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ANTS FROM THE OTWAY RANGES.

BY

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By John Clark, Entomologist, National Museum.

(Plate IV)

During January 1932 a short collecting trip was undertaken to the little frequented area near Beech Forest. Arrangements were greatly facilitated by Mr. MacRae, Forest Officer in charge of the district, to whose interest and enthusiasm much of our success was due. The camp was located in the heart of almost virgin forest on Turton's Track, near Mt. Sabine (1812 ft.), where in all directions deep and almost inaccessible gullies abound, the great wealth of ferns and undergrowth rendering progress difficult and slow.

The Otway Ranges consist of a deeply dissected plateau of Jurassic sandstones and mudstones between 1500 ft. and 1800 ft. above sea level. The average annual rainfall at Beech Forest exceeds 60 inches, but we were fortunate in having fine weather during our visit. The very wet climate is reflected in the fauna, Crustaceans being abundant, but most forms of Insect life scarce. Only two specimens of *Peripatus* were found. Carab beetles predominated over other forms and were more numerous in the damp gullies than on hill-tops. Ants were represented by fourteen species; they were practically confined to the higher ground and most of them were taken in rotten logs; no doubt other species exist, since only a very limited area was worked and no search was made for arboreal forms. On the return journey three days were spent at Gellibrand at the foot of the range where thirty species of ants were collected. Although less than twenty miles apart the two areas yielded totally different faunas, only four species of ants being common to both.

Of those species taken near Mount Sabine ten are new, the remainder being found on the Dandenong Ranges. The Ponerinae predominate with five species, four of which are new. Myrmicinae were represented by two species, both of which are new; Dolichoderinae by three, two being new; Formicinae by four species, three being new.

The five genera of Ponerinae belong to an ancient and widely distributed fauna. All are found in the mountainous areas of New Guinea, and, with the exception of *Trapeziopelta*, are also common to New Zealand. *Discothyrea* is found also in America. Of the Myrmicinae, only two species of *Monomorium* were found, but they were numerous in individuals, always occurring in

small nests. The genus *Solenopsis* has not previously been recorded from Victoria. The subfamily Dolichoderinae is represented by three species of *Iridomyrmex*, and it is interesting to note that none occurred in the bush, all the nests being found at the side of the road or near clearings. Of the Formicinae the most abundant, both in species and individuals, was the genus *Prolasius*, a genus until recently supposed to be confined to New Zealand. This genus had not been recognised in Australia until the recent visit of Dr. W. M. Wheeler who secured a number of species over a large area. The genus *Diodontolepis* is, so far as known, confined to Victoria. A notable feature at Mount Sabine was the absence of any species of the large and widely distributed genera *Myrmecia*, *Chalcoponera*, and *Rhytidoponera*, though the two former genera occur abundantly at the foot of the range.

The material from the foot of the range near Gellibrand was more varied. The country consists of cleared land, more or less open forest and sandy-heath-scrub. In the forest area was found a small nest of ants for which a new genus, *Pseudonotoncus*, has been erected. The habits as well as general structure suggest an affinity with *Notoncus*.

Family **FORMICIDAE** Latreille 1810.

Subfamily **Cerapachyinae** Forel 1893.

Genus **EUSPHINCTUS** Emery 1893.

Eusphinctus fulvipes, sp. nov.

(Pl. IV, fig. 1.)

Worker.—Length, 3.3–3.8 mm.

Chestnut-brown; mandibles, antennae and gaster castaneous; legs ochraceous.

Mandibles, head, thorax and node densely and rather coarsely covered with large shallow piligerous punctures; gaster similarly, but more finely punctate; declivity shining.

Hair yellow, short and suberect, abundant throughout, longer than elsewhere on terminal segments of gaster. Pubescence yellow, very fine and adpressed.

Head one-sixth longer than broad, as broad in front as behind, sides feebly convex, occipital border straight, angles broadly rounded. Mandibles short, triangular, abruptly bent near their base, inner border short, terminal border edentate, in some examples very feebly denticulate. Clypeus short and

rounded. Frontal carinae erect, confluent, truncate behind. Carinae of cheeks sharply marked, almost meeting frontal carinae behind. Scapes greatly thickened to apex, extending to posterior third of head; first segment of funiculus slightly longer than broad, second to ninth broader than long, apical two and a half times longer than broad and as long as the four preceding together. No trace of eyes. Thorax twice as long as broad, constricted at the mesonotal area, feeble traces of sutures. The lateral and anterior borders rounded, posterior border straight, margined, the angles tooth-like. In profile feebly convex longitudinally, with a slight depression indicating the mesoepinotal suture; epinotal declivity short and concave, flat laterally, submargined on sides. Node very slightly broader than long, slightly broader behind than in front, anterior and posterior borders straight, sides convex; in profile longer than high, dome-shaped; a long, broad, sharp-pointed projection in front below. Postpetiole almost one-fourth broader than long, broader behind than in front, sides and anterior border straight; a deep and wide constriction between it and first segment of gaster. All segments of gaster separated by deep constructions. Pygidium broad and flat, bordered in front with short sharp bristles, becoming obsolete behind. Legs long and slender.

Female.—Length, 3.8–4.2 mm.

Colour, sculpture and pilosity as in the worker. Head as broad as long, sides strongly convex. Eyes large, convex, situated slightly in front of middle of sides. Ocelli large. Mandibles more strongly denticulate. Thoracic sutures more strongly marked. Gaster much larger than that of the worker, the segments more widely separated. Pygidium larger and the bristles at sides longer and stronger.

Habitat.—Gellibrand, under stone, and one female under log.

Near *E. hirsutus* Clark, but more robust and more strongly sculptured.

Subfamily **Ponerinae** Lepeletier 1836.

Genus MYRMECIA Fabricius 1804.

Myrmecia crassinoda, sp. nov.

(Pl. IV, fig. 2.)

Worker.—Length, 16–20 mm.

Dark red, almost brown; gaster black; middle of forehead between frontal carinae and ocelli black, size of area varying in individuals; mandibles and clypeus castaneous; antennae, anterior legs and all tarsi ferruginous; middle and posterior femora and tibia brown.

Mandibles, postpetiole and gaster shining. Head strongly striate diverging outward behind. Pronotum longitudinally arched striate, transversely on a few examples. Mesonotum and epinotum transversely striate. Node circularly rugose.

Hair yellowish, long and erect, abundant throughout, short and suberect on legs. Pubescence yellow, very fine and adpressed, longer and coarser on clypeus and apical segments of gaster than elsewhere.

Head as long as broad, sides parallel, occipital border straight, angles rounded. Mandibles barely as long as head, external border feebly concave; inner border furnished with fourteen teeth, the third, seventh, ninth and eleventh large, reduced from eleventh to base. Clypeus widely and deeply excised in front, angles sharp. Frontal carinae erect. Eyes and ocelli large and prominent. Scapes extending beyond occipital border by one-fifth their length; second segment of funiculus very slightly longer than first, third shorter than first. Thorax two and three-fourths times longer than broad. Pronotum broader than long, slightly flattened above. Mesonotum circular, convex above. Epinotum longer than broad, convex laterally, with indications of a longitudinal median groove; in profile the dorsum almost flat, declivity short and convex. Node as long as broad, broader behind than in front; in profile higher than long, fully twice as long as the stalk in front, anterior and posterior faces vertical, dorsum almost flat, the angles rounded. Post-petiole broader than long, convex. First segment of gaster much broader than long. Legs short and robust.

Female.—Length, 21 mm. (Ergatoid).

Slightly larger and darker than the worker; sculpture coarser. Pilosity longer and more abundant. Pronotum similar. Mesonotum somewhat similar but with a depression at each side in front. Scutellum small but distinct. Wing pads present but no traces of wings. Node broader than long. In other respects similar.

Habitat.—Gellibrand.

Near *M. pulchra* Clark, but readily separated by the colour, sculpture and pilosity, in addition to the structural details.

Myrmecia crudelis Smith.

