

A Second Instalment of the Ross Collection of Ants from New Guinea. By HORACE DONISTHORPE, F.Z.S., F.R.E.S., etc.

THE first instalment only dealt with undescribed species. This paper also lists those species, now identified, which have been described before.

Subfamily *PONERINÆ*.

Tribe *AMBLYOPONINI*.

Myopopone rossi, sp. n.

♂.—Reddish brown, legs lighter, clothed with longer and shorter scattered yellow outstanding hairs.

Head broad, transverse, subquadrate, posterior angles rounded, posterior border slightly and widely excised; *mandibles* broad, longitudinally striate, and punctate, truncate at apex, overlapping when closed, masticatory border armed with a double row of strong teeth pointing backwards; *clypeus* transverse, anterior border finely margined and very slightly and widely excised, with a

sharp tooth at each side and a row of very short and small dentures or tubercles, posterior border pointed, extending between the frontal carinæ; *frontal carinæ* forming two bluntly pointed lobes in front, slightly convergent and then divergent behind; a shallow rather broad *central furrow* extends from the posterior point of clypeus, after which there is a rather deep pit, between the lobes and front of head; the anterior portion of head is finely longitudinally striate, the striæ extending beyond the antennal foveæ to base of frontal carinæ, a few scattered punctures and longitudinal furrows, and striæ are present on the lobes; *eyes* rather small, round, flat, striated behind middle of sides of head; the *cheeks* and *temples* are longitudinally striate and the whole head is marked with larger, and very small punctures and short furrows; *antennæ* 12-jointed, fairly long, *scape* short, curved, not extending as far as the anterior border of the eye, *funiculus* with all the joints transverse, increasing in length and breadth and forming a large broad apical club, the last joint very bluntly pointed, very slightly longer than the two preceding joints taken together. *Thorax* rather massive, broadest across centre of disc of pronotum; *pronotum* convex on disc, anterior border rounded, finely margined, and forming a blunt neck, a hollow is present between neck and disc, which is very finely transversely striate, sides rounded and finely margined, the front of disc is marked with shallow long punctures, the centre is impunctate; *mesonotum* narrow, flat, transverse, posterior border almost straight; *suture* between pro- and mesonotum deep; *epinotum* oblong, longer than broad, sides straight, anterior angles of dorsal surface rounded, angle between dorsal surface and declivity marked, declivity truncate, flat, shorter than dorsal surface, transversely striate; longer, larger and smaller punctures are present anteriorly and posteriorly and at sides of dorsal surface. *Petiole* pedunculate, transverse and convex on upper surface, rounded and finely margined at sides, narrower than front petiole to which it is joined for its whole breadth, the upper surface is punctured with not very close larger and smaller round punctures, more abundant at angle with anterior surface, which is concave; *gaster* oval, broadest across the front of the segment below the post-petiole, the sides of the segments are rounded, the

apex is rather sharply pointed, a few very small widely scattered punctures are present on the segments after the petiole, the *hypopygium* being extremely finely transversely striate. *Legs* powerful, *tarsi*, especially the intermediate pair, covered with strong spines and bristles, as are also the intermediate *tibiae*, which are short. *Long.* 8.7-12.5 mm.

Described from 24 workers, Fenschhafen, New Guinea, April 20, 1944, E. S. Ross collection.

Tribe ECTATOMMINI.

Rhytidoponera (Rhytidoponera) gagates Donisthorpe, Trans. R. Ent. Soc. Lond. xci. pt. 2, pp. 51-64 (1941), ♀.

14 ♂♂, Maffin Bay, Dutch New Guinea, June 20, 1944. E. S. Ross Coll.

Rhytidoponera (Chalcoponera) inops Emery, Term. Füzet. xxiii. p. 312 (1900).

9 ♂♂, Maffin Bay, Dutch New Guinea, June 26, 1944. E. S. Ross Coll.

Tribe PONERINI.

Diacamma rugosum Le Guill., subsp. *vagans* F. Smith, var. *papuanum* Stitz, Ges. Naturf. Fr. Berlin, 1911, p. 354.

