minutely punctured, the apical dorsal segment more coarsely punctured and clothed with testaceous hairs, the apex of the segment rufo-testaceous and very narrowly rounded. The transverse groove on the second ventral segment is distinctly marked. Second abscissa of the radius as long as the first and third combined, first recurrent nervure received just beyond the middle of the second cubital cell, second at two-fifths from the base of the third cubital cell. The cubital nervure of the hind wing originates a little beyond the transverse median nervure. The fuscous bands on the forewing are situated on the basal nervure and another much broader filling the basal two-thirds of the radial cell, the second and three-quarters of the third cubital cells and uniting below the cubital nervure with the pale fuscous marginal band. Posterior tibiæ serrate.

Hab.—Mt. Wellington, Tasmania, 2,300ft.; January and February; not uncommon.

This is somewhat allied to *C. ornatipennis* Sm., but is a much smaller species, with a very different wing-pattern.

Family SPHEGIDÆ.

Subfamily AMPULICINÆ.

APHELOTOMA RUFIVENTRIS, n.sp.

♂. Niger; mandibulis apice, scapo, abdomine pedibusque rufo-testaceis; alis hyalinis, venis nigris, basi testaceis. Long. 5 mm.

♂. Head finely rugulose; clypeus without a carina; eyes slightly convergent towards the vertex, separated at the base of the clypeus by a distance equal to twice the length of the scape, posterior ocelli as far from each other as from the eyes; a low longitudinal carina from the anterior ocellus nearly reaching the base of the clypeus. Second joint of the flagellum distinctly longer than the third. Mesopleuræ rugose, sides of the median segment obliquely striated. Thorax coarsely rugose; the pronotum about twice as broad as long, the anterior angles produced into short spines; median segment coarsely rugose, abruptly truncate posteriorly. Abdomen shining, finely and closely punctured. First recurrent nervure received near the apex of the first cubital cell, second interstitial with the second transverse cubital nervure; second abscissa of the radius shorter than the first, third longer than the first and second combined.

Hab.—Kuranda, Q.; May to July. One male, in the Brisbane Museum, from Stradbroke Island.

Easily distinguished by the colour of the abdomen, and the spines at the angles of the pronotum. Fairly common on dead Eucalyptus trees.

Subfamily PHILANTHINÆ.

CERCERIS ALASTOROIDES, sp.n.

♀. Nigra; mandibulis, clypeo, fronte sub antennis, fascia pone oculos, macula utrinque pone oculos, antennis, prothorace, mesopleuris maculis duabus antice, scutello, postscutello, segmento mediano area basali lateribusque late, abdomine, segmento tertio excepto, pedibusque rufo-aurantiacis; alis flavo-hyalinis, apice infuscatis, venis testaceis, apice fuscis; clypeo apice late rotundato in medio denticulato, mesopleuris haud tuberculatis, segmento ventrali secundo area basali elavata nulla. Long. 12 mm.

♀. Clypeus large, without a lamina, the middle lobe as long as its apical breadth; the apical margin very broadly rounded, with a distinct blunt tooth in the middle. Head, thorax, and abdomen strongly punctured; antennæ inserted as far from the clypeus as from the anterior ocellus, the second joint of the flagellum longer than the third; the frontal carina narrow and

elevated between the antennæ, broadened and depressed towards the base of the clypeus. Basal area of the median segment very finely obliquely striated, with a median longitudinal sulcus. First abdominal segment distinctly broader at the apex than long; pygidial area with the sides almost parallel, very slightly convergent towards the apex, which is truncate. Petiole of the second cubital cell short; first recurrent nervure received before the middle of the second cubital cell, second at one-fifth from the base of the third cubital cell.

Hab.—Borrooloola, Northern Territory; February.

Type in Victorian National Museum.

The colour, especially on the head, is probably altered by cyanide, but the reddish-orange colour of the abdomen is seen in several other Australian species of the genus. The shape of the clypeus does not approach any other Australian species. This can hardly be the female of the Northern Territory species *C. cucullata* Bingh., the disposition of the colour, and the sculpture of the enclosed area, at the base of the median segment, being very different.

Subfamily NYSSONINÆ.

SPHODROTES PUNCTUOSUS Kohl.

Sphodrotes punctuosus Kohl, Ann. Naturh. Hofmus. Wien, iv. p.189, 1889, ♂.

Hab.—Jindabyne, N.S.W.; 3,000 ft. (Helms). In Australian Museum, two males; Eaglehawk Neck, S.E. Tasmania (Turner), one male.

The Tasmanian specimen was taken in February, 1913; the Jindabyne specimens in March, 1889. I have not seen the female.

GORYTES RUFOMIXTUS, sp.n.