Cat. Hymn. Brit. Mus., vi, p. 147, 1858.

Originally described from Adelaide, S. Australia, this species is found in several places in Victoria. A few workers were found on tree trunks at Gellibrand.

Myrmecia simillima Smith.

Cat. Hymn. Brit. Mus., vi, p. 144, 1858.

Numerous nests of this species were found at Gellibrand. Many examples in nests have a bright violet sheen and are, in general, lighter in colour than the ordinary workers. It seems certain that it is to such examples Forel applied the varietal name *violacea*.

Myrmecia (Promyrmecia) pilosula Smith.

Cat. Hymn. Brit. Mus., vi, p. 146, 1858.

Many nests of this common and widely distributed species were found at Gellibrand. This is generally known as the "Black-jumper" and greatly respected on account of its sting. The nests are always in the ground and very populous.

Myrmecia (Promyrmecia) fulvipes Roger.

Ent. Zeitschr., v, p. 36, 1861.

This species is widely distributed in South Eastern Australia. It varies much in size and slightly in colour of the legs. One nest was found at Gellibrand.

Genus AMBLYOPONE Erichson 1842.

Amblyopone australis Erichson.

Arch. f. Naturg. 8, p. 260, 1842: Wheeler, Proc. Amer. Acad. Arts & Sc. 62 (i), pp. 4-8, 1927.

Widely distributed throughout the mountainous parts of Australia and Tasmania. Extending from S.W. Aust., round the south and east coast, to N. Queensland. It is very variable in size and colour. Many nests were found at Beech Forest and at Gellibrand, all in rotten logs.

Subgenus FULAKORA Mann 1919.

Amblyopone (Fulakora) gracilis, sp. nov.

(Pl. IV, figs. 3-4.)

Worker.—Length, 3.5-4.5 mm.

Castaneous; legs more yellowish; anterior angles of head brown.

Finely and densely reticulate-punctate on head, finely punctate elsewhere; epinotal declivity very finely striate transversely. Mandibles longitudinally striate.

Hair yellow, short and erect, sparse throughout, except on apical segments of gaster. Pubescence yellow, short and adpressed, abundant throughout.

Head one-sixth longer than broad, broader in front than behind, sides straight, occipital border slightly concave, angles strongly rounded, anterior angles of sides produced as strong tooth-like projections. Mandibles long, narrow, sharply pointed, external border straight, inner border convex, furnished with seven large teeth, first two simple, the others bifid laterally. Clypeus strongly convex in front; furnished with eight strong sharp teeth, the central pair joined at base. Frontal carinae short and erect, truncate and diverging behind, slightly overhanging the antennal insertions in front. Scapes

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reaching the posterior third of head, almost uniformly thickened to apex; first segment of funiculus almost as long as the three following together, the others subequal to apical which is as long as the four preceding together. Eyes minute, composed of about seven facets, placed at posterior third of head. Anterior ocellus very minute, situated in a deep fovea, posterior ocelli represented by minute punctures. Thorax twice as long as broad. Pronotum as broad as long, strongly convex on sides and in front, feebly convex above. Mesonotum almost twice as broad as long. Epinotum longer than broad; epinotal declivity flat, the superior border rounded into dorsum. In profile the top of thorax straight, the pro-mesonotal suture deeply impressed. Node as long as broad, sides and anterior border strongly convex, in profile longer than high, the anterior face and dorsum forming a right angle, the corner rounded. A long broad translucent projection in front below, as high as long, with a small circular perforation slightly in front of the middle. Postpetiole broader than long, broader behind than in front, separated from the petiole and gaster by wide constrictions. Gaster slender. Legs long and slender.

Female.—Length, 5 mm. (Dealated).

Similar to worker but larger and more robust. The head is as broad behind as in front. Eyes and ocelli large.

Habitat.—Beech Forest. Two nests under rotten logs.

Much larger, and not close to any of the previously known forms. Many females were found in each nest, all were dealated. They are much more active than the members of *Amblyopone*, although like them they curl up and remain motionless for a few moments when disturbed.

Genus DISCOTHYREA Roger 1863.

Discothyrea turtoni, sp. nov.

(Pl. IV, figs. 5–6.)

Worker.—Length, 2.3 mm.

Russet; apical segment of antennae and legs lighter.

Pubescence very fine, short and abundant giving a somewhat silky sheen.

Head longer than broad, broadest just behind the eyes, sides and occipital border convex. Mandibles triangular, edentate. Front of head produced and overhanging mandibles, the frontal carinae and antennae situated on the projection. Frontal carinae short, erect, truncate in front and behind, appearing as a thin blade separating the antennae and by no means covering their insertions. Scapes extending slightly beyond the eyes, thickened towards apex; apical segment of funiculus as long as the other seven together, and one and three-quarters times longer than broad. Eyes small, circular, situated at the middle of the sides of head. Thorax one and one-half times longer than broad, pronotum twice as broad as epinotum and three times as broad as long, convex in front, anterior angles bluntly rounded. Pro-mesonotal suture

feebly indicated. Meso-epinotal suture not visible. In profile convex longitudinally, pro-mesonotal suture indicated, slightly depressed at epinotum, declivity straight or feebly concave, vertical, top edge feebly rounded into dorsum. Node twice as broad as long, anterior face and sides strongly convex, posterior face almost straight; in profile almost twice as high as long, anterior face and dorsum convex, posterior face straight; a broad blunt tooth in front below. Postpetiole as long as broad. Apical segments of gaster turned under. Legs short and robust.

Female.—Length, 2–6 mm.

Colour, sculpture and pilosity as in the worker. Eyes much larger, rather flat. Ocelli prominent. Thorax one and one-half times longer than broad. Pronotum scarcely visible from above. Mesonotum as broad as long, sides and anterior border strongly convex; dorsum flattened, or feebly depressed behind. Scutellum oval, one-third broader than long, posterior border concave. Node twice as broad as long, slightly broader behind, sides and posterior border straight, anterior border feebly convex. Wings missing. In other respects similar to the worker.

Habitat.—Beech Forest.

Two very small nests found under logs, in both instances along with nest of *Amblyopone (Fulakora) gracilis*. This species comes nearest to *D. bidens* Clark from Warburton but is readily distinguished by the formation of epinotum and node, in addition to the colour.

Genus TRAPEZIOPELTA Mayr 1862.

Trapeziopelta diadela, sp. nov.

(Pl. IV, figs. 7–8.)

Worker.—Length, 4.5 mm.

Castaneous; epinotum, node and first segment of gaster black; legs testaceous. Some examples are more or less suffused with black throughout.

Shining. Head finely and superficially punctate. Mandibles with very sparse, shallow, scattered punctures. Top of thorax polished, with scattered shallow punctures towards the sides, coarser than on head. Sides of pronotum smooth and with few scattered punctures; rest of sides, including node, very finely striate longitudinally and with scattered punctures. Epinotal declivity punctate. Postpetiole and gaster with fine piligerous punctures.

Head as broad as long, as broad in front as behind, sides and occipital border feebly convex, angles strongly rounded. Mandibles about one-fourth shorter than head, external border concave, inner border strongly convex, furnished with two large blunt teeth near the middle and a small, more or less obsolete, tooth near the apex; the second large tooth is situated just behind the middle and forms an angle from where the mandible is rapidly reduced to base; the first is situated about one-third between second and apex. Clypeus very short, truncate in front. Frontal carinae produced, overhanging clypeus and base of mandibles, truncate in front, approximate, confluent behind, separated by a deep narrow groove which extends to the posterior third of head; the

lobes overhanging the antennal insertions. Antennae stout, scapes not extending to occipital border, gradually thickened to apex; first segment of funiculus as long as the three following together, seventh to tenth broader than long, apical twice as long as broad and as long as the three preceding together. Eyes small, circular and flat, consisting of about twelve facets, situated at the anterior fourth of head, or about twice its diameter from base of mandible. Ocelli absent. Thorax twice as long as broad, sutures deeply impressed. Pronotum about one-third broader than long, sides and anterior border convex. Mesonotum oval, one-third broader than long, convex in all directions. Epinotum as broad as long. In profile feebly convex longitudinally, the declivity short and abrupt, rounded into dorsum. Node twice as broad as long, front and sides strongly convex; in profile fully one-third higher than long, the anterior face descending at a steep angle, the posterior face almost vertical, dorsum slightly convex; a long blunt process in front below. Post-petiole one-third broader than long, truncate in front. First segment of gaster one-third broader than long. Legs stout.

