

10. *Formicidae* (*Hymenoptera*).

By JOHN CLARK, Entomologist, National Museum of Victoria.

The collecting was confined almost entirely to Reevesby Island. The ant fauna is typical of South and Western Australia, and it is interesting to note that Reevesby Island, 3 miles long by 1 mile wide, contains almost twice the number of species of ants found in the British Isles or in New Zealand. Both these countries have about twenty species each. Thirty-three species, in twenty genera, representing four sub-families, were obtained on Reevesby Island, seven of these were found also on Winceby Island and two on English Island. Four of the species belong to genera not recorded previously from South Australia. One species is known only from South Australia, two only from Western Australia, nine from the dry inland area of Western Australia, South Australia, and Victoria, and seven are common in most parts of all the States; only four of the total number have been found in Tasmania. Fourteen species are new; one of these is found also on the mainland and extends westward to Balladonia. The hot weather and dry conditions on the island were not favourable for ant life. Most of the species were found in their nests under the shelter of small shrubs, whilst a few had their nests beneath the leaf debris under the large shrubs and some of the sun-loving species were nesting in the open, clear of all shade. Most of the Myrmicinae and Formicinae were found in rotten trunks and stumps of the "Native juniper" or "Boobialla", the nest of some species being of considerable size.

The Ponerinae, or stinging ants, are represented by seven species in six genera. Of these *Rhytidoponera punctata* (Smith) is the most common species, their small crater-like mounds being abundant. Numerous nests of the slender bull ant *Myrmecia gracilis* Emery were found near the middle of the island, particularly near the camp. Several small nests of the interesting genus *Eubothroponera*, were found beneath the accumulated debris under large shrubs near the middle of the island. In the same situations also were found nests of a jumping bull ant *Myrmecia* (*Promyrmecia*) *dichospila* sp. n. described herein and *Euponera* (*Brachyponera*) *nigra* Clark a black species found in various parts of Western Australia. The common "green head ant" *Chalcoponera metallica* Smith is abundant; it is found throughout the Commonwealth. *Myrmecia*, *Eubothroponera*, and *Chalcoponera* are purely Australian genera; *Rhytidoponera* is a Papuan genus and *Acanthoponera* is found in New Zealand and South America.

The sub-family Myrmicinae is represented by ten species in eight genera. Nests of *Crematogaster* and *Dacryon* were found in fallen rotten trunks of "Native juniper", and in several instances the trunks were occupied also by the large termite

Calotermes condonensis Hill. The only arboreal species found is the common "tree ant" *Podomyrma adelaidae* (Smith); it is widely distributed on the mainland.

The sub-family Dolichoderinae is represented by seven species in two genera. Several large nests of the "meat-ant" *Iridomyrmex detectus* Smith were found. This is the most common and widely distributed ant in Australia. The blue or greenish-blue variety of this species is common at the north end of Reevesby Island. Described originally from Killalpaninna, South Australia, it extends westward to Balladonia. The nests of the variety are inconspicuous and indicated by small entrance tunnels without traces of a mound. The mounds of *I. detectus* generally are several feet in diameter and almost 2 feet high.

The sub-family Formicinae is represented by nine species in five genera. Four of the species are new, the remainder are widely distributed in Australia.

Family FORMICIDAE Latreille, 1810.

Sub-family PONERINAE Lepelletier.

Genus **Myrmecia** Fabricius.

MYRMECIA GRACILIS Emery.

M. gracilis Emery, Ren. Accad. Sc. Bologna, p. 232, fig. 2, 1898, ♂.

M. crudelis Sm. var. *gracilis* Emery, Gen. Insect., fasc. 118, p. 19, 1911, ♂.

(Fig. 1.)

Worker.—Length 20–22 mm.

Head and gaster black, thorax, node and postpetiole ferruginous, mandibles yellow, clypeus, antennae and tarsi reddish yellow, femora and tibiae brownish.

Hair yellow, abundant, slender and erect on head and thorax, sub-erect on legs, none on scapes, very long on gaster. Pubescence greyish, very abundant and adpressed, particularly on gaster.

Mandibles shining, feebly punctate-striate. Head coarsely and irregularly rugose, finely and densely reticulate between the rugae. Pronotum transversely arched striate, mesonotum and epinotum transversely striate. Node punctate-rugose, rugae obsolete. Postpetiole, gaster and legs microscopically punctate.

Head as long as broad, strongly rounded behind, occiput not truncate. Mandibles as long as head, linear and parallel, external border concave in middle. Clypeus broadly and deeply excised in middle, borders convex, anterior angles sharp pointed. Labrum broader than long, projecting in front of clypeus, anterior border broadly convex. Frontal carinae twice as long as broad in front, parallel. Frontal area large and triangular. Scapes extend beyond

occipital border by one-third their length. Second segment of funiculus one and one-half times longer than first, third very slightly longer than first, remainder sub-equal to apical. Eyes large and convex. Ocelli small and close together. Thorax three times longer than broad. Pronotum as long as broad, strongly convex in all directions. Mesonotum circular, as long as broad, convex above. Metanotum deep and wide, one-third as long as mesonotum. Epinotum slightly longer than broad, strongly rounded in all directions. In profile pronotum strongly convex from base to apex. Mesonotum strongly convex, much higher than pronotum, higher in front than behind. Metanotum deep and long. Epinotum feebly convex, strongly rounded into declivity. Node circular, as long as broad, convex on top, one-fourth longer than stalk in front. In profile dome-shaped, anterior face concave below, the spine in front below very short and blunt. Postpetiole one-third broader than long, two-thirds broader behind than in front, sides feebly convex. Gaster slightly longer than broad. First segment one-sixth broader than long, broader behind than in front, sides strongly convex. Legs long and slender.

Female.—Length 24.5–26 mm.

Similar to worker, but more robust. Colour darker and sculpture coarser. Head almost square and more truncate behind. Mayrian and parapsidal furrows strongly impressed on scutellum. A deep narrow impression between metanotum and epinotum. Legs more robust. Wings missing.

Male.—Length 18–19 mm.

Colour and pilosity as in the worker. Sculpture finer, more punctate-reticulate, the punctures large and shallow.

Head, across the eyes, one-fourth broader than long, strongly convex behind. Mandibles short, triangular, edentate. Clypeus flatly convex above, feebly indented in middle in front. Frontal carinae short and elevated. Frontal area small. Scapes one-third longer than first segment of funiculus, second segment three and one-half times longer than scape, third, fourth, and fifth equal in length, one-third shorter than second, remainder sub-equal to apical. Eyes large, occupying almost one-half of sides. Ocelli large and convex. Thorax barely twice as long as broad. Pronotum short, strongly convex in front. Scutellum broader than long, bluntly cone-shaped in front, mayrian and parapsidal furrows deeply impressed, a fine short longitudinal groove in front. Mesonotum slightly broader than long, anterior edge straight, sides feebly, posterior border strongly convex. Epinotum short, strongly convex transversely. Node as long as broad, circular, longer than stalk in front, in profile dome-shaped, evenly convex, the ventral spine very short and blunt. Postpetiole very slightly broader than long, fully two and one-half times broader

behind than in front, sides straight to posterior fourth then strongly convex. Gaster fully one-fourth longer than broad. First segment one-fourth broader than long, sides strongly convex. Pygidium retracted. Legs long and slender. Wings hyaline.

Habitat.—Reevesby Island.

Numerous nests of this species were found, particularly near the middle of the island, and around the camp. All the nests are the usual crater-shaped mounds about ten inches high. Several nests were dug out; all were 2 feet deep and contained about 200 workers. Although described as a species by Emery he later regarded it as a variety of *M. crudelis* Smith. It is related to *M. vindex* Smith not to *M. crudelis* as supposed by Emery; *M. crudelis* was unknown to him. *M. gracilis* was described from a single, damaged specimen from Kangaroo Island and has not been recorded since. It is abundant and widespread in South Australia, parts of Western Australia and Victoria.