1 ♂, Maffin Bay, Dutch New Guinea, June 6, 1944. E. S. Ross Coll.

Euponera (Trachymesopus) nixonii Donisthorpe, Ann. Mag. Nat. Hist. (s. 11), x. p. 441 (1943).

♀, undescribed.

Colour, sculpture and clothing much as in ♀.

Head slightly more quadrate; *mandibles* more inclined to be triangular, with slightly more pronounced teeth; *clypeus*, *frontal carinae* and *frontal furrow* as in ♀; *eyes* very small and only slightly convex, situated considerably in front of middle of sides of head; *antennae* as in ♀, but slightly less stout. *Thorax* not long, and somewhat stout, broadest before base of pronotum; *pronotum* large, convex, forming a neck anteriorly, sides and humeral angles rounded; *suture* between pro- and mesonotum rather deep; *mesonotum* transverse, oval, rather flat;

suture between meso- and epinotum not so marked; epinotum and scale of petiole as in ♀. Construction of gaster as in ♀. Sting long and narrow. Legs as in ♀. Long, 5.8–6 mm.

Described from two workers, Maffin Bay, Dutch New Guinea, August 1, 1944. E. S. Ross Coll.

Euponera (Trachymesopus) brunneus, sp. n.

♂.—Blackish brown, mandibles, antennæ, legs, part of thorax, and gaster lighter, yellowish brown; clothed with longer and shorter yellow outstanding hairs and silky whitish yellow pubescence; finely reticulately punctured.

Head, not counting mandibles, subquadrate, slightly broader at base than apex, posterior angles rounded, posterior border widely but not deeply excised; *mandibles* relatively large, longitudinally striate, and with a few scattered shallow punctures, angle between masticatory border and basal border well marked, masticatory border armed with five strong teeth, the apical one long and sharp, the one preceding it shorter, but considerably longer and sharper than the three preceding, which are short and blunt; *clypeus* narrow, transverse, and rather wide, anterior border finely margined and extended in a short angle in centre, a carina extends back from this angle; *frontal carinæ* with rather large lobes, sharply convergent behind the lobes and then divergent; *eyes* small, flat, situated considerably before centre of sides of head; *antennæ* 12-jointed, fairly long, *scape* reaching posterior border of head, *funiculus* gradually thickened to apex, first joint distinctly longer and slightly broader than second, last joint slightly longer than the two preceding taken together. *Thorax* moderate, somewhat narrowed to base, broadest before base of pronotum; *pronotum* large, rather flat on disc, humeral angles rounded, sides margined and forming a neck anteriorly; *mesonotum* slightly convex, transverse, surrounded by a well-marked suture which is circular anteriorly, rounded at sides, and slightly inverted posteriorly; *metanotum* very narrow and transverse; *epinotum* large, *dorsal surface* rather long, and slightly convex on disc, sides flat, angle between dorsal surface and declivity well marked, *declivity* slightly concave, shorter than dorsal surface. *Petiole* furnished with a high thick node, in lateral view somewhat narrowed

to apex, upper surface rounded, anterior surface somewhat sloping, posterior surface and sides straight, flat; *gaster* short oval, rounded above, and at sides; anterior surface of *post-petiole* truncate, strangulation between it and rest of gaster well marked; second segment of gaster slightly longer and broader than post-petiole. *Sting* long, slender. *Legs* with intermediate *tibiae* short, upper surface of first joint of tarsus furnished with sharp outstanding bristles. *Long.* 5.5 mm.

♀.—Colour slightly darker, hairiness and pubescence slightly more evident, sculpture much as in ♂.