Female.—Length, 5 mm. (Dealated).

Very similar to the worker but with much larger eyes and well developed ocelli. Scapes shorter, not extending beyond posterior ocelli. The parapsidal furrows deeply impressed.

Habitat.—Turton's Track, Beech Forest.

Two small nests were found in very rotten beech logs.

It is with some diffidence that the species has been placed in this genus, which has not previously been recorded from Australia. From the description this species is near *T. xiphias* Emery from New Guinea.

Genus PONERA Latreille 1802.

Ponera scitula, sp. nov.

(Pl. IV, figs. 9–11.)

Worker.—Length, 3 mm.

Head and gaster black; thorax brown; mandibles, clypeus, antennae and legs yellowish red.

Smooth and subopaque. Very finely and densely punctate throughout.

Hair yellow, rather long and suberect on thorax, node and gaster, not apparent on antennae and legs. Pubescence yellow, fine and adpressed throughout, stouter on antennae and legs than elsewhere.

Head one-fifth longer than broad, as broad in front as behind, sides feebly convex, occipital border straight. Mandibles triangular, almost half as long as head; terminal border furnished with nine strong sharp teeth. Clypeus produced and broadly rounded in front. Frontal carinae flattened above, separated by a fine shallow groove which extends to the posterior third of head. Scapes extending to the occipital border, gradually thickened to their apex; first segment of funiculus as long as three following, apical twice as

long as broad and longer than the two preceding together. Eyes small, situated at the anterior third of head. Thorax twice as long as broad. Pronotum one-third broader than long, strongly convex. Mesonotum one-fourth broader than long. Epinotum slightly broader than long; in profile feebly convex longitudinally, the sutures feebly impressed, the declivity abrupt, as long as dorsum of epinotum, the lateral and superior borders bluntly margined. Node three times as broad as long, convex in front, flattened behind, in profile twice as long at the base as above, the anterior face vertical; there is a long broad projection in front below, longer than top of node, the corners sharp. Postpetiole fully one-third broader than long, truncate in front, sides and anterior border convex. First segment of gaster one-fourth broader than long, as broad in front as behind. Legs slender.

Female.—Length, 3.5 mm.

Colour, sculpture and pilosity as in the worker. Larger and more robust. Head larger, broader behind than in front. Eyes and ocelli large. Teeth of mandibles somewhat finer. Parapsidal furrows well defined. Node thinner above, more scale-like. Wings missing.

Ergatoid female.—Length, 3 mm.

Exactly midway between the worker and female. The eyes are smaller and more flattened than in the female, ocelli also much smaller. Thorax as in worker, but scutellum and metanotum developed. There are no traces of wing pads.

Habitat.—Turton's Track, Otway Range.

Near *P. sulciceps* Clark but readily distinguished by the shape of the node.

Ponera decora, sp. nov.

(Pl. IV, fig. 12-13.)

Worker.—Length, 2.8-3.4 mm.

Ochraceous tawny; first segment of gaster infuscated, brownish.

Shining, very finely and densely punctate.

Hair yellow, long and erect, not abundant except on gaster. Pubescence yellow, fine and adpressed, abundant throughout.

Head one-fifth longer than broad, very slightly broader behind than in front, sides strongly convex, occipital border straight, angles rounded. Mandibles half as long as head, terminal border furnished with eight teeth. Clypeus feebly carinate, produced and convex in front. Frontal carinae lobe-like, separated by a narrow, feeble, short groove which hardly extends beyond carinae. Scapes extending beyond occipital border by fully their thickness; first segment of funiculus as long as three following, apical segment fully twice as long as broad and as long as the three preceding together. Eyes moderately large, flat, placed about five times their width from the anterior border of side of head. Thorax twice as long as broad. Pronotum one-third broader than long, strongly convex in front and on sides. Mesonotum slightly broader than long, almost circular, both sutures strongly impressed. Epinotum narrow on top, twice as long as broad, and twice as broad behind as in front. In profile

the mesonotum raised above the level of pronotum and epinotum, the latter distinctly concave in the middle, the sutures deeply impressed; epinotal declivity rounded into dorsum, the lateral borders submarginate. Node twice as broad as long, front and sides united in one convexity, posterior face flat; in profile twice as high as long, twice as long at the base as on top, anterior face vertical, posterior face straight, inclined forward, dorsum convex; a broad flat plate-like projection in front, longer than high. Postpetiole broader than long, anterior face straight and truncate, sides convex. A distinct constriction between postpetiole and first segment of gaster, the latter broader than long, strongly convex on sides. Legs short and stout.

Female.—Length, 3.8 mm.

Differs from the worker as follows: Head broader behind than in front. Eyes large, placed about their diameter from the anterior angle of head. Ocelli large. Mesonotum flattened above, parapsidal furrows deeply impressed. Epinotal declivity almost twice as long as dorsum. Node much more slender, almost sharp above. Wings missing.

Habitat.—Gellibrand; under logs.

Ponera rectidens, sp. nov.

(Pl. IV, fig. 14.)

Worker.—Length, 2.5 mm.

Black; mandibles, clypeus, antennae and legs dull reddish yellow.

Mandibles and clypeus shining, finely and sparsely punctate. Head very densely and finely punctate, rest of body shining, with very fine, shallow, scattered piligerous punctures.

Hair yellow, long and erect, abundant only on gaster, not apparent elsewhere. Pubescence yellow, rather long and adpressed, abundant throughout, shorter on antennae and legs.

Head one-fourth longer than broad, slightly broader behind than in front, sides convex, occipital border straight or feebly concave, angles rounded. Mandibles not half the length of head, terminal border long, furnished with three strong sharp teeth in front, three or four obsolete teeth behind. Clypeus short, broadly rounded and feebly produced in front, carinate on top behind, the carinae feeble and somewhat bifurcated in front. Frontal carinae approximate, short and narrow, separated by a very feeble suture which is not continued behind. Scapes just reach occipital border; first segment of funiculus as long as the three following, others subequal to apical which is twice as long as broad and longer than the three preceding together. Thorax barely twice as long as broad. Pronotum one-third broader than long, strongly convex in all directions. Mesonotum one-fifth broader than long, almost circular. Epinotum twice as long as broad on top, dorsum narrow, parallel and convex laterally. In profile the pronotum convex, lower than mesonotum, a sharp excision between the two. Mesonotum and epinotum together straight, suture hardly visible, declivity flat, at an acute angle, long as the dorsum, sides submarginate forming a distinct sharp angle at sides of superior border, middle of this border bluntly rounded, giving a somewhat concave appearance from above. Node fully three times broader than long, flat behind, sides and front hemispherical; in profile one-third longer at base than on top, anterior face

feebly convex, posterior face inclined forward, straight or feebly concave; a broad plate-like projection in front below, as long as base of node. Postpetiole fully one and a half times broader than long, sides and anterior border feebly convex, the latter truncate in front. A sharp constriction between postpetiole and first segment of gaster. Legs long and slender.

Habitat.—Gellibrand.

Near *P. scitula* in size and colour but distinguished by the shape of the head, thorax and node.

Genus CHALCOPONERA Emery 1897.

Chalcoponera metallica Smith, var. *tasmaniensis* Em.

Rend. Acad. Sc. Bologna, p. 232, 1897, ♀.

This variety was abundant at Gellibrand. Nests under stones.

Subfamily **Myrmicinae** Lepeletier 1836.

Genus APHAENOGASTER Mayr 1853.