Sub-genus **Promyrmecia** Emery.

MYRMECIA (PROMYRMECIA) DICHOSPILA sp. n.

(Fig. 2.)

Worker.—Length 7-9 mm.

Black, dorsum of node and a large spot on epinotum red. Mandibles yellow at base, reddish yellow towards apex, teeth brown. Labrum reddish yellow. Scapes brown, funiculi reddish yellow. Tarsi and apex of tibiae brownish yellow.

Mandibles finely striate-reticulate with a row of large deep punctures along the inner borders. Head finely striate-rugose longitudinally, densely and finely reticulate between the rugae. Clypeus and frontal area finely and densely reticulate, not striate. Pronotum striate-rugose, transversely arched. Mesonotum striate-rugose longitudinally. Epinotum and node coarsely and irregularly rugose. Postpetiole and gaster very finely reticulate.

Hair yellowish, long and erect, particularly on clypeus and last three segments of gaster. None on antennae, very short and sparse on legs. Pubescence greyish, very fine and adpressed, longer and more abundant on gaster.

Head as long as broad, sides and occipital border straight, angles broadly rounded. Mandibles one-fifth shorter than head, external border concave, inner border strongly dentate, the third, fifth, seventh, and ninth teeth twice as large as the others, the ninth forming a slight angle. Clypeus deeply excised in middle in front. Labrum convex in front. Frontal area large and deep, semi-circular. Frontal carinae swerving behind, twice as long as wide in front. Scapes not extending to occipital border by twice

their thickness at apex. First and second segment of funiculus equal length, third one-fourth shorter. Eyes large, occupying half the length of sides. Ocelli small. Thorax two and one-half times longer than broad. Pronotum one-third broader than long, strongly convex in all directions. Mesonotum circular, as long as broad. Epinotum slightly longer than broad, strongly convex transversely. In profile pronotum strongly convex from apex to base. Mesonotum higher than pronotum, dropping behind, strongly convex. Epinotum feebly convex on dorsum, strongly rounded into and united with declivity. Node slightly broader than long, fully twice as long as the stalk in front, convex in all directions. In profile slightly higher than long, apical third straight and vertical, sloping gradually to apex of stalk in front, dorsum convex, rounded into posterior face, ventral spine long and broad, sharp pointed, directed forward. Postpetiole almost one-third broader than long, broadest at middle, strongly convex in all directions; constriction deep and wide. Gaster one and two-thirds times longer than broad. First segment of gaster one-fifth broader than long, much broader behind than in front, sides convex. Legs long and slender.

Female.—Length 11 mm.

Colour, sculpture and pilosity similar to worker. Mandibles broader and straighter, teeth larger. Pronotum twice as broad as long, one-third shorter than scutellum, convex in all directions. Scutellum short, one-fourth broader than long, sides and front semi-circular, convex both ways on top. Parapsidal furrows distinct. Wing stumps present. Mesonotum circular, as long as broad, dome-shaped above. Epinotum feebly convex transversely. Node one-fifth broader than long. Postpetiole almost twice as broad as long. Legs slender.

Male.—Length 9.5 mm.

Head and gaster black, Thorax, node, postpetiole and legs brownish yellow, mandibles and scapes brown, funiculi yellowish red.

Head finely punctate-reticulate, more coarsely punctate behind. Thorax and node finely and densely reticulate, with numerous large shallow punctures scattered throughout, coarser and more abundant on epinotum. Postpetiole and gaster finely and densely reticulate. Pilosity as in worker but the erect hairs longer.

Head almost one-third broader than long, strongly convex behind. Mandibles short, furnished with four strong sharp teeth. Clypeus broad, convex above, concave in middle in front. Frontal area large, triangular. Frontal carinae one-third longer than broad in front. Scapes two and one-half times longer than first segment of funiculus, second segment six times longer than first, remainder sub-equal to apical. Eyes large, occupying almost all the sides. Ocelli large. Thorax two and one-half times longer than broad.

Pronotum short, strongly convex. Scutellum one-fifth broader than long, convex in front, median and parapsidal furrows and frontal groove in centre deeply impressed. Mesonotum one-third broader than long, anterior edge feebly convex, sides and posterior edge strongly convex. Epinotum strongly convex transversely. Node circular, as long as broad, fully four times as long as the stalk in front, in profile like node of worker but ventral spine straight. Postpetiole as long as broad, almost three and one-half times broader behind than in front, sides straight to basal third than strongly convex. Gaster fully twice as long as broad. First segment almost one-third broader than long, much broader behind than in front. Genitalia retracted. Legs long and slender. Wings hyaline.

Habitat.—Reevesby Island.

One nest and numerous workers were found. The male was obtained by Mr. Croll at a light late in January. This species is related more closely to *P. urens* Lowne than to any other known species. The workers vary slightly in size and colour. The smallest workers have epinotum and node black; these are red in the majority of workers.

Genus **Eubothroponera** Clark.

EUBOTHROPONERA BRUNNIPES sp. n.

(Fig. 3.)

Worker.—Length 5 mm.

Castaneous. Mandibles, antennae and legs brown, posterior margin of node black.

Very finely and densely reticulate throughout, with some shallow obsolete punctures. Node coarsely punctate, more rugose.

Hair reddish, sub-erect and abundant, shorter on scapes and legs. Pubescence greyish, abundant and adpressed throughout.

Head one-sixth longer than broad, sides strongly, occipital border feebly convex, angles rounded. Mandibles triangular, abruptly bent at their bases, anterior edge of masticatory border sharp, edentate on the apical half and four or five obsolete teeth behind. Clypeus strongly convex in all directions. Frontal carinae flat, lobe-like, overhanging the antennal insertions in front. Scapes extend beyond occipital border by fully their thickness, second and third segments of funiculus equal length, one-fourth shorter than first, apical bluntly pointed, twice as long as the preceding. Eyes convex, placed in front of the middle of the sides. Thorax barely twice as long as broad. Pronotum almost one-third broader than long, convex in all directions. Pro-mesonotal suture deeply impressed. Meso-epinotum one-fourth longer than broad, strongly convex transversely, posterior border

feebly margined. In profile convex longitudinally, pro-mesonotal suture deeply impressed, pronotum dropping abruptly in front, epinotal declivity at an obtuse angle, sides and top feebly margined. Node almost one-third broader than long, front and sides strongly convex, posterior border sharply margined, feebly concave, with a slight tubercle-like projection in the middle; in profile one-fourth higher than long, anterior face and dorsum convex, posterior face concave, feebly margined, ventral surface concave, with indications of a feeble spine behind. Postpetiole one-fourth broader than long, sides straight, parallel, anterior angles broadly rounded, a deep constriction between postpetiole and gaster. First segment of gaster slightly broader than long, sides convex. Legs short and robust.

Habitat.—Reevesby Island.

Euponera sub-genus **Brachyponera** Emery.

EUPONERA (BRACHYPONERA) RUFONIGRA Clark.

Euponera (Brachyponera) rufonigra Clark, Mem. Nat. Mus. Vict., Melbourne, viii., p. 30, pl. vi., figs. 12-13, 1934, ♀ ♀.

Several small nests of this species were found throughout Reevesby Island. The nests were never more than 4 inches deep in the soil amongst leaf debris under bushes. No nest contained more than one dozen individuals.

There are no differences on which to separate this from the Western Australian form. It has a wide range along the South-Western coast.

Genus **Acanthoponera** Mayr.

ACANTHOPONERA IMBELLIS Emery

Acanthoponera imbellis Emery, Ann. Soc. Ent. Belg., xxxix., p. 346, 1895, ♀.