Head similarly formed; *mandibles* more powerful, teeth longer in proportion, angle between masticatory border and basal border less marked; *clypeus* and *frontal carinae* similarly formed; *eyes* much larger in proportion; small *ocelli* present; *antennae* as in ♂. *Thorax* large, but not long; *pronotum* as in ♂, but more convex; *mesonotum* large, transverse oval, posterior suture much finer and less marked than anterior one; *præscutellum* transverse, very narrow in middle; *scutellum* not very convex, large, nor prominent, borders very finely margined; *metanotum* transverse and narrow in middle; *epinotum* considerably shorter in proportion than in ♂, *dorsal surface* short, transverse, angle between dorsal surface and declivity well marked, *declivity* somewhat concave, longer than dorsal surface. *Node of petiole* as in ♂, but stouter in proportion; *gaster* as in ♂, but much more voluminous. *Legs* as in ♂, but more robust. *Wings* moderate, dusky, covered with very short yellow decumbent hairs, *ptero-stigma* and *veins* brown, one *discoidal*, two *cubital*, and closed *radial cells* present. *Long.* 7 mm.

Described from four workers and one winged female: Maffin Bay, Dutch New Guinea, August 1, 1944. E. S. Ross Coll.

Euponere (Brachyponera) luteipes Mayr v. *croceicornis*, Emery, Term. Füzet. xxiii. p. 315 (1900).

8 ♂♂, Maffin Bay, Dutch New Guinea, June 20, 1944. E. S. Ross Coll.

Ponera anommata, sp. n.

♂.—Yellowish testaceous, back of head and gaster darker, clothed with yellowish-white pubescence, longer

and more abundant on gaster. Extremely finely and closely punctured ; rather opaque.

Head subquadrate, slightly narrower in front than behind, posterior angles rounded, posterior border somewhat excised in middle ; *mandibles* smooth and shining, long, masticatory border armed with five teeth, the apical one long, curved, and rather sharply pointed, the basal one, situated at the angle between the masticatory border and the basal border, smooth ; *clypeus* stout, triangular, transverse, with a short, broad carina posteriorly ; no *eyes* whatsoever present ; *antennæ* 12-jointed, *scape* not reaching posterior border of head, first joint of *funiculus* longer, and slightly broader than the following five joints, last joint of the four-jointed club long and pointed, longer than the two preceding taken together. *Thorax* broadest before apex, narrowest at base, constricted in middle ; *pronotum* long, transverse, convex, broader than mesonotum, broadest across middle, somewhat flat on disc ; *suture* between pronotum and mesonotum distinct ; *mesonotum* transverse, not very convex, sides rounded ; *suture* between mesonotum and epinotum distinct ; *epinotum* narrow, longer than mesonotum, sides flat forming an angle with dorsal surface, *dorsal surface* rather flat on disc, longer than declivity, angle between dorsal surface and declivity rounded, but well marked, *declivity* flat. *Node of petiole* not high, narrower at apex than at base, upper surface bluntly pointed and rounded, anterior and posterior surfaces flat ; *gaster* long oval, truncate at base, pointed at apex, sides rounded, strangulation between post-petiole and rest of gaster distinct. *Sting* exerted, sharp. *Long.* 2·7 mm.

♂.—Dark brown, shining, head darker, eyes black, legs and antennæ lighter brown, first joint of funiculus pale yellow. The insect being apparently somewhat immature, it is slightly shrivelled, and distorted, especially in the thorax. The description, therefore, cannot be as accurate as one would wish.

Head slightly longer than broad (not counting eyes), oblong ; *mandibles* short, pointed, unarmed ; *eyes* very large, situated on sides of head ; *ocelli* large, situated on top of back of head ; *antennæ* 13-jointed, *scape* short, but a little longer than the first joint of *funiculus*, the rest of the joints long and filiform. *Thorax* narrowed in front

and behind, forming a neck anteriorly; *mesonotum* large, convex, apparently somewhat square, sides margined; *præscutellum* very narrow; *scutellum* not large, oval, convex. *Metanotum* not very narrow, transverse; *epinotum* large, sloping, no angle between dorsal surface and declivity. *Scale of petiole* not large, pointed at apex; *gaster* long oval, narrowed in front and behind. *Legs* moderate. *Wings* iridescent, *pterostigma* and veins light brown, one *discoidal*, two *cubital*, and closed *radial cell* present. *Long.* 3.5 mm.

Described from a single worker, and a single male, Maffin Bay, Dutch New Guinea, June 20, 1944. E. S. Ross Coll.

Tribe LEPTOGENYINI.