Subgenus NYSTALOMYRMA Wheeler 1916.

Aphaenogaster (Nystalomyrma) longiceps Smith.

Cat. Hymn. Brit. Mus. vi, p. 128, 1858; Wheeler, Trans. Roy. Soc. S. Aust., 40, p. 216, 1916.

The crater-like nests of this species were common at Gellibrand.

Genus PHEIDOLE Westwood 1841.

Pheidole gellibrandi, sp. nov.

(Pl. IV, figs. 15–16).

Worker major.—Length, 4–5 mm.

Head ferruginous; mandibles, thorax and gaster chestnut; antennae and legs ochraceous.

Mandibles smooth, with shallow, scattered punctures. Anterior two-thirds of head longitudinally striate, these diverging slightly behind; posterior third transversely striate-reticulate, the interstices shining, microscopically reticulate. Pronotum and mesonotum transversely striate-reticulate. Epinotum and nodes densely and finely punctate. Gaster smooth and shining.

Hair yellow, rather long and erect, abundant throughout, shorter and suberect on antennae and legs.

Head slightly longer than broad, sides straight to posterior third, from there reduced and convex behind. Occipital border deeply excised in the middle, forming two strongly rounded angles. Mandibles edentate, with a distinct notch near apex, large and triangular. Clypeus short, produced in front, with a semi-circular excision in the middle, the sides forming sharp teeth-like angles. Frontal carinae short and broad, overhanging the antennal insertions. Scapes short, not extending to middle of head; first segment of funiculus as long as the four following together, second to eighth broader than long, ninth and tenth longer than broad, apical two and a half times longer than broad and longer than the three preceding together. Eyes small, feebly convex, situated at anterior fourth of sides. Pronotum and mesonotum together as broad as long, almost circular. Epinotum one-third longer than broad, sides parallel, furnished behind with two long slender spines directed upward and backward. In profile the pronotum and mesonotum united in a large dome-shaped convexity; epinotum straight, declivity short, forming a right angle with dorsum, the spines sharply pointed. Node sharply pointed above, concave in the middle; in profile one-fourth longer than high, the anterior face descending at an oblique angle; feebly concave. Postpetiole twice as broad as long, oval; in profile dome-shaped. First segment of gaster almost one-third broader than long, sides and front strongly convex. Legs short and robust. Femora greatly thickened at the middle.

Worker minor.—Length, 2–2.5 mm.

Chestnut-brown; antennae and legs lighter.

Sculpture as in worker major, but slightly coarser and mandibles striate. Pilosity similar.

Head as long as broad, sides and occipital border convex. Mandibles furnished with six or seven sharp teeth behind the apex. Clypeus produced, anterior border straight or very feebly concave. Frontal carinae longer, more lobe-like in front. Scapes reaching the occipital border; funiculus as in worker major. Eyes convex, situated in front of the middle of sides. Thorax as in worker major. Node a little more slender, dorsum convex. The remainder as in the major.

Habitat.—Gellibrand.

A nest under a log. Near *P. ampla* Forel but readily separated by the shape of epinotum, spines and nodes, as well as by the strongly marked sculpturing.

Genus MONOMORIUM Mayr 1855.

Subgenus NOTOMYRMEX Emery 1915.

Monomorium (Notomyrmex) sculpturatum, sp. nov.

(Pl. IV, figs. 17–18.)

Worker.—Length, 2.7 mm.

Bright ferruginous; apex of first segment of gaster and middle segments of funiculus infuscated; apex of antennae, scapes and legs ochraceous.

Shining. Mandibles rather coarsely striate punctate. Head superficially striate, the striae diverging outward behind from the frontal carinae, leaving a triangular space on middle smooth, almost encircling the antennal fovea in front; clypeus strongly striate longitudinally, these striae almost forming carinae. Pronotum and mesonotum with transversely arched striae, coarser than on head, becoming longitudinal on sides; epinotum longitudinally striate on top. In profile the side of pronotum almost smooth, sides of mesonotum and epinotum coarsely striate-rugose. Nodes coarsely and irregularly rugose. Gaster smooth, with scattered shallow piligerous punctures.

Hair yellow, long and erect, abundant throughout, shorter on antennae and legs. Pubescence whitish, very fine and adpressed, apparent only on antennae.

Head slightly longer than broad, broader in front than behind, sides strongly, occipital border feebly, convex. Mandibles barely half as long as head, rather broad, terminal border short, apex long and sharp, furnished with two strong sharp teeth equally spaced between apex and angle, the angle is formed by a short sharp tooth. Clypeus produced, high and overhanging, the dorsum convex longitudinally, level with top of frontal carinae, the anterior border almost as wide as frontal carinae, feebly concave. Frontal area small and semicircular. Frontal carinae short and lobe-like, not overhanging antennal insertions, broader than long, separated by at least the width of lobe. Scapes slightly thicker near middle than at apex, not extending to occipital border by more than their greatest thickness; first segment of funiculus as long as the four following together, second to seventh broader than long, ninth and tenth as broad as long, apical pointed, as long as the six preceding together. Eyes convex, situated in front of middle of sides. No ocelli. Thorax twice as long as broad, strongly constricted at the meso-epinotal suture, pro-mesonotal suture feebly defined. Pronotum one and one-half times broader than long, sides and front strongly convex. Mesonotum longer than broad, almost twice as broad in front as behind, convex in all directions. Meso-epinotal suture deep. Epinotum twice as long as broad, terminated behind by two long slender spines directed slightly outward and upward, barely as long as the interval between them at base; the peculiar striation gives the dorsum a marginate appearance. In profile pronotum and mesonotum united in a convexity. Epinotum lower than mesonotum, convex, declivity abrupt, as long as dorsum, the spines directed upward. Node as long as broad, broader behind than in front, almost circular; in profile one-third higher than long, almost dome-shaped but slightly higher in front than behind, the stalk in front almost as long as node; a short broad tooth in front directed strongly forward. Postpetiole one-third broader than long, oval; in profile higher than long, dome-shaped with a short plate-like process below, extending the full length of base. First segment of gaster, oval, one-sixth longer than broad, occupying almost the whole gaster. Legs long and slender; all the femora bent and greatly thickened at the apical third. Tibia thickened towards apex.

Female.—Length, 3.5 mm.

Similar to the worker but the gaster darker and the ocelli encircled by a brownish patch. Sculpture somewhat closer and coarser, top of clypeus and mesonotum smooth and shining. Pilosity longer and more abundant. Eyes larger, ocelli well developed. Parapsidal furrows short but well impressed. Spines of epinotum slightly stouter.

Habitat.—Beech Forest, in rotten logs.

In size, colour and sculpture this species closely resembles *Huberia bruni* Forel from New Zealand.

Monomorium (Notomyrmex) hemiphacum, sp. nov.

(Pl. IV, fig. 19-20.)

Worker.—Length, 2.8-3.5 mm.

Bright ferruginous; eyes, apex of first and whole of second and third segments of gaster black.

Smooth and shining throughout, mandibles strongly punctate. Hair yellow, long and erect, abundant throughout, shorter on antennae and legs.

Head one-fifth longer than broad, sides convex, occipital border straight or feebly convex, angles strongly rounded. Mandibles half as long as head, furnished with four strong sharp teeth behind the apex. Clypeus projecting strongly in front, the anterior border straight. Frontal carinae very short and widely separated. Scapes not extending to occipital border by about their thickness; first segment of funiculus as long as the three following together, second to eighth broader than long, ninth and tenth as long as broad, apical fully twice as long as broad and as long as the six preceding together. Eyes small and convex. Thorax twice as broad as long. Pro-mesonotal suture feebly marked. Meso-epinotal suture deeply impressed. Pronotum one and one-half times broader than long. Mesonotum as long as broad, much narrower behind than in front. Epinotum as long as broad, with a feeble longitudinal impression in the middle, posterior border concave. In profile pronotum and mesonotum united in a strong convexity, without an impression at the suture. Meso-epinotal excision deep and broad. Epinotum convex, the declivity very short and rounded into dorsum. Node slightly broader than long, almost circular; in profile the anterior face at an oblique angle, slightly concave, dorsum and posterior face united in a convexity, almost two-thirds longer than the stalk in front; a feeble tooth in front below. Postpetiole slightly broader than node, circular, in profile almost circular, smaller than node. First segment of gaster very slightly longer than broad, twice as broad behind as in front. Sides strongly convex.