Two nests of this species were found, both in rotten tree stumps in the ground, on Reevesby Island. A single worker was found under a stone on Winceby Island. Originally described from Queensland, this species has been recorded previously from Adelaide.

Genus **Chalcoponera** Emery.

CHALCOPONERA METALLICA (Smith).

Ponera metallica Smith, Cat. Hymn. Brit. Mus., vi., p. 94, pl. vi., figs. 17, 18, 1858, ♀ ♀.

First recorded from Adelaide, this species is widely distributed throughout Australia. It was abundant on Reevesby Island.

Genus **Rhytidoponera** Mayr.**RHYTIDOPONERA PUNCTATA** (Smith).

Ectatomma punctata Sm., Cat. Hymn. Brit. Mus., vi., p. 104, 1858, ♂.

Rhytidoponera punctata Clark, Mem. Nat. Mus. Vict., ix, p. 57, pl. 5, fig. 34, 1936, ♀.

Previously known only from Port Lincoln, this species was most abundant on Reevesby Island. The nest is typical of this group, a crater-shaped mound with the entrance covered with leaves and twigs. Several males were obtained from nests. They have not been described previously.

Male.—Length 9–10 mm.

Blackish brown, mandibles, antennae and legs reddish brown. Wings hyaline with a slight brownish tinge.

Mandibles finely and densely reticulate, with some obsolete striae near base. Head and thorax with scattered large shallow punctures, finely and densely reticulate between the punctures. Node and gaster microscopically punctate and with more scattered obsolete punctures.

Hair reddish, sparse, short and erect, longer on apical segments of gaster, very short and adpressed on antennae and legs. No pubescence.

Head as long as broad, strongly arched behind eyes. Mandibles triangular, with numerous fine sharp teeth. Clypeus broad, flatly convex above, sharply convex in front. Frontal carinae as long as broad in front, swerving outward behind. Second and third segments of funiculus equal length, one-fourth longer than scape, first segment one-fourth of length of scape. Eyes placed at middle of sides. Ocelli large. Thorax barely twice as long as broad. Pronotum hardly seen from above. Scutellum slightly broader than long, strongly convex in front and above, mayrian furrows wide and deep in front, obsolete behind, parapsidal furrows sharply impressed. Mesonotum one-fifth broader than long, anterior edge straight, sides and posterior edge convex. Epinotum strongly convex transversely. In profile pronotum short and erect, convex. Scutellum erect in front, convex from apex to base, almost hemispherical. Mesonotum dome-shaped, longer than high. Epinotum convex from base to foot of declivity. Node stalk-like, one-fifth longer than broad behind, sides almost parallel; in profile twice as long as high, slightly higher behind than in front. Postpetiole as long as broad, pear-shaped, sides convex behind, constriction deep and wide. First segment of gaster much broader than long, sides convex. Genitalia retracted. Legs long and slender.

Habitat.—Reevesby Island, Winceby Island.

Sub-family MYRMICINAE Lepel, 1836

Genus **Dacryon** Forel.

DACRYON NITIDA sp. n.

(Fig. 4.)

Worker.—Length 3.5–4.5 mm.

Head, thorax and nodes brown, gaster black, mandibles and antennae yellow.

Shining. Mandibles finely striate longitudinally. Head with five sharp longitudinal striae between antennal grooves. Thorax almost smooth, with some traces of fine longitudinal striae. Node with two longitudinal carinae on top. Postpetiole with six or seven strong longitudinal striae. First segment of gaster finely and densely striate longitudinally at base, remainder of gaster smooth and shining.

Hair yellow, long and erect on head, scapes and apical segments of gaster, very sparse elsewhere. Pubescence grey, very short and adpressed on gaster, longer on funiculi, not apparent on rest of body.

Head slightly longer than broad, sides and occipital border feebly convex, angles rounded. Mandibles triangular, with five or six large sharp teeth. Clypeus convex above and in front, with a feeble indentation in the middle of anterior edge. Antennal grooves deep and wide, edges sharply margined, extending backward almost to occipital border. Scapes not extending to occipital border by fully their thickness. First segment of funiculus as long as the second and third together. Eyes small, placed at middle of sides. Thorax, to end of spines, barely twice as long as broad. Pro-mesonotum as long as broad, sharply margined in front and sides, anterior border convex in middle, angles sharp and projecting, sides convex broader in front than behind, a deep and wide constriction at meso-epinotal suture. Epinotum broader than long, sharply margined on sides, each posterior angle produced in a long sharp spine directed backward, longer than their distance apart at base. In profile pro-mesonotum strongly convex, dome-shaped, borders sharp, with an erect blunt tubercle-like spine on each side marking junction of pronotum and mesonotum. Epinotum flat and straight, declivity straight, as long as dorsum, spines on posterior angles almost as long as dorsum, straight and parallel, directed backward almost level with dorsum. Node with a long broad spine at the middle of each side, directed outward and upward, sharply convex in front, apex turned up, erect, tubercle-like, dorsum flattened, in profile triangular, anterior superior edge forming the apex, dorsum and posterior faces united, straight, as long as anterior face, lateral spines sharp pointed, broad at base, slightly longer than their distance from anterior edge. Ventral spine long and broad,

bluntly pointed, directed forward at an acute angle. Postpetiole one-third broader than long, broadest just behind middle. First segment of gaster slightly broader than long, strongly convex, egg-shaped. Legs short and robust. Femora incrassated.

Female.—Length 5 mm. (Deälated.)

Similar to worker but larger and more robust. Sculpture slightly coarser. Wing sclerites fully developed, wing stumps present. Spines on epinotum shorter and stouter.

Male.—Length 3.5 mm.

Black; mandibles, antennae and tarsi yellow, femora and tibiae brown.

Shining. Mandibles finely striate at base. Head with some widely spaced longitudinally striae, densely reticulate between the striae. Thorax and node finely and densely reticulate, coarser on mesonotum. Postpetiole very finely striate longitudinally, base of gaster finely striate longitudinally.

Hair yellow, short and erect, sparse throughout. Pubescence grey, apparent only on gaster.

Head, including mandibles, slightly longer than broad across eyes, strongly convex behind, straight and parallel in front of eyes. Mandibles short, triangular, finely dentate. Clypeus broad, convex above and in front. Frontal area large, triangular. Frontal carinae indicated, antennae with thirteen segments, insertions exposed. Scapes extend to posterior fourth of head, first segment of funiculus twice as long as broad, second segment half as thick and one-third longer than first, first to eighth at least twice as long as broad, increasing in thickness from the ninth to apical, somewhat clavate, apical bluntly pointed, as long as the three preceding together. Eyes hemispherical, protruding, placed in front of the middle of sides. Ocelli small, not prominent. Thorax twice as long as broad. Pronotum hardly seen from above, appearing as a narrow margin to scutellum, strongly convex in front and sides. Scutellum very slightly longer than broad, strongly convex in front, mayrian furrows deep and wide, parapsidal furrows sharply impressed. Mesonotum as long as broad, feebly convex in front, strongly convex transversely. In profile pronotum short and erect, top edge projecting slightly. Scutellum high, dorsum slightly concave in middle, anterior face concave, ending in a short rounded projection at apex below. Mesonotum fully twice as long as high, convex above, overhanging epinotum. Dorsum and declivity of epinotum short and convex. Node as long as broad, hexagonal, dorsum convex, in profile dome-shaped, ventral spine obsolete. Postpetiole almost one-third broader than long, broadly hexagonal, sides angular and

broadest at middle, dorsum convex. First segment of gaster as long as broad, sides evenly convex. Legs slender, femora slightly thickened near base. Genitalia retracted.

Habitat.—Reevesby Island.