♀. Nigra, clypeo macula utrinque, pronoto, scutello macula utrinque, segmentisque dorsalibus 1-5 fascia lata apicali flavis; mandibulis, antennis dimidio basali, tegulis, mesopleuris antice, scutello in medio, postscutello, segmentis abdominalibus lateribus, segmento septimo, pedibusque sordide ferrugineis; alis hyalinis, venis fusco-ferrugineis. Long. 8.5 mm.

♀. Clypeus broad, truncate at the apex; eyes scarcely convergent towards the clypeus, the inner margin slightly and very widely emarginate. Antennæ short, not as long as the thorax and median segment combined, stout, but only slightly thickened to the apex, the second and third joints of the flagellum equal in length. Head small, clothed with short greyish pubescence, the front with a sulcus reaching the anterior ocellus. Posterior ocelli further from each other than from the eyes or the anterior ocellus. Head and thorax opaque, minutely punctured; the mesosternum with a transverse but without a longitudinal carina; a very deep transverse sulcus between the mesonotum and scutellum, the sulcus coarsely longitudinally striated; basal area of the median segment very coarsely longitudinally striated, the sides of the segment indistinctly striated. Abdomen very finely and minutely punctured, subpetiolate; the first segment short, widened from the base, with one carina beneath, second ventral segment sparsely and rather coarsely punctured; pygidium shining, sparsely and finely punctured, almost pointed at the apex, the pygidial area not as clearly defined as in *G. frenchi* Turn. Third abscissa of the radius less than half as long again as the second; both recurrent nervures received by the second cubital cell, the distance between them about half as great again as that separating them from the base and apex of the cell. First transverse cubital nervure bent outwards close to the cubitus, but not as sharply as in *G. frenchi* Turn., a scar running from the bend to the base of the stigma. Fore tarsi with a comb of very slender spines.

Hab.—Jindabyne, Snowy River, N.S.W.; 3,000 ft.; March (Helms).

Type in Australian Museum, Sydney.

Subfamily LARRINÆ.

LYRODA MICHAELSENI Schulz.

Lyroda michaelсени Schulz, Fauna Südwest Australiens, i. 13, p 479, 1908, ♀♂.

Subsp. *tasmanica*, subsp.n.

♀. Differs from the typical form in the almost total want of the small teeth on the anterior margin of the clypeus; in the

position of the recurrent nervures, both of which are situated further from the base of the second cubital cell than in *L. michaelsoni*, in the somewhat shorter third abscissa of the radius, and in the somewhat less opaque head and thorax, which are scarcely more opaque than the abdomen. The ocelli are placed in an equilateral triangle, as in the typical form, but the posterior pair are only a very little further from each other than from the eyes, not half as far again, as in the typical form. The median segment is rather longer in subsp. *tasmanica*.

Hab.—Eaglehawk Neck, S.E. Tasmania; February, 1913, 4♀.

I have not seen the typical form, which is from Shark Bay, W.A., and it is quite possible that subsp. *tasmanica* may prove to be a distinct species.

Subfamily PEMPHREDONINÆ.

SPILOMENA HOBARTIA, sp.n.

♀. Nigra; mandibulis, antennis, pedibusque testaceis; alis hyalinis, venis nigris. Long. 5 mm.

♀. Mandibles bidentate at the apex, not very stout; clypeus moderately convex, with a low carina from the base to the middle. Antennæ shorter than the head; the flagellum gradually thickened towards the apex, rather more than twice as long as the scape. Eyes convergent towards the apex, separated on the vertex by a distance equal to about twice the length of the scape, the posterior ocelli nearly twice as far from the eyes as from each other and as far from the posterior margin of the head as from the eyes. Cheeks as broad as the eyes, which are elongate-oval and touch the base of the mandibles. Head a little broader than the thorax, a little longer than broad, the hind margin widely emarginate, opaque, with a frontal sulcus from the anterior ocellus to the base of the clypeus. Pronotum depressed below the mesonotum, thorax opaque, minutely punctured. Median segment finely reticulate; the basal area short, broadly rounded and irregularly longitudinally striated; the sides of the segment reticulate; the posterior truncation vertical, minutely punctured, with a median sulcus. Abdomen not petiolate, no longer than the thorax and median segment combined, shining and minutely

punctured. Stigma at least two and a half times as long as the greatest breadth, second abscissa of the radius almost as long as the first, the recurrent nervure received by the first cubital cell at a distance from the apex equal to rather less than half the length of the first transverse cubital nervure. The wings are strongly iridescent.

Hab.—Eaglehawk Neck, S.E. Tasmania; also from Hobart; three females, early in March.

Taken on a fallen Eucalyptus tree, going into small holes.

This species and *S. australis* Turn., show a near approach to the genus *Harpactophilus*.