Female.—Length, 3.7 mm. (Ergatoid.)

Colour, sculpture and pilosity as in the worker. Eyes much larger, placed nearer to front of head. Ocelli large and convex. Thorax more robust. Pro-mesonotal suture scarcely visible. Pronotum and mesonotum equal in length. Scutellum half as long as mesonotum, sutures well impressed. Metanotum short but distinct. Epinotum concave behind, the posterior angles short; in profile convex longitudinally, metanotal sutures only showing on dorsum, the other sutures well impressed on sides; but without traces of wing pads. Epinotal declivity short, slightly convex, angles bluntly rounded. Node and postpetiole as in the worker, but the tooth on ventral surface more plate-like. Gaster much larger.

Habitat.—Beech Forest, 3 nests; Gellibrand, one small nest.Near *M. (N) lae* Forel from Tasmania but smaller. The epinotum and nodes differently shaped.*Monomorium (Notomyrmex) rubriceps* Mayr, var. *cincta* Wheeler.

Proc. Amer. Acad. Sc. Washington, 3, p. 114, fig. 3, 1917, ♀ ♀.

A large colony of this variety was found nesting in a rotten log at Gellibrand.

Genus SOLENOPSIS Westwood 1841.

Solenopsis fusciventris, sp. nov.

(Pl. IV, fig. 21.)

Worker.—Length, 1.3–1.8 mm.

Ochraceous; antennae and legs slightly paler; gaster darker with an indistinct fuscus tinge on apical third of first segment.

Smooth and shining, with scattered shallow piligerous punctures. Faint indications of striae between frontal carinae.

Hair white, moderately long and abundant throughout, suberect; shorter and more adpressed on antennae and legs. Pubescence not apparent.

Head one-sixth longer than broad, as broad in front as behind, sides feebly convex, occipital border straight, angles rounded. Mandibles triangular, with a long sharp point, and four large sharp teeth behind on terminal border. Clypeus strongly projecting in front, overhanging mandibles, the anterior border furnished with four strong, sharp teeth, the two in centre making the termination of two strong sharp carinae above, concave and shining between carinae. Frontal carinae very short, diverging outward behind. Scapes not reaching the occipital border by fully their thickness; first segment of funiculus as long as the four following together, two to seven short, broader than long, eighth as long as broad, apical two and a half times as long as broad, the eighth and ninth forming a distinct club longer than remainder of funiculus. Eyes small and flat, situated at anterior third of sides. Thorax barely twice as long as broad, pro-mesonotal suture not defined, meso-epinotal suture strongly impressed. Pro-mesonotum almost three times broader in front than behind. Epinotum very short, sides parallel; in profile pronotum strongly convex in front, feebly so behind, the epinotum convex, descending from the suture into the declivity with which it is united in a continuous convexity. Node twice as broad as long, transverse oval, in profile twice as high as long, dome-shaped, as long as the stalk in front; there is a short blunt tooth in front below. Postpetiole transverse oval, one and three-fourths times broader than long; in profile higher than long, strongly convex above. First segment of gaster fully twice as long as broad, broadest at middle, occupying almost two-thirds of gaster. Legs robust, femora thickened near apical third.

Habitat.—Gellibrand. A small nest in a Termite infested log.

Near *S. froggatti* Forel from Tasmania, but readily separated by the form of the nodes.

Subfamily **Dolichoderinae** Forel 1878.

Genus IRIDOMYRMEX Mayr 1862.

Iridomyrmex vicina, sp. nov.

(Pl. IV, fig. 22.)

Worker.—Length, 3 mm.

Dull bluish-green; mandibles, antennae and legs brownish; scapes and tarsi lighter.

Smooth, subnitid, microscopically punctate throughout.

Hair yellow, very short, erect, longer on ventral surface of gaster, rather sparse throughout. Pubescence whitish very fine and adpressed, abundant throughout but not hiding the sculpture.

Head slightly longer than broad, much broader behind than in front, sides convex, occipital border straight, angles strongly rounded. Mandibles furnished with nine to ten teeth, the first six or seven strong and sharp. Clypeus convex, anterior border straight and broad, with a somewhat truncate appearance. Frontal area elongate triangular. Frontal carinae flat, as long as broad. Scapes passing occipital border by almost one-fourth their length; first segment of funiculus three times longer than broad, second to ninth longer than broad, tenth as broad as long, apical as long as two preceding together. Eyes circular, flat, placed at middle of sides. Thorax twice as long as broad. Sutures well defined. Pronotum one-third broader than long, strongly convex in all directions. Mesonotum as long as broad, sides almost parallel, strongly convex laterally. Epinotum as long as broad, parallel with mesonotum. In profile pronotum strongly and evenly convex, suture sharply impressed. Mesonotum straight, very low behind. Epinotum dome-shaped, almost half its length higher than mesonotum, declivity continuous with dorsal convexity. Node scale-like, convex transversely; in profile inclined slightly forward, anterior face convex, posterior face flat. Gaster ovate. Legs long and slender.

Female.—Length, 7–8 mm.

Colour and sculpture as in the worker. Pubescence more abundant. Head as long as broad. Eyes and ocelli large. Scapes exceeding the occipital border by fully their thickness. Pronotum hardly visible from above. Mesonotum one-third broader than long, front and sides strongly convex, dorsum convex in all directions, parapsidal furrow sharply defined. Scutellum one-fifth broader than long, strongly convex behind. Epinotum almost twice as broad as long. Node fully twice as broad as long, convex in front. Gaster twice as long as broad. Legs slender.

Habitat.—Beech Forest; several small nests under stones.

Much more robust than *gracilis* Lowne which it resembles. The structure of the head and node readily separate them.

Iridomyrmex mattiroli Emery.

Rend. Accad. Sc. Bologna, p. 238, fig. 8, 1897, ♀.

Two nests of this species were obtained at Gellibrand.

Iridomyrmex itinerans Lowne.

The Entomol., London, 2, p. 278, ♀.

Many examples were found on tree-trunks at Gellibrand.

Iridomyrmex darwinianus Forel.

Ann. Mus. Hung. 5, p. 28, 1907, ♀.

Found at Beech Forest and Gellibrand but not common. The examples from Gellibrand appear to belong to the subspecies *leae* Forel but are certainly closer to the typical form.

Iridomyrmex foetans Clark.

Vic. Naturl. xlvi, p. 122, pl. 1, fig. 1, 1929, ♀.

Many examples were found on tree-trunks at Beech Forest and Gellibrand. This species emits a powerful and disagreeable odour.

Subfamily **Formicinae** Lepeletier 1836.

Genus **DIODONTOLEPIS** Wheeler 1920.

Diodontolepis spinisquamis (Andre).

Rev. d'Ent. Caen, p. 254, 1896, ♀ ♀ ♂. (*Melophorus*).

Diodontolepis spinisquamis Wheeler, Bull. Amer. Mus. Nat. Hist., xlv, p. 694, 1922.

Melophorus spinisquamis Emery, Gen. Insect. Fasc. 183, p. 12, 1925.

Two nests were found under logs near Gellibrand, and one at Beech Forest. Emery is in error in sinking Wheeler's generic name for this species. In addition to the anatomical details the habits, too, are different from those of *Melophorus*. Some examples have a distinct tubercle on posterior margin of epinotum, and distinct, but small, spines on node.

Genus **NOTONCUS** Emery 1895.

Notoncus foreli Andre.

Rev. d'Ent. Caen, p. 256, 1896, ♀.

One small nest under log at Gellibrand.

Genus **PSEUDONOTONCUS**, gen. nov.