A large nest of this species was found in a dead tree.

Genus **Crematogaster** Lund.

CREMATOGASTER (ACROCOELIA) LAEVICEPS Smith
var. CHASEI Forel.

Crematogaster (Acrocoelia) laeviceps Smith var. *chasei* Forel, Rev. Suisse Zool., x., p. 413, 1902, ♀.

Very abundant in most parts of Reevesby Island. Most of the dead trees contained a nest, with workers, females and males.

Originally described from Perth, Western Australia, it is widely distributed throughout Australia.

Genus **Xiphomyrmex** Forel.

XIPHOMYRMEX FLAVIGASTER sp. n.

(Fig. 5.)

Worker.—Length 3–3.5 mm.

Head, thorax and nodes reddish brown, mandibles, antennae and legs reddish yellow, gaster lighter.

Mandibles finely striate longitudinally. Clypeus smooth and shining. Head longitudinally striate-rugose. Thorax and nodes irregularly rugose. Gaster and legs smooth and shining.

Hair yellow, abundant, long and erect, shorter and sub-erect on antennae and legs. Pubescence not apparent except on antennae.

Head as long as broad, almost circular. Mandibles short, triangular, furnished with four sharp teeth. Clypeus raised, slightly concave in middle above, the concavity bordered at each side by a sharp ridge, anterior edge produced forward, concave in middle, sides straight, angles sharp. Frontal area small, continued backward as a short groove. Frontal carinae short, flattened, as long as broad in front. Scapes barely extend to occipital border. First segment of funiculus as long as second and third together, apical segment as long as the three preceding together. Eyes small, convex, placed at middle of sides. Thorax one-fourth longer than broad, suture not marked. Pro-mesonotum strongly convex in all directions, epinotum short, convex transversely, each posterior angle produced as a long slender, sharp spine, directed backward and slightly outward, twice as long as

their distance apart at base, two shorter and thicker spines at bottom of declivity. In profile strongly convex from apex to base of epinotal spines; declivity vertical, short, dorsal spines slender, twice as long as spines at bottom. Node slightly broader than long, convex in all directions; in profile dome-shaped, slightly longer than stalk in front, ventral surface concave in middle. Postpetiole barely twice as broad as long, ovate, dorsum convex. First segment of gaster as long as broad, sides strongly convex. Legs slender.

Habitat.—Reevesby Island.

Small nests at roots of small shrubs.

Genus **Meranoplus** Smith.

MERANOPLUS EXCAVATUS sp. n.

(Fig. 6.)

Worker.—Length 2.5–3 mm.

Reddish yellow, mandibles, antennae and legs lighter yellow.

Head, thorax, node and postpetiole coarsely and densely punctate, thimble-like, punctures shining at bottom. Mandibles finely striate longitudinally. Gaster very finely and densely reticulate, with some large scattered punctures.

Hair yellow, erect, short, abundant throughout. No pubescence.

Head as long as broad, occipital border and sides convex, angles rounded. Mandibles triangular, furnished with small sharp teeth. Clypeus broad, overhanging mandibles, widely and deeply excavated in front. Frontal carinae straight and parallel, widely separated, forming a strong ridge to antennal scrobe, the latter deep, extending to occipital border. Scapes extend slightly beyond posterior margin of eye, subclavate. First segment of funiculus as long as second and third together, apical segment bluntly pointed as long as three preceding together. Eyes convex, placed at posterior third of sides. Thorax slightly broader than long, sutures not indicated. Pronotum convex in front, anterior angles sharply produced, directed outward and forward. Sides of pronotal region straight, much broader in front than behind, basal half of sides fringed with a translucent membrane, this membrane occupies a large cavity at the place of the pro-mesonotal suture, at the place of the meso-epinotal suture is another large cavity also filled by a transparent membrane; between these cavities is a broad plate-like projection with a sharp point directed forward. Posterior angles of epinotum spine-like, rather long and pointed, between the outer spines are two short tubercle-like projections. At the middle of epinotal declivity at each side is

a long slender sharp spine directed backward and slightly outward, extending to posterior face of node; in profile strongly convex above, pronotal spine sharp, directed forward and upward, epinotal spine shorter and thicker, sharp pointed, directed backward, epinotal declivity straight, at an obtuse angle, lateral spines slender, directed straight backward. Node three times broader than long, anterior border straight or feebly concave, posterior strongly convex; in profile triangular, the apex, or dorsum, sharp pointed, anterior face feebly concave, posterior face convex, a blunt spine directed forward on ventral surface. Postpetiole as long as broad, feebly convex in front, strongly convex behind and on sides; in profile dome-shaped. Gaster pear-shaped, one-sixth longer than broad, concave in front. First segment as long as broad, sides strongly convex. Legs short and stout.

Habitat.—Reevesby Island.

Several workers were found amongst leaf debris under shrubs. No nest was found.

Genus **Podomyrma** Smith.

PODOMYRMA ADELAIDAE (Smith).

Myrmica adelaidae Smith, Cat. Hymn. Brit. Mus., vi., p. 128, 1858, ♀.

Two workers were found on the Eucalypts at the north end of Reevesby Island. This species is widely distributed in Australia.

Genus **Monomorium** Mayr.

MONOMORIUM (NOTOMYRMEX) RUBRICEPS Mayr var. RUBRA Forel.

Monomorium (Notomyrmex) rubriceps Mayr var. *rubra* Forel, Arkiv. f. Zool., 9, 16, p. 72, note, 1915, ♀.

A small nest was found in a rotten log on Reevesby Island. Originally described from New South Wales, this form has a wide distribution in southern Australia.

MONOMORIUM (NOTOMYRMEX) INSULARIS sp. n.

(Fig. 7.)

Worker.—Length 3–3.8 mm.

Reddish yellow throughout, apical margins of segments of gaster darker.

Smooth and shining. Mandibles and head with numerous small shallow punctures. Sides only of mesonotum and epinotum rugose, finely on top more coarsely below.

Hair yellow, erect, long and abundant on body, shorter and sub-erect on antennae and legs.

Head one-fifth longer than broad, sides and occipital border convex, angles strongly rounded. Mandibles furnished with five large sharp teeth. Clypeus bicarinate above, flattened between carinae, strongly produced in front, sides and front straight. Frontal carinae short, diverging outward behind. Scapes not extending to occipital border by fully their thickness. First segment of funiculus as long as second, third and fourth combined, apical segment as long as the three preceding together. Eyes placed slightly in front of middle of sides. Thorax twice as long as broad, meso-epinotal suture feebly defined. Pronotal area strongly convex in all directions, meso-epinotal area constricted. Epinotum very slightly longer than broad, posterior edge and angles sharp. In profile dorsum straight, meso-epinotal suture feebly impressed, pro-mesonotal suture indicated. Pronotum erect and strongly convex. Epinotal declivity at an obtuse angle, sub-bordered. Node oval, twice as broad as long, convex in all directions, in profile bluntly cone-shaped, higher than long, anterior face convex above, concave below, stalk slender. Postpetiole one-third broader than long, slightly broader in front than behind, convex in all directions, in profile dome-shaped. Gaster one-third longer than broad. First segment one-sixth broader than long, twice as broad behind as in front, sides convex. Legs long and slender.

Female.—Length 4.5 mm.

Colour and pilosity as in worker, sculpture slightly coarser.

Head broader, eyes larger, ocelli large and prominent. Scutellum large, convex, parapsidal furrows feebly indicated. Epinotum slightly concave in middle behind, transversely striate, angles sharp. Nodes similar; gaster larger.

Habitat.—Reevesby Island.

A small nest in ground under a small shrub.

MONOMORIUM (NOTOMYRMEX) FLAVIPES sp. n.

(Fig. 8.)