Leptogenys (Lobopelta) nitens Donisthorpe, Ann. Mag. Nat. Hist. (s. 11), ix. p. 169 (1943).

10 ♂♂, Maffin Bay, Dutch New Guinea, August 13, 1944. E. S. Ross Coll.

Tribe ODONTOMACHINI.

Odontomachus hæmatoda L.

9 ♂♂, 1 del. ♀, 1 winged ♀, Maffin Bay, Dutch New Guinea, June 20 and 26; winged female, August, 1944. E. S. Ross Coll.

Subfamily MYRMICINÆ.

Tribe PHEIDOLINI.

Pheidole (Pheidole) gambogia, sp. n.

♂.—Shining gamboge yellow, mandibles and post-petiole darker, gaster blackish, eyes and teeth of mandibles black. Clothed with longer and shorter yellow outstanding hair.

Head oblong, slightly longer than broad, broadest halfway between eye and posterior angles, slightly narrowed at insertion of eye, posterior angles bluntly rounded, posterior border fairly deeply excised in middle; *mandibles* with a few small scattered punctures, rather stout, apical tooth sharply pointed; *clypeus* narrow, transverse, anterior border slightly excised in middle, convex on disc;

frontal area forming a shallow pit or fovea; *cheeks* and front of head finely longitudinally striate, *lobes* with a few very small scattered punctures, posterior part of head smooth and shining; *frontal carinæ* short, slightly raised, divergent behind; *antennæ* 12-jointed, moderate, *scape* slender, curved, only extending a very little beyond half-way between insertion of antennæ and posterior border of lobes, *club* three-jointed, not quite as long as rest of *funiculus*, last joint slightly longer than the two preceding taken together; *eyes* small, round oval, only slightly convex, situated in front of middle of sides of head. *Thorax* narrower than head, narrowed behind; *pronotum* narrow, transverse, forming a neck, sides finely margined in front, a *suture* is present, at least at sides between *pro-* and *mesonotum*; *mesonotum* convex, narrowed to base, humeral angles prominent, bluntly pointed; *suture* between mesonotum and epinotum rather broad and deep; *epinotum* armed with two small short narrow spines, extending outwards and slightly backwards, *dorsal surface* convex, considerably shorter than declivity, *declivity* concave. *Petiole* with a rather long narrow parallel-sided peduncle with a short projection, or tooth, on each side before junction with epinotum, *node* of petiole high, narrow, rounded above and at sides; *post-petiole* globular, broader than node of petiole; *gaster* short oval, truncate at base. *Legs* moderately long, strong, *femora* spindle shaped. *Long.* 2.6 mm.

♀.—Colour as in ♂, smooth and shining, less hairy.

Head ovate, narrowed in front, broadest before posterior angles, which are rounded, posterior border very slightly, but widely, excised; *mandibles* with a sharp long tooth at apex, and a row of very small short dentules on masticatory border; *clypeus* narrow, triangular, transverse, anterior border slightly excised in middle, convex on disc; *frontal carinæ* short, very slightly raised, divergent behind; *frontal area* shallow, longer than broad; *eyes* moderate, round oval, slightly convex; *antennæ* fairly long, *scape* thin curved, scarcely extending to posterior border of head, three-jointed *club* of *funiculus* not as long as the rest of the funiculus, last joint as long as the two preceding taken together. *Thorax* longer than broad, narrowed behind, narrower than head, humeral angles rounded, slightly constricted at meso-epinotal suture, which is

somewhat shallow; *epinotum* armed with two small, short, not very sharp teeth. *Petiole* and post-petiole as in 24, but smaller in proportion; *gaster* small, short oval, truncate at base. *Legs* moderately long. *Long.* 1.7 mm.

Described from 12 soldiers, and six workers, Maffin Bay, Dutch New Guinea, July 1944, and August 1, 1944. E. S. Ross Coll.

In the worker of this species the length of the club, and of its joints, varies in size, as do the spines of the *epinotum*.

Pheidole (Pheidolacanthinus) striatus Donisthorpe, Ent. Mo. Mag. lxxxiii. pp. 172-174, 2 text figs. (1947).