Worker.—Monomorphic, varying slightly in size. Mandibles triangular, dentate. Maxillary palpi with six segments, labial palpi with four segments. Clypeus broad, carinate, produced in front, slightly overhanging mandibles. Frontal area small, transverse. Frontal carinae feeble, diverging behind. Antennae twelve segmented. Scapes extending beyond occipital border. Eyes circular, placed at posterior third of head. Ocelli distinct. Pronotum broad, strongly convex in all directions. Pro-mesonotal suture deep and wide. Spiracles placed on dorsum at anterior of depression. Posterior border of epinotum furnished with two long sharp spines; flattened laterally. Two similar but shorter spines near middle of epinotal declivity at sides. Node thick, furnished with two spines similar to those on epinotum, parallel, directed backward; a short blunt tooth below in front directed forward. Gaster oval. Legs robust, all femora and tibiae thickened at middle. Tibia with one pectinate and one bristle-like spur; middle and posterior tibiae each with one strong bristle-like spur. Claws simple.

Female.—Differs from the worker only in slightly larger size ; the spines of epinotum slightly shorter. Wings missing.

Genotype, *Pseudonotoncus hirsutus*, n. sp.

In size and sculpture this genus is apparently nearest to *Notoncus*. The same variation in size of workers is found in both genera. In many respects it is even closer to *Diodontolepis* Wheeler, but the latter is much larger, with a different sculpture. All these genera have the maxillary palpi with six, and the labial palpi with four segments.

Pseudonotoncus hirsutus, sp. nov.

(Pl. IV, fig. 23-24.)

Worker.—Length, 3.3-3.8 mm.

Chocolate brown ; antennae and legs somewhat lighter ; gaster black.

Shining. Mandibles finely striate, clypeus striate-rugose. Head finely striate-reticulate, scapes very finely reticulate. Pronotum and mesonotum coarsely and irregularly rugose. Dorsum and declivity of epinotum transversely striate, the striae continued longitudinally on sides. Top of node rugose, anterior face smooth and shining, posterior face weakly striate transversely. Gaster smooth and shining.

Hair yellow, long, slender and erect, abundant throughout, shorter and suberect on antennae and legs. Pubescence very fine, sparse, apparent only on gaster.

Head very slightly broader than long, broader behind than in front, sides and occipital border feebly convex, angles broadly rounded. Mandibles furnished with six strong sharp teeth, the first, second and fourth largest. Clypeus convex in front, carinate above, the apex forming a sharp tooth-like projection in front. Frontal area large, transversely triangular. Frontal carinae as long as broad in front, one-third broader behind, sharply margined. Scapes extending beyond occipital border by almost one-fourth their length ; first segment of funiculus twice as long as two following together, second to ninth longer than broad, tenth as long as broad, apical pointed, as long as two preceding together. Eyes large, convex, placed near posterior third of sides. Ocelli small. Thorax one and two-thirds times longer than broad. Pronotum twice as broad as long, strongly convex. Mesonotum as long as broad, sides almost straight, very feebly convex ; a wide constriction separates epinotum. The latter broader than long, terminating in two long sharp spines, as long as their distance apart, almost parallel ; two shorter, but sharp, teeth on lateral borders of declivity, wider apart than those on dorsum. In profile pronotum and mesonotum form a strong convexity, interrupted at suture. Meso-epinotal suture deeply impressed. Epinotum slightly convex, the spines slender, one-third shorter than dorsum, directed upward and backward, declivity straight, twice as long as dorsum, with a strong sharp spine at basal third, thicker and shorter than dorsal spines. Node twice as broad as long, strongly convex in front, feebly convex behind, furnished above with two broad sharp-pointed spines, their outer edges convex ; in profile almost twice as high

as long, very slightly longer at base than above, anterior face vertical, convex toward tip, posterior face feebly convex, inclined slightly forward, spines slender, but a little more robust than those of pronotum, directed backward and upward; a short blunt tooth on the ventral surface in front, directed forward. Gaster slightly longer than broad, front and sides strongly convex. Legs slender.

Female.—Length, 4.3 mm.

Colour and pilosity as in the worker. Sculpture much coarser. Head as broad as long, occipital border almost straight. Mandibles and clypeus as in worker. Scapes extending beyond occipital border by one-third their length. Eyes and ocelli slightly larger. Pronotum broader than long, angles broadly rounded. Mesonotum one-third broader than long, posterior border straight, parapsidal furrows distinct. Scutellum one-fifth broader than long, oval. Epinotum almost four times broader than long, posterior border with two short, broad, sharp-pointed teeth-like spines. In profile pronotum truncate in front, suture deeply impressed. Mesonotum and scutellum feebly convex above. Epinotum low, dorsum and declivity united, convex, spines of dorsum slender and sharp, as long as dorsum, directed slightly backward, spines of declivity short, sharp, placed just below middle of lateral border. Node one-fourth broader than long, oval, spines long, broad at base, sharp at apex, inner borders straight, outer borders convex; in profile twice as high as long, thickest at base, anterior and posterior faces convex, spines slender, directed backward and upward; a sharp blunt tooth in front below directed forward. Gaster slightly longer than broad. Legs robust.

Habitat.—Gellibrand.

A small colony under a log. On being disturbed they instantly rolled themselves up and lay motionless.

Genus PROLASIUS Forel 1892.

Prolasius abruptus, sp. nov.

(Pl. IV, fig. 25.)

Worker.—Length, 3.5 mm.

Ferruginous; mandibles, antennae and legs lighter; gaster brownish.

Subopaque, very finely and densely punctate. Mandibles finely striate.

Hair yellow, long, slender and erect, almost confined to gaster, clypeus, mandibles and apex of scapes. Pubescence greyish, very fine, adpressed, abundant throughout but not hiding the sculpture.

Head very slightly longer than broad, sides and occipital border convex, angles broadly rounded. Mandibles triangular, with six large sharp teeth. Clypeus not carinate, bluntly pointed in front. Frontal area transversely triangular. Frontal carinae short, barely as long as broad in front, parallel. Scapes extending beyond occipital border by barely half their length; first segment of funiculus twice as long as two following together, second and third as long as broad, fourth to tenth longer than broad, apical as long as two preceding together. Eyes large, circular, rather flat, placed at middle of

sides. Ocelli present, but small. Thorax one and two-thirds longer than broad, sutures well defined. Pronotum almost twice as broad as long, strongly convex. Mesonotum almost one-fourth longer than broad, half as broad as pronotum, sides feebly convex. Epinotum one and one-half times broader than long; in profile pronotum and mesonotum convex, latter somewhat higher. Epinotum much lower than mesonotum, straight, elevated behind, declivity face straight, at right angles to dorsum, two and a half times as long as dorsum. Node scale-like, concave transversely; in profile the anterior face convex, posterior almost flat, a short broad projection below. Gaster one-fourth longer than broad. Legs slender.

Habitat.—Gellibrand, in rotten logs.

Prolasius pallidus, sp. nov.

(Pl. IV, fig. 26-27.)

Worker.—Length, 2.2-2.8 mm.

Pale ochraceous yellow; gaster slightly darker.

Hair yellow, short and erect, apparent only on clypeus and gaster. Pubescence yellow, very fine and adpressed, abundant throughout but not hiding the sculpture.

Head very slightly longer than broad, sides and occipital border convex, latter with a feeble indentation at middle. Mandibles triangular, furnished with four large sharp teeth and three smaller. Clypeus produced to a blunt point in front, not carinate. Frontal area transversely triangular. Frontal carinae short, parallel. Scapes extending beyond occipital border by one-fourth of their length: first segment of funiculus slightly longer than two following, second and fourth as long as broad, third shortest, one-third broader than long, fifth to ninth longer than broad, tenth as long as broad, apical longer than two preceding together. Eyes moderately large and convex, placed at middle of sides. Ocelli small. Thorax one and two-thirds broader than long. Pronotum one-third broader than long, strongly convex; pro-mesonotal suture sharply impressed. Mesonotum as long as broad, broader in front than behind, sides and dorsum convex. Epinotum as long as broad, sides feebly convex. In profile the pronotum and mesonotum form an almost even convexity, dorsum of epinotum straight and inclined upward behind, epinotal declivity straight, or feebly convex, almost at right angles to dorsum, twice as long as dorsum. Node scale-like, bluntly pointed above, convex transversely, anterior face convex, posterior almost flat. Gaster almost twice as long as broad. Legs slender.