Worker.—Length 2.5–3 mm.

Head, thorax and gaster dark yellow, antennae, nodes and legs pale yellow.

Smooth and shining, some fine scattered piligerous punctures throughout, sides of mesonotum and epinotum reticulate.

Hair yellow, erect, long, abundant on gaster, sparse on head and thorax, short and sub-erect on antennae and legs.

Head one-fifth longer than broad, as broad in front as behind, sides evenly convex, occipital border straight or feebly concave, angles sharply rounded. Mandibles with five strong sharp teeth.

Clypeus convex above, with two sharp central carinae, anterior border sharply convex in middle. Frontal carinae straight, parallel. Scapes not extending to occipital border by their thickness. First segment of funiculus as long as four following combined, apical not as long as two preceding combined. Eyes small, placed in front of the middle of sides. Thorax twice as long as broad, meso-epinotal suture sharply impressed. Promesonotum one-fourth longer than broad, sides and front strongly convex, constricted at mesonotum, dorsum convex transversely. Epinotum longer than broad, convex transversely; in profile pronotum high, strongly convex in front, dorsum straight with a slight excision at meso-epinotal suture, epinotal declivity at an acute angle, half as long as dorsum, superior border sharply rounded. Node twice as broad as long, anterior and posterior edges straight, sides convex, in profile high and slender, longer than stalk in front, anterior face straight, dropping at an acute angle. Postpetiole twice as broad as long, convex in all directions; in profile hemispherical. First segment of gaster as long as broad, much broader behind than in front, sides convex. Legs robust.

Female.—Length 3.3 mm. (Deälated.)

Similar to worker but slightly larger and more robust. Colour darker. Sculpture on sides and epinotum coarser. Hairs longer and more abundant.

Habitat.—Reevesby Island.

A small nest was found under a stone at the north end of the island.

Genus **Solenopsis** Westwood.

SOLENOPSIS INSCULPTUS sp. n.

(Fig. 9.)

Worker.—Length 1-1.3 mm.

Pale yellow throughout, apex of mandibles darker.

Smooth and shining, with some fine scattered piligerous punctures, more numerous on head than elsewhere.

Hair yellow, long and erect, particularly on clypeus and apical segments of gaster, shorter and sub-erect on antennae and legs.

Head one-fifth longer than broad, sides convex, occipital border straight, angles rounded. Mandibles furnished with four large sharp teeth, all about equal in size. Clypeus strongly projecting and excised in front, the dorsal carinae terminating as spine-like projections at each side of excision. Frontal area small. Frontal carinae narrow. Scapes not extending to occipital border by one-third of their length. First segment of funiculus as long as

the five following combined, the two apical segments one and one-half times longer than rest of funiculus. Eyes small, slightly in front of anterior fourth of sides. Thorax one and three-quarter times longer than broad, meso-epinotal suture sharply impressed. Pro-mesonotum as long as broad, strongly convex in all directions; constricted at meso-epinotal suture; epinotum slightly longer than broad, convex transversely, in profile dorsum straight, meso-epinotal suture sharply impressed. Pronotum high and convex in front, epinotum evenly convex from base to bottom of declivity. Node one and one-half times broader than long, oval; in profile higher than long, anterior face straight, sloping forward below at an obtuse angle, dorsum bluntly pointed in front, convex and merged into declivity behind, ventral surface convex. Postpetiole one-fifth broader than long, convex in all directions; in profile dome-shaped. First segment of gaster as long as broad behind, strongly convex in front, feebly on sides. Legs short and stout.

Habitat.—Reevesby Island.

A small nest was found in the galleries of a termite (*Calotermes condonensis* Hill) in a dead tree. Near *S. clarki* Crawley from Western Australia, but is distinguished by the form of the thorax and nodes.

Genus **Pheidole** Westwood.

PHEIDOLE PYRIFORMIS sp. n.

(Figs. 10-11.)

Worker major.—Length 4.2 mm.

Mandibles, head and legs brownish red, mandibles edged with black, thorax and nodes brown, gaster black, funiculi and tibiae yellowish red.

Mandibles smooth and shining, finely punctate. Head finely striate longitudinally in front, smooth and shining behind, from frontal carinae to occipital border, with some fine shallow scattered punctures. Pro-mesonotum densely reticulate, some obsolete rugae in middle. Epinotum more coarsely reticulate. Sides of thorax reticulate as on epinotum, more rugose on epinotum. Nodes very finely and densely reticulate.

Hair yellow, erect, long and abundant throughout, shorter and sub-erect on antennae and legs.

Head very slightly longer than broad, anterior half of sides straight and parallel, anterior angles sharp, posterior half convex, narrowing behind, occipital border deeply indented in middle giving the border a bilobed appearance, both lobes strongly convex. Mandibles massive, coarsely and irregularly dentate.

Clypeus short, raised and bicarinate in middle, concave between carinae, anterior edge almost straight, with a sharp projection at end of each carina, concave between projections. Frontal area large and deep, triangular. Frontal carinae not raised, widely diverging behind. Scapes extend beyond middle of head by almost their thickness. First segment of funiculus longer than the four following combined, apical as long as three preceding segments combined. Eyes very small, convex, their posterior edge placed at anterior third of sides. Thorax one and three-quarter times longer than broad, pronotum one-fourth broader than long, strongly convex, broadest behind. Mesonotum small and circular, very slightly broader than long. Epinotum one-fourth broader than long, concave in middle, ending at each side in a long sharp spine; in profile pro-mesonotum high, hemispherical, sutures not indicated, a slight tubercle-like projection near end of mesonotum. Meso-epinotal suture sharply impressed. Epinotum slightly convex, spines slender and sharp, directed upward and slightly backward, twice as long as their width at base, declivity abrupt, straight, as long as dorsum. Node twice as broad as long, anterior and posterior faces convex, dorsum concave transversely, the angles bluntly pointed; in profile bluntly pointed above, anterior face twice as long as posterior face. Post-petiole two and one-half times as broad as long, anterior and posterior faces convex, sides and dorsum bluntly pointed; in profile bluntly pointed above, both faces convex. First segment of gaster one-fourth broader than long, strongly convex above. Legs short and stout.

Worker minor.—Length 2.2–2.5 mm.

Colour and pilosity as in major worker, but mandibles yellow.

Mandibles finely striate near apex. Head shining, finely reticulate on cheeks and clypeus, a few short striae on cheeks. Pro-mesonotum smooth and shining. Epinotum and node finely and densely reticulate-punctate on top and sides.

Head as long as broad, occipital border concave in middle sides convex, angles broadly rounded. Mandibles furnished with two large sharp teeth in front, five or six small obsolete teeth behind. Clypeus short, truncate, very slightly produced in front. Frontal area triangular, large and deep. Scapes extend to occipital border. Eyes placed in front of middle of sides. Thorax twice as long as broad. Pro-mesonotum one-fifth longer than broad, pear-shaped, strongly constricted at mesonotum, convex in all directions. Epinotum sub-bordered, flat transversely. Spines directed more backward. Node straight, or very feebly concave, on top. Legs longer and more slender. Remainder as in major.

Habitat.—Reevesby Island (many nests), Winceby Island (one nest), and English Island (one specimen).

Sub-family DOLICHODERINAE Forel, 1878.

Genus **Iridomyrmex** Mayr.

IRIDOMYRMEX DETECTUS (Smith).

Formica detecta Sm., Cat. Hymn. Brit. Mus., vi., p. 36, 1858. ♀.

Formica purpurea Sm., l. c., p. 40, ♂.

Commonly known as the "Meat ant", this is the most abundant and widely distributed ant in Australia.

IRIDOMYRMEX DETECTUS Sm. var. VIRIDIAENUS Viehmeyer.