7 24, 7 ♀♀, and 3 ♂♂, Maffin Bay, Dutch New Guinea, August 1944. E. S. Ross Coll.

Tribe CREMATOGASTRINI.

Creमतogaster (Orthocrema) major Donisthorpe, 'Entomologist,' lxxiv. p. 39 (1941).

10 ♀♀, on the average darker and a little smaller than the type. Maffin Bay, Dutch New Guinea, June 27, 1944. E. S. Ross Coll.

Creमतogaster (Xiphocrema) flavitarsis Emery, Term. Füzet. xxiii, p. 232 (1900).

6 ♀♀, Maffin Bay, Dutch New Guinea, August 1944. E. S. Ross Coll.

Tribe SOLENOPSIDINI.

Volenhovia piroskæ Forel, Trans. Linn. Soc. Lond. Zool. xv. p. 162 (1912).

7 ♀♀, 1 del. ♀, Maffin Bay, Dutch New Guinea, June 15 and August 1944. E. S. Ross Coll.

Liomyrmex reneæ Donisthorpe, Ent. Mo. Mag. (2 figs.).

13 ♀♀, Maffin Bay, Dutch New Guinea, June 10 and 20, 1944. E. S. Ross Coll.

Tribe MYRMECININI.

Pristomyrmex lucidus Emery, Term. Füzet. xx, p. 584 (1897).

2 ♀♀, Maffin Bay, Dutch New Guinea. E. S. Ross Coll.
♀.—Undescribed.

Colour and sparse outstanding hairs as in ♀, except that the thorax, petiole, and post-petiole are blacker, showing less red.

Head broader, more circular; *eyes* larger and more outstanding; *ocelli* very small; *mandibles* more massive; *antennæ* slightly shorter, and *funiculi* slightly stouter in proportion. *Thorax* very convex and robust, especially the *mesonotum*. Teeth of *epinotum* much shorter. *Petiole* and *post-petiole* stouter. *Gaster* broader, longer, and longer oval in shape. *Long.* 4.5 mm.

Described from a single dealated female, with two workers, Maffin Bay, Dutch New Guinea, July 1944. E. S. Ross Coll.

Pristomyrmex lævigatus Emery, Term. Füzet. xx, p. 583 (1897).

3 ♀♀, Maffin Bay, Dutch New Guinea, June 10, 1944. E. S. Ross Coll.

Pristomyrmex orbiculatus, sp. n.

♀.—Reddish brown, legs and antennæ lighter, gaster darker, shining. Sculpture of head and thorax consisting of large round shallow, not close punctures. Clothed with fine outstanding whitish yellow hairs.

Head slightly longer than broad, orbicular; *mandibles* fairly long, triangular, narrow at base, masticatory border truncate armed with two sharp teeth at apex, and two small blunt teeth at base, when closed slightly overlapping and leaving an open space between mandibles and clypeus; *clypeus* triangular, flat, armed with five small triangular teeth on anterior border, the centre one being slightly the longest, five narrow carinæ run from teeth to base of clypeus, the central one being the most marked and extending over a small transverse *frontal area*; *frontal furrow* short, shallow; *frontal carinæ* narrow, sharp, extending in a curve towards posterior border of head, a small row of shallow punctures are placed along inner sides of the carinæ; *antennal foveæ* long, extending in a shallow, widely transversely striate, groove to opposite centre of eye; *eyes* fairly small, round, prominent, situated about middle of sides of head; *antennæ* 11-jointed, fairly long, *scape* extending slightly beyond posterior

border of head, *funiculus* with first and second joints about as long as broad, first joint slightly broader than second, third to fifth joints transverse, *club* 3-jointed, last joint broader, and longer than the two preceding joints taken together. *Thorax* short, broadest at apex, narrowed to base, somewhat constricted in middle; *pronotum* with anterior border finely marginal and slightly rounded, humeral angles armed with a sharp pointed triangular spine, slightly bent inwards; pro-mesonotal and meso-epinotal *sutures* very indistinct; two prominent longitudinal carinæ extend on disc of pronotum to mesonotum; *epinotum* at base of dorsal surface armed with two sharply pointed triangular spines, *dorsal surface* shorter than declivity; *declivity* concave smooth and shining, angle between it and dorsal surface well marked, base of declivity armed with two shorter spines. *Petiole* pedunculate, long, narrow, furnished with a bluntly pointed node posteriorly; *post-petiole* short, and not broader than petiole, rounded above and armed with a short sharp tooth beneath, projecting forwards. *Gaster* oval, rather short, very smooth and shining. *Legs* moderate. *Long.* 3.5 mm.