Female.—Length, 5.5 mm.

Colour, sculpture and pilosity as in the worker. Head slightly broader than long, sides feebly convex, occipital border feebly concave in middle, angles broadly rounded. Mandibles as in worker. Anterior two-thirds of clypeus carinate, produced somewhat tooth-like on the anterior border. Scapes extending beyond occipital border by one-fifth of their length. Eyes and ocelli large and convex. Thorax one and one-half times longer than broad. Pronotum hardly visible from above. Mesonotum one and one-half times broader than long, strongly convex in front; parapsidal furrows fully half as long as dorsum, sharply impressed. Scutellum one-fourth broader than long; oval. Epinotum five times broader than long. Node with a slight excision on top edge.

Habitat.—Beech Forest, under logs.

Prolasius hemiflavus, sp. nov.

(Pl. IV, fig. 28-29.)

Worker.—Length, 2.7-3.2 mm.

Head, thorax, node, antennae and legs ochraceous; gaster brownish; apex of segments yellowish.

Smooth and shining; head, thorax, antennae and legs very finely and densely punctate.

Hair yellow, sparse, rather long, erect and bristle-like; none on antennae and legs. Pubescence whitish, very fine and adpressed, hardly apparent on gaster.

Head almost one-fourth longer than broad, sides strongly convex, occipital border straight or feebly concave. Mandibles triangular, furnished with six strong sharp teeth. Clypeus strongly convex, not carinate, anterior border rounded. Frontal area large, broadly triangular. Frontal carinae as long as broad in front. Scapes extending beyond occipital border by almost one-third their length; first segment of funiculus larger than three following together, second and fourth as long as broad, third shorter, remainder longer than broad. Eyes large, placed at middle of sides. Ocelli prominent. Thorax barely twice as long as broad, sutures deeply impressed. Pronotum fully one-fourth longer than broad, sides straight. Epinotum broader than mesonotum, broader behind than in front, fully one-third broader than long, posterior border concave, sides convex. In profile the pronotum and mesonotum form a single convexity, mesonotum low, dorsum straight, epinotal declivity twice as long as dorsum, convex, the superior angle sharp. Node scale-like, bluntly pointed, convex transversely. Gaster one-fourth longer than broad. Legs rather long and slender.

Female.—Length, 4.4 mm.

Colour, sculpture and pilosity as in the worker. Head as broad as long, much broader behind than in front. Front edge of clypeus more acute than in worker, dorsum subcarinate in front. Scapes extending beyond occipital border by fully one-third their length. Thorax barely one-third broader than long. Pronotum short. Mesonotum one-third broader than long, dorsum flattened, parapsidal furrows not deeply impressed. Epinotum four times broader than long. Node scale-like as in worker.

Habitat.—Beech Forest.

This species is very common, being present in most rotten logs.

Prolasius niger, sp. nov.

(Pl. IV, fig. 30.)

Worker.—Length, 3.4-3.8 mm.

Black; mandibles, antennae and tarsi brown; legs blackish brown.

Smooth and shining. Mandibles feebly striate and punctate. Clypeus microscopically reticulate. Scapes and legs very finely and densely punctate.

Hair yellow, long and erect, very sparse on head, more numerous on gaster, not apparent on thorax, node, antennae and legs. Pubescence very fine and adpressed, sparse on body, abundant on antennae and legs.

Head very slightly longer than broad, almost square, sides and occipital border feebly convex, angles broadly rounded. Mandibles triangular, furnished with six strong sharp teeth. Clypeus sharply carinate on anterior two-thirds. Frontal area transversely triangular. Frontal carinae longer than broad in front, almost parallel. Scapes extending beyond occipital border by half their length; first segment of funiculus twice as long as broad and slightly longer than second, remaining segments longer than broad, apical twice as long as broad, sharply pointed. Eyes circular, rather flat, placed slightly behind middle of sides. Ocelli very small. Thorax twice as long as broad. Pronotum one-fourth broader than long, strongly convex, twice as broad as rest of thorax. Mesonotum one-fourth longer than broad, sides almost straight. Epinotum as long as broad, broader behind than in front; in profile the pronotum and mesonotum form a long convexity with a slight depression at the suture. Meso-epinotal suture deeply excised, epinotum convex, dorsum projecting slightly beyond the declivity face, hardly overhanging; declivity face straight to near top where the projecting dorsum gives a concave appearance, almost one-third longer than dorsum. Node scale-like but twice as broad as long, very blunt above, convex transversely; in profile, the anterior face strongly convex, posterior feebly convex, twice as high as long. Gaster one-fourth longer than broad. Legs slender.

Habitat.—Beech Forest, in rotten logs.

Prolasius flavicornis, sp. nov.

(Pl. IV, fig. 31–32.)

Worker.—Length, 3–4 mm.

Brownish-black; antennae and coxae yellowish; legs and node brown.

Shining, microscopically punctate throughout. Mandibles very finely striate longitudinally.

Hair yellow, long and erect, sparse throughout except on gaster. Pubescence very fine, short, sparse except on antennae and gaster.

Head very slightly longer than broad, sides and occipital border strongly convex. Mandibles triangular, furnished with five strong, sharp teeth behind the apex. Clypeus produced and bluntly pointed in front, subcarinate on anterior two-thirds above. Frontal area broad, almost convex behind. Frontal carinae barely as long as wide in front. Eyes large, convex, placed behind the middle of sides. Ocelli very small. Scapes extending beyond occipital border by almost half their length; first segment of funiculus as long as the three following together, second to fourth as broad as long, remainder longer than broad, pronotum one-third broader than long, strongly convex. Mesonotum half as wide as pronotum, one-fourth longer than broad, slightly broader in front than behind, sides almost straight. Epinotum one-fourth narrower than pronotum, twice as broad behind as in front. In profile the pronotum and mesonotum together feebly convex, a deep and wide excision between mesonotum and epinotum, the latter dome-shaped, the declivity abrupt and straight, almost one-third longer than dorsum. Node scale-like, two and a half times higher than long, anterior and posterior faces convex, top edges straight and rather sharp. Gaster ovate. Legs robust.

Female.—Length, 5 mm.

Head and antennae ferruginous; thorax darker; gaster black with apical margin of segments reddish; legs ochraceous. Sculpture and pilosity as in the worker.

Head broader than long, much broader behind than in front. Mandibles and clypeus as in worker. Scapes extending beyond occipital border by one-third their length. Eyes and ocelli large and convex. Mesonotum flattened above, parapsidal furrows short but sharply impressed. Top edge of node concave. Gaster large.

Habitat.—Beech Forest; usually found under stones in damp fern gullies.

Genus STIGMACROS Forel 1905.

Stigmacros barretti Santschi.

Bull. Soc. Vaud. Sc. Nat. 56, no. 221, 1928, p. 477, fig. 2.

A single worker taken at Gellibrand. Originally described as from Ringwood (Barrett).

Genus CAMPONOTUS Mayr 1861.

Subgenus TANAEMYRMEX Ashmede 1905.

Camponotus (Tanaemyrmex) consobrinus (Erichson).

This common and widely distributed species was found at Gellibrand.

Having examined many large series of all forms of this species from all parts of Tasmania and the mainland I can find nothing in which to justify the retention of Roger's name. The differences in the clypeus and size mentioned by Roger for *dimidiatus* are found in all series of *consobrinus* from Tasmania.