Iridomyrmex detectus Sm. var. *viridiaenus* Viehmeyer, Arch. f. Naturg., 79, 12, p. 41, 1913, ♂.

The colour of this variety is deep metallic blue on the head, thorax and legs, the gaster brassy-green, in many examples the colour is violet, while some have the colour of the typical *I. detectus* Sm. This ant is common in the dry interior of Australia. Several nests were found on Reevesby Island. The nests are inconspicuous and are indicated by very small holes without a mound.

IRIDOMYRMEX PUNCTATISSIMA Emery.

Iridomyrmex punctatissima Emery, Ann. Mus. Stor. Nat. Genova, xxiv., p. 251, 1887, ♂.

Many small nests were found under loose bark on dead trees on Reevesby Island, one example was found on English Island. Widely distributed in Southern Australia.

IRIDOMYRMEX BICKNELLI Em.

Iridomyrmex bicknelli Emery, Rend. Accad. Sc. Bologna, p. 236, figs. 6-7, 1897-8, ♂.

Abundant on Reevesby Island, this species nests in the ground. The workers run about rapidly during the heat of the day. This ant was recorded first from Tasmania, but is widely distributed throughout Australia.

IRIDOMYRMEX MATTIROLI Em. var. CONTINENTIS Forel.

Iridomyrmex mattioli Emery var. *continentis* Forel, Fauna Sudwest Austral., i., p. 290, 1907, ♂ ♀ ♂.

Several small nests of this common Western Australian ant were found on Reevesby and Winceby Islands. The nest is in the ground and surmounted by a small crater-shaped mound about 1-inch high.

IRIDOMYRMEX DROMUS sp. n.

(Fig. 12.)

Worker.—Length 3.3 mm.

Pale yellow, head and gaster darker.

Very finely and densely reticulate throughout.

Hair yellow, short and sparse, longer and more abundant on apical segments of gaster. Pubescence abundant, yellow, very short and adpressed.

Head slightly longer than broad, much broader behind than in front, occipital border straight or feebly convex, sides strongly convex, angles broadly rounded. Mandibles broad, two and one-half times shorter than head, apical border furnished with five large sharp teeth, directed backward, and some fine denticles between the teeth, inner border finely denticulate. Clypeus convex both ways, anterior border straight, angles sharp. Frontal area large and shallow, triangular. Frontal carinae short and parallel, antennal insertions exposed. Scapes extend beyond occipital border by almost one-third their length. First segment of funiculus one-fourth longer than second, others sub-equal, apical as long as the two preceding combined. Eyes large, rather flatly convex, placed at middle, more on front than on sides. Thorax two and one-half times as long as broad. Pronotum one-fifth broader than long, front, sides and dorsum convex. Mesonotal suture sharply impressed. Mesonotum as long as broad, convex in all directions, broader in front than behind. Meso-epinotal suture deep and wide, spiracles prominent, placed on dorsum. Epinotum as long as broad, strongly convex transversely; in profile pro-mesonotum strongly convex, almost hemispherical, highest at suture. Dorsum and declivity of epinotum combined in a strong convexity. Node slender, fully twice as broad as long, convex on all sides, bluntly pointed; in profile higher than long, bluntly pointed above, anterior face convex, posterior face concave, stalk behind joined to gaster almost at ventral surface. Gaster one and two-thirds times longer than broad, all segments broader than long. Legs very long and slender.

Habitat.—Reevesby Island.

Nests of this species are abundant on the sand-dunes.

Genus **Bothriomyrmex** Emery.

BOTHRIOMYRMEX PUSILLUS (Mayr).

? Tapinoma pusillum Mayr, Jour. Mus. Godeff., xii., p. 83, 1876, ♀ ♀ ♂.

One small nest, containing the queen and several workers, was found in a dead tree stump on Reevesby Island.

Sub-family FORMICINAE Lepeletier, 1836.

Genus **Melophorus** Lubbock.

MELOPHORUS TURNERI Forel s. sp. **AESOPUS** Forel.

Melophorus turneri Forel s. sp. *aesopus* Forel, Rev. Suisse Zool., xviii., p. 64, 1910, ♀ ♀ ♂.

Many nests of this form were found in all parts of Reevesby Island.

Genus **Notoncus** Emery.

NOTONCUS ECTATOMMOIDES (Forel).

Camponotus ectatommoides Forel, Mitth. Schweiz. Ent. Ges., viii., p. 333, 1892, ♀.

Notoncus ectatommoides Emery, Ann. Soc. Ent. Belg., xxxix., p. 353, 1895, ♀.

No nest was found but many examples were found amongst leaf debris under shrubs on Reevesby Island.

Genus **Stigmacros** Forel.

STIGMACROS AEMULA Forel.

Acantholepis (Stigmacros) aemula Forel, Fauna Sudwest Austral., i., p. 298, 1907, ♀.

Several workers were found amongst leaf debris on Reevesby Island. This species is a common coastal form in Western Australia.

STIGMACROS FLAVINODIS sp. n.

(Fig. 13.)

Worker.—Length 2–2.3 mm.

Head, thorax, gaster and anterior coxae black, mandibles antennae, node and legs yellow.

Shining. Head, mandibles and gaster very finely punctate. Thorax very finely and densely reticulate, anterior face of node finely reticulate.

Hair yellow, long, very sparse, confined to clypeus and apical segments of gaster. Pubescence yellow, very short, fine and adpressed throughout.

Head as long as broad, occipital border feebly, sides strongly convex, angles rounded. Mandibles furnished with six large sharp teeth. Clypeus convex above, short, anterior border straight at middle. Frontal area feebly defined, triangular. Frontal carinae short and parallel, antennal insertions exposed. Scapes

extend beyond occipital border by their thickness. First segment of funiculus as long as the two following combined, apical as long or longer than the two preceding combined. Eyes large and convex, placed at middle of sides. Thorax one-third longer than broad, sutures sharply impressed. Pronotum fully twice as broad as long, sides and front feebly convex, angles broadly rounded. Mesonotum one-fourth broader than long, almost twice as broad in front as behind, sides and front convex, posterior border straight, meso-epinotal suture wide and very deep. Epinotum twice as broad as long, broadest behind, sides feebly convex, posterior border feebly concave; in profile feebly convex, superior border margined, pro-mesonotal suture sharply impressed, meso-epinotal suture very deep and wide, twice as deep as wide, wedge-shaped. Pronotum dropping abruptly in front, concave, dorsum convex. Mesonotum feebly convex, truncate behind, three times longer than the truncate face behind, posterior angle sharply rounded. Epinotum straight, one-third shorter than declivity, the spine as long as broad at base, posterior border of dorsum bluntly rounded, anterior face dropping at an acute angle, straight. Node scale-like, broad, convex in front, concave behind, the angles feebly produced backward, in profile slender, anterior face convex, posterior face concave, dorsum sharp, midway between base and apex at each side is a small blunt spine. Gaster one-third longer than broad strongly convex. Legs short and robust.

Habitat.—Reevesby Island.

Several specimens were found amongst dead leaves.

Genus **Camponotus** Mayr.

CAMPONOTUS (MYRMOPHYMA) CHALCEOIDES sp. n.

(Figs. 14-16.)

Worker major.—Length 9.3-9.7 mm.

Head, thorax and node metallic bronze-black, gaster iridescent bronze with the anterior and apical margins of segments metallic green, femora and tibiae brownish black, tarsi reddish brown. On several specimens the epinotum more or less red.

Mandibles coarsely striate-rugose and punctate, whole body finely and very densely reticulate throughout except on legs, scapes and legs shining, finely punctate.

Hair yellow, erect, short and abundant throughout, some extra long hairs on clypeus. Pubescence not apparent.