♀.—Colour and sculpture as in ♂.; rather more hairy.

Mandibles and *teeth* slightly more powerful; *eyes* considerably larger; *ocelli* rather small; *antennæ* as in ♂. *Thorax* more convex, no teeth or spines anteriorly; *scutellum* transverse, oval, prominent, overhanging epinotum; *epinotum*, *petiole* and *post-petiole* as in ♀. *Gaster* a little broader in proportion. *Wings* moderate, slightly dusky and translucent, covered with very short, decumbent, yellow hairs, *pterostigma* and *veins* brown, one large *cubital cell* and open *radial cell* present. *Legs* as in ♀. *Long.* 4 mm.

♂.—Black, shining, legs and scape reddish brown, funiculus and tarsi yellow.

Head transverse, posterior angles rounded, posterior border very finely margined; *mandibles* very short, broad, sharply pointed at apex, very widely separated; *clypeus* narrow, transverse, convex, anterior and posterior borders straight; a shallow fovea is present on front of head; *eyes* large, oval, prominent, occupying a greater part of the sides of the head; *ocelli* fairly large, situated on top of vertex of head; *antennæ* 12-jointed, *scape*

short, first joint of *funiculus* shining slightly longer than broad, but much shorter than all the following joints, which are pubescent, and longer than broad, last joint not as long as the two preceding taken together. *Thorax* short, oval, very convex, narrowed in front and behind, broadest before insertion of wings; *pronotum* transverse, narrow in middle; *mesonotum* robust, convex, overhanging præscutellum; *mayrian furrows* strongly marked; *præscutellum* very narrow and transverse, marked with short, widely separated longitudinal striæ, which encroach on scutellum; *scutellum* convex, prominent, straight anteriorly, rounded posteriorly, overhanging the metanotum; *epinotum* armed with two blunt teeth on base of dorsal surface, and two sharper teeth at base of declivity; *declivity* longer than *dorsal surface*, concave, smooth and shining. *Petiole* with long peduncle, furnished with a low rounded node posteriorly; *post-petiole* slightly longer than broad, not broader than petiole, with a small sharp tooth beneath pointing forwards; *gaster* long oval, pointed at apex, broadest a little before middle. *Genitalia* large, exerted. *Legs* long. Wings as in ♀.

Long. 3.5 mm.

Described from nine workers, three winged females, and four males. Maffin Bay. Dutch New Guinea, 20. vi. 1944. E. S. Ross Coll.

Podomyrma gibula Viehmeyer, Deuts. Ent. Zeitschr. 521, 523 (1914).

6 ♂♂, Maffin Bay, Dutch New Guinea, 27. vi. 1944. E. S. Ross Coll.

Lordomyrma furcifera Emery, Term. Füzet. xx. 591 (1897).

1 ♀, Maffin Bay, Dutch New Guinea, August 1944. E. S. Ross Coll.

Tribe TETRAMORIINI.

Tetramorium guineense F. Ent. Syst. ii. 357 (1793).

15 ♂♂, Maffin Bay, Dutch New Guinea, 20. and 22. vi. 1944, and 6 ♂♂, 1 ♀. ♀ 1. viii. 1944. E. S. Ross Coll.

Tribe DUCETINI.

Rhopalothrix (Rhopalothrix) procera Emery, Term. Füzet.
xx. 572 (1897).

2 ♂♂, Maffin Bay, Dutch New Guinea, 20. vi. 1944.
E. S. Ross. Coll.

Subfamily DOLICHODERINÆ.

Tribe TAPINOMINI.

Iridomyrmex nitidus Mayr, Verh. Zool. Bot. Gess. Wien,
xii. 702 (1862).

11 ♀♀, Maffin Bay, Dutch New Guinea, 27. vi. 1944.
E. S. Ross Coll.

Iridomyrmex rufoniger Lowne, subsp. *pallida* Forel, Mitt.
Zool. Mus. Berlin, ii. 22 (1901).

7 ♂♂, Maffin Bay, Dutch New Guinea, 17. and 20. vi.
1944. E. S. Ross Coll.

Iridomyrmex rufoniger Lowne var. *metallescens* Emery,
Rev. Suisse Zool. i. 194 (1893).

8 ♀♀, Maffin Bay, Dutch New Guinea, 20. vi. 1944.
E. S. Ross Coll.

Iridomyrmex rufoniger Lowne var. *metallescens* Emery.
♀.—Undescribed.

Black with a bluish metallic reflection in some lights ;
clothed with fine yellow pubescence ; legs brown, tarsi
pale yellow.

Head much as in ♀ ; *eyes* larger ; *ocelli* present, moderate.
Thorax massive, narrowed in front and behind, broadest
before insertion of the wings ; *pronotum* narrow, transverse,
embracing mesonotum ; *mesonotum* large, convex, sides
and anterior border rounded, posterior border straight ;
præscutellum transverse, very narrow in middle, wider
at sides ; *scutellum* convex, prominent, projecting, over-
hanging metanotum ; *metanotum* transverse, narrow,
slightly raised ; *epinotum* large, convex, rounded, some-
what longer than broad, slightly narrowed to apex,
broadest at base, no angle between dorsal surface and
declivity ; *scale* of *petiole* narrow, concave posteriorly,
slightly rounded anteriorly, upper surface rounded,
broadest near apex, narrowed to base. *Gaster* fairly
ample, longer than broad. *Legs* moderate ; *wings* mode-
rate, translucent, one oblong discoidal, two cubital ;

and long closed radial cell present. *Pterostigma* and veins light brownish yellow.

Long. 6·7 mm.

♂.—Undescribed.

Colour and pubescence as in ♀.

Head small, triangular; *mandibles* narrow, sharply pointed, but not armed with teeth, crossing when closed; *clypeus* convex, transverse, anterior border rounded; *eyes* large, situated about middle of sides of head; *ocelli* moderate, situated on top of vertex of head; *antennæ* 13-jointed, *scape* short, first joint of *funiculus* shorter than scape, joints two to four longer than broad, slightly narrowed to apex, last joint not quite as long as the two preceding taken together. *Thorax* narrowed in front and behind, narrowest at apex, broadest before insertion of wings; *pronotum* narrow, transverse; *mesonotum* large, convex, overhanging pronotum; no *mayrian furrows* present; *præscutellum* narrow, transverse, slightly concave; *scutellum* very prominent and convex, slightly heart-shaped; *metanotum* narrow, transverse; *epinotum* a little longer than broad, broadest anteriorly, narrowed posteriorly, no angle between dorsal surface and declivity; *node of petiole* short, transverse, rather low, rounded above, armed beneath with a short, sharp tooth. *Gaster* long oval, narrowed to apex. *Cerci* present. *Genitalia* rather large, exerted; *stipes* short, broad, very bluntly pointed; *volsellæ* curved, sharply pointed, hairy; *lacinæ* short, bluntly pointed; *sagittæ* curved, sharply pointed, inner margin rather strongly crenulate. *Hypopigium* considerably excised in middle, the outside edge of the excision rather sharply pointed and prominent. *Legs* rather long. *Wings* translucent, not ample, *pterostigma* and *veins* pale yellow, one oblong discoidal, only one cubital, and closed radial cell present.

Long. 4·5 mm.

Described from two winged females and three males, with eight workers. Maffin Bay, Dutch New Guinea, 20. vi. 1944. E. S. Ross Coll.

Technomyrmex detorquans Walker, Ann. Mag. Nat. Hist. (S. 3) iv