CAMPONOTUS (TANAEMYRMEX) CONSOBRINUS Erichson, Arch. f. Naturg. viii, pt. i, p. 228, 1842, ♀ (*Formica*); Smith, Cat. Hymn. Brit. Mus. vi, p. 41, 1858, ♀ ♀. (*Formica*).

Camponotus consobrinus Froggatt, Agric. Gaz. N.S. Wales, 1905.

Camponotus consobrinus Roger, Verz. Formicid, p. 4, 1863 (non Erichson); Emery, Genera Insect. fasc. 183, p. 171, 1925 (sous genre incertain).

Camponotus dimidiatus Roger, Verz. Formicid, p. 4, 44, 1863, ♀; Mayr, Reise Novara, Formic. p. 50, 1865, ♀.

Camponotus nigriceps var. *dimidiatus* Emery, Ann. Mus. Stor. Nat. Genova, xxiv, p. 211, 1887, ♀ ♀ ♂.

Camponotus nigriceps s. sp. *dimidiatus* Forel, Arkiv. f. Zool. ix, (16), p. 97, 1915.

Camponotus intrepidus Mayr, Verh. Zool.-bot. Ges. Wien, xii, p. 659, 1862 (non Kirby).

ANTS FROM THE OTWAY RANGES.

- s. sp. LIVIDIPES Emery, Ann. Mus. Nat. Genova, xxiv, p. 211, 1887 (nota).
(*Camponotus nigriceps* var. *lividipes* Emery.)
Camponotus nigriceps var. *prostans* Forel, Fauna S.W. Austrl. i, p. 301,
1907, ♀ ; Rev. Suisse Zool. xviii, p. 72, 1910 ; Emery, Gen. Insect. 183,
p. 103, 1925.
- s. sp. OBNIGER Forel.
Camponotus nigriceps var. *obniger* Forel, Rev. Suisse Zool. x, p. 506, 1902, ♀ ;
Forel, ibidem, xviii, p. 72, 1902 ; Emery, Gen. Insect. 183, p. 103, 1925.
- s. sp. PERTHIANA Forel, Arkiv. f. Zool. ix (16), p. 97, 1915, ♀ ; Crawley, Ann.
Mag. Nat. Hist. (9), x, p. 35, 1922, ♀ ♀ ; Emery, Gen. Insect. 183, p. 103,
1925.
- CAMPONOTUS (TANAEMYRMEX) NIGRICEPS F. Smith, Cat. Hymn. Brit. Mus. vi,
p. 38, 1858, ♀.
Camponotus nigriceps Roger, Verz. Formicid, p. 4, 1863, ♀. Mayr, Verh.
Zool.-bot. Ges. Wien, xii, p. 59, 63, 1876, ♀ ♀.
Camponotus (Myrmoturba) nigriceps Forel (1914).
Camponotus (Tanaemyrmex) nigriceps Emery, Gen. Insect. 183, p. 103, 1925.
- s. sp. CLARIOR Forel, Rev. Suisse Zool. x, p. 506, 1902, ♀. (*nigriceps* var.).
Emery, Gen. Insect. 183, p. 103, 1925.
- s. sp. PALLIDICEPS Emery, Ann. Mus. Nat. Genova, xxiv, p. 211 (nota), 1887.
(*nigriceps* var.)

Subgenus MYRMOSAULUS Wheeler 1921.

Camponotus (Myrmosaulus) intrepidus (Kirby).

Trans. Linn. Soc. Lond. xii, p. 477, 1818 (*Formica*).

Formica agilis Smith, Cat. Hymn. Brit. Mus. vi, p. 37, 1858.

Camponotus intrepidus Roger, Verz. Formicid, p. 4, 1863 ; Mayr, Jour.
Mus. Godeffroy, xii, p. 62, 1876 ; Forel, Rev. Suisse Zool. x, p. 493,
1902 (sensu strict).

Camponotus magnus Mayr, Verh. Zool.-bot. Ges. Wien, xii, p. 673, 1863.

Camponotus (Myrmosaulus) intrepidus Emery, Gen. Insect. 183, p. 114,
1925.

One nest of this species was found at Gellibrand, nesting
under a rotten log.

Subgenus MYRMOPHYMA Forel 1912.

Camponotus (Myrmophyma) aeneopilosus Mayr.

Verh. Zool.-bot. Ges. Wien, xii, p. 665, 1862.

Two specimens found running on bush track at Gellibrand.

Camponotus (Myrmophyma) hartogi Forel.

Rev. Suisse Zool. x, p. 500, 1902, ♀.

Camponotus (Myrmepomis) hartogi Forel (1914).

Camponotus (Myrmophyma) hartogi Emery, Gen. Insect., fas. 183, p. 111, 1925.

Several small nests of this species were found at Gellibrand.

Genus POLYRHACHIS Smith 1857.

Subgenus CAMPOMYRMA Wheeler 1911.

Polyrhachis (Campomyrma) femorata Smith.

Cat. Hymn. Brit. Mus. vi, p. 73, pl. 4, fig. 46, 1858, ♀.

Polyrhachis femorata Mayr, Jour. Mus. Godeffroy, xii, p. 70, 76, 1876, ♀.

Camponotus emeryi Forel, Bull. Soc. Vaud. Sc. Nat. xvi, p. 113, pl. 1, fig. 4, 1879.

Polyrhachis (Campomyrma) femorata Forel, Arkiv. f. Zool. ix (16), p. 113, 1915; Emery, Gen. Insect. 183, p. 179, 1925.

Several nests were found under logs and stones at Gellibrand.

Polyrhachis (Campomyrma) semipolita Andre.

Rev. d'Ent. Caen, p. 251, 1896 (*P. semipolita*).

Polyrhachis (Campomyrma) hexicantha s. sp. *semipolita* Emery, Gen. Insect. 183, p. 179, 1925.

A nest of this distinct species was found under a log near Gellibrand River.

Genus PARATRECHINA Motschoulsky 1863.

Subgenus Nylanderia Emery 1906.

Paratrechina (Nylanderia) obscura Mayr.

Ver. Zool.-bot. Ges. Wien, xii, p. 698, 1862.

Two nests of this species were found at Gellibrand.

Paratrechina (Nylanderia) minutula Forel.

Mitt. Zool. Mus. Berlin, 2, p. 25, 1901, ♀.

A small colony under a log at Gellibrand.

Plate IV

Fig.

1. *Eusphinctus fulvipes*, sp. nov. ; worker.
2. *Myrmecia crassinoda*, sp. nov. ; worker.
- 3, 4. *Amblyopone (Fulakora) gracilis*, sp. nov. ; worker (3) ; head of female (4).
- 5, 6. *Discothyrea turloni*, sp. nov. ; worker (5) ; female (6).
- 7, 8. *Trapeziopelta diadela*, sp. nov. ; worker (7) ; female (8).
- 9, 10, 11. *Ponera scitula*, sp. nov. ; worker (9) ; female (10) ; ergatoid female (11).
- 12, 13. *P. decora*, sp. nov. ; worker (12) ; female (13).
14. *P. rectidens*, sp. nov. ; worker.
- 15, 16. *Pheidole gellibrandi*, sp. nov. ; soldier (15) ; worker (16).
- 17, 18. *Monomorium (Notomyrmex) sculpturatum*, sp. nov. ; worker (17) ; female (18).
- 19, 20. *M. (N.) hemiphaeum*, sp. nov. ; worker (19) ; female (20).
21. *Solenopsis fusciventris*, sp. nov. ; worker.
22. *Iridomyrmex vicina*, sp. nov. ; worker.
- 23, 24. *Pseudonotoncus hirsutus*, sp. nov. ; worker (23) ; female (24).
25. *Prolasius abruptus*, sp. nov. ; worker.
- 26, 27. *P. pallidus*, sp. nov. ; worker (26) ; head of female (27).
- 28, 29. *P. hemiflavus*, sp. nov. ; worker (28) ; head of female (29).
- 30, 31. *P. flavicornis*, sp. nov. ; worker (30) ; head of female (31).
32. *P. niger*, sp. nov. ; worker.