Head as long as broad, occipital border straight, sides convex, angles broadly rounded. Mandibles furnished with four long, broad sharp teeth. Clypeus flatly convex above, strongly projecting in front, convex, with a short deep concave excision in middle.

Frontal area triangular, feebly defined. Frontal carinae as long as broad behind, much broader behind than in front, a fine longitudinal groove between them. Scapes extend beyond occipital border by one-fifth their length. First segment of funiculus one-fifth longer than second, remainder sub-equal, apical as long as the two preceding combined. Eyes small, rather flat, their anterior edge behind the middle of sides. Anterior ocellus very small, placed in a large puncture, posterior ocelli lacking. Thorax barely twice as long as broad, sutures sharply impressed. Pronotum two and one-half times broader than long, sides, front and top strongly convex, concave behind. Mesonotum slightly broader than long, almost circular, strongly convex in all directions. Spiracles prominent. Epinotum slightly longer than broad, strongly convex transversely; in profile pronotum strongly convex from apex to base. Mesonotum feebly convex, highest in front. Epinotum feebly concave in middle one and one-half times longer than declivity into which it is rounded. Node fully twice as broad as long, bluntly pointed above, sides and anterior face convex, posterior face straight; in profile twice as high as long, anterior and posterior faces convex, bluntly pointed above. Gaster longer than broad. First segment twice as broad as long, strongly convex in front, almost hemispherical. Legs long and slender.

Worker media.—Length 7.5–8 mm.

Colour, sculpture and pilosity as in the major, with the epinotum more often rose-red.

Head one-fifth longer than broad, sides almost parallel. Scapes extend beyond occipital border by one-third their length. Epinotum, in profile, much more concave, and lower than mesonotum. Node thicker, more rounded on top.

Worker minor.—Length 6.5–7 mm.

Colour, sculpture and pilosity as in the major, epinotum red.

Head one-fifth longer than broad, strongly convex behind eyes, sides convex. Scapes extend beyond occipital border by half their length, epinotum more concave than in major and media, and node thicker, convex on top.

Habitat.—Reevesby Island.

South Australia: Port Lincoln, Kyancutta.

Western Australia: Balladonia.

Several nests were found in rotten trees on Reevesby Island. Many single examples of the worker minor have been received in the past from the other localities. This species is more highly coloured than *Camponotus chalceus* Crawley from Western Australia, but has a slight resemblance.

CAMPONOTUS (MYRMOPHYMA) CERISEIPES sp. n.

(Figs. 17-19.)

Worker.—Length 12 mm.

Mandibles and head dark brown, with some lighter and darker tints. Thorax reddish brown, tinged darker in places. Scapes, node and gaster black, femora reddish yellow, tibiae and tarsi brown. Apical half of mandibles coarsely striate-rugose, smooth and punctate at base. Remainder of body very finely and densely reticulate, with fine shallow scattered punctures.

Hair yellow, long and erect on mandibles, clypeus and gaster, sparse elsewhere. Pubescence short and adpressed, apparent only on legs.

Head one-seventh broader than long, occipital border straight, sides strongly convex, angles rounded. Mandibles furnished with six large sharp teeth. Clypeus convex above and in front, subcarinate, anterior edge feebly crenulate. Frontal area triangular, small and shallow. Frontal carinae as long as broad behind, twice as broad behind as in front. Scapes extend beyond occipital border by almost one-fourth their length. First and third segments of funiculus equal in length, slightly longer than second, apical segment twice as long as the preceding. Eyes rather small and flatly convex. Only anterior ocellus present, very small, situated in a rather deep pit. Thorax one and one-half times longer than broad. Pro-mesonotal suture deeply impressed, meso-epinotal suture wide and shallow. Pronotum fully twice as broad as long, sides strongly convex. Mesonotum very slightly broader than long, circular, dorsum strongly convex all ways. Epinotum convex transversely, as long as broad; in profile pronotum and mesonotum convex, excised at suture, epinotum straight in front, rounded into declivity behind, declivity feebly concave, as long as dorsum. Node slender, scale-like, convex in front, straight behind; in profile twice as high as long, sharply pointed, anterior face convex, posterior face straight. Gaster one and one-half times longer than broad. First segment twice as broad as long, strongly convex in front. Legs long and stout.

Worker media.—Length 9.5-10 mm.

Black, femora light yellowish red, funiculi brown.

Sculpture and pilosity as in worker major.

Head very slightly broader than long, occipital border slightly convex. Scapes extend beyond occipital border by almost one-fourth their length. In profile the epinotum lower and node much thicker than in worker major.

Worker minor.—Length 7-7.5 mm.

Colour, sculpture and pilosity as in worker media.

Head one-seventh longer than broad, strongly convex behind eyes. Scapes extend beyond occipital border by almost half their length, thorax one and three-quarter times longer than broad; in profile mesonotum higher in front and more convex. Node thicker, as long as high, parallel, dorsum rounded.

Habitat.—Reevesby Island

A small nest was found in the ground at the north end of the island.

CAMPONOTUS (TANAEMYRMEX) MYOPORUS sp. n.

(Figs. 20-22.)

Worker major.—Length 8-9 mm.

Mandibles, front of head, scapes and gaster black; occiput, thorax and node brown, funiculi and all legs yellow.

Mandibles finely striate near apex, shining at base, remainder of body very finely and densely reticulate with scattered small shallow punctures.

Hair yellow, long and erect, rather scattered on thorax and gaster, very short and sub-erect on antennae and legs. Pubescence very fine and adpressed throughout.

Head a fraction broader than long, occipital border feebly, sides strongly convex, angles rounded. Mandibles with five or six large sharp teeth. Clypeus flatly convex above, strongly projecting in front, anterior border straight, fully half the width of clypeus, angles sharp. Frontal area triangular, small and shallow. Frontal ridges one-fourth longer than broad behind, a faint longitudinal groove in middle. Scapes extend beyond occipital border by almost one-fourth their length, first and third segments of funiculus equal in length, one-sixth longer than second, apical very slightly longer than preceding segment. Eyes large, rather flatly convex. Thorax almost twice as long as broad, promesonotal suture sharply and deeply impressed, meso-epinotal suture feebly impressed. Pronotum one and three-quarter times broader than long, strongly convex in front and on sides. Mesonotum very slightly broader than long, convex in all directions. Epinotum slightly longer than broad, convex transversely; in profile evenly convex longitudinally, sutures sharply defined, epinotal declivity barely as long as dorsum into which it is broadly rounded. Node twice as broad as long, oval, sharply pointed above; in profile barely twice as high as long, anterior and posterior faces convex, sharp pointed on top. Gaster one-fifth longer than broad. First segment three times broader than long, strongly convex in front. Legs long and stout.

Worker media.—Length 6.5-7 mm.

Mandibles and gaster black, head and scapes brown, thorax, funiculi and node reddish yellow, legs yellow.

Sculpture and pilosity as in worker major.

Head as long as broad, occipital border and sides convex, angles broadly rounded. Mandibles with six large sharp teeth, decreasing in size towards base. Clypeus convex above, projecting and sharply convex in front, bluntly pointed. Frontal area large and shallow, triangular. Scapes extend beyond occipital border by one-third their length, funiculus as in major worker. Eyes more convex, placed far back, almost their diameter from occipital border. Thorax twice as long as broad, strongly constricted at meso-epinotal junction; in profile like major worker, but epinotal declivity shorter. Node and gaster similar. Legs more slender.

Worker minor.—Length 4.5–5 mm.

Colour, sculpture and pilosity as in worker media.

Head one-sixth longer than broad, strongly convex behind eyes, feebly convex in front. Scapes extend beyond occipital border by almost half their length. Thorax fully twice as long as broad; in profile pronotum feebly convex. Mesonotum high and convex in front, forming a straight edge with epinotum behind, declivity short, strongly rounded into dorsum. Node one-fourth broader than long, oval, top edge sharp, transversely convex; in profile higher than long, bluntly pointed above. Gaster and legs as in worker media.

Habitat.—Reevesby Island.

A small nest was found in a dead limb of the "Native juniper" or "hoobialla" (*Myoporum insulare* R. Br.).

CAMPONOTUS (COLOBOPSIS) MUTILATUS (Smith).

Formica mutilata Sm., Jour. Linn. Soc., Lond., iii., p. 137, 1858, ♂.

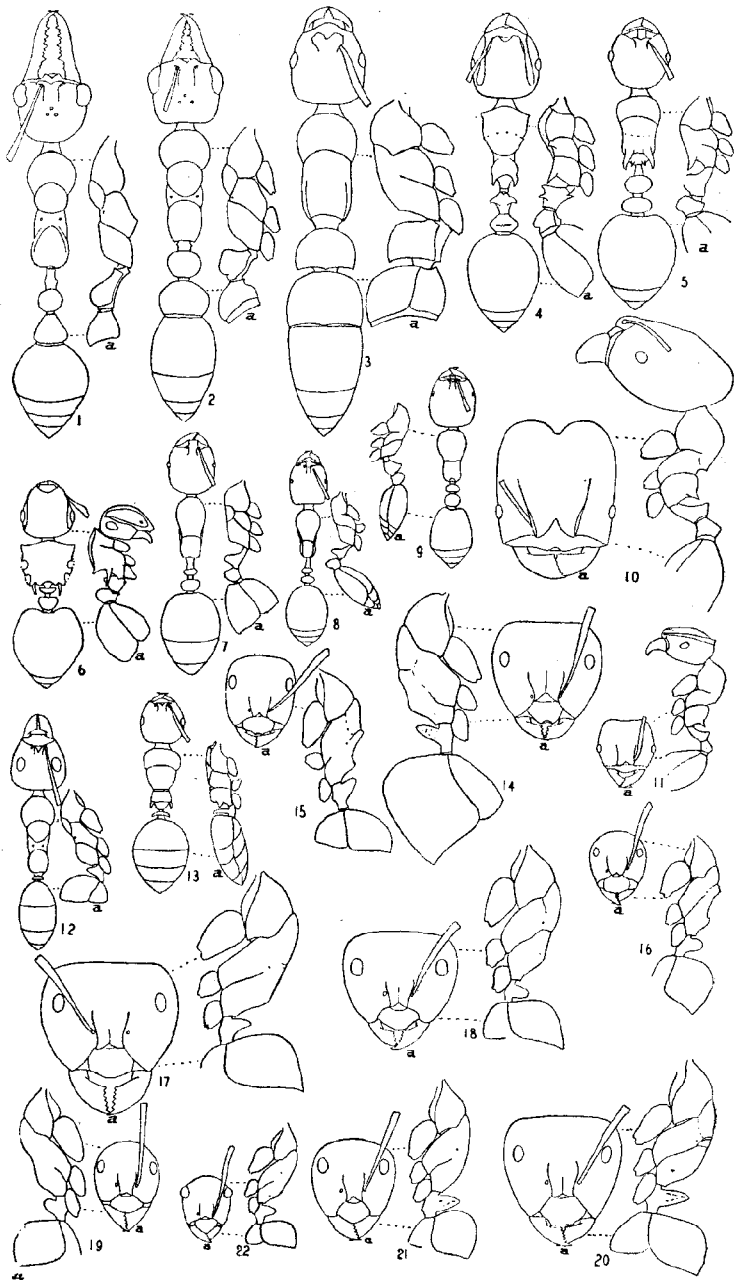
Many major and minor workers were taken from a nest in a small tree near the camp.

Genus **Polyrhachis** Shuckard.

POLYRHACHIS (CAMPOMYRMA) SIDNICA Mayr.

Polyrhachis (Campomyrma) sidnica Mayr, Verh. Zool. bot. Ges. Wien., xvi., p. 886, 1866, ♂ ♀.

Three nests of this widely distributed species were found on Reevesby Island.



FIGS. 1-20.

Explanation of Figures.

1. *Myrmecia gractilis* Emery. Worker. a. Side view.
2. *Myrmecia (Promyrmecia) dichospila* sp. n. Worker. a. Side view.
3. *Eubothroponera brunniipes* sp. n. Worker.
4. *Dacrycn nitida* sp. n. Worker.
5. *Xiphomyrmex flavigaster* sp. n. Worker.
6. *Meranoplus excavatus* sp. n. Worker.
7. *Monomorium (Notomyrmex) insularis* sp. n. Worker.
8. *Monomorium (Notomyrmex) flavipes* sp. n. Worker.
9. *Solenopsis insculptus* sp. n. Worker.
10. *Pheidole pyriformis* sp. n. Worker major.
11. *Pheidole pyriformis* sp. n. Worker minor.
12. *Iridomyrmex dromus* sp. n. Worker.
13. *Stigmacros flavinodis* sp. n. Worker.
14. *Camponotus (Myrmophyma) chalceoides* sp. n. Worker major.
15. *Camponotus (Myrmophyma) chalceoides* sp. n. Worker media.
16. *Camponotus (Myrmophyma) chalceoides* sp. n. Worker minor.
17. *Camponotus (Myrmophyma) ceriseipes* sp. n. Worker major.
18. *Camponotus (Myrmophyma) ceriseipes* sp. n. Worker media.
19. *Camponotus (Myrmophyma) ceriseipes* sp. n. Worker minor.
20. *Camponotus (Tanaemyrmex) myoporos* sp. n. Worker major.
21. *Camponotus (Tanaemyrmex) myoporos* sp. n. Worker media.
22. *Camponotus (Tanaemyrmex) myoporos* sp. n. Worker minor.

11. Reptilia, Part 1: General.

By J. A. TUBB, M.Sc.

Representatives of the twelve species described and figured were found on Reevesby Island, which was the most intensively surveyed of the Group, and it is probable that many of these forms, notably the smaller skinks, will be found on the other Islands.

Correlated with the habitat, all forms except the Black Tiger Snake (*Notechis scutatus* var. *niger* Kinghorn) are grey or brown, with lighter markings. Also, species with the limbs reduced or absent form an important part of the population. Well developed limbs occur in *Sphenomorphus australis* (Gray), three of the four species of *Ablepharus* and in *Phyllodactylus marmoratus* (Gray), the former are active non-burrowing species and the Gecko is a typical climbing form. The conspicuous coloration and abundance of *Notechis* may be attributed to the absence of natural enemies, except possibly the *Varanus*.

Only the most significant references are given, and the measurements of all species are expressed in millimetres.

OPHIDIA.

Family: COLUBRIDAE.

Subfamily: ELAPINAE.

Genus **Notechis****NOTECHIS SCUTATUS** var. **NIGER** Kinghorn, 1921.

(Fig. 1, a-d.)

Notechis scutatus var. *niger* Kinghorn, 1921, Rec. Aust. Mus. Sydney, xiii., p. 145, pl. xxvi.

Eye as long or little shorter than distance from mouth in adult, larger in young. Rostral broader than deep, portion visible from above less than half as long as distance from frontal; frontal as long as, or slightly longer than, broad, once and one half to twice as broad as supraocular, as long as it's distance from rostral, half to two-thirds as long as parietals; nasals in contact with single pre-ocular; two post-oculars; temporals usually 2 plus 2, lower anterior very large, wedged between fifth and sixth upper labials, sometimes reaches lip; six upper labials, third and fourth entering orbit; three lower labials in contact with anterior chin shields; anterior chin shields as long as or little shorter than posterior. Scales in 17-21 rows; ventrals 163-173; anal entire; subcaudals 48-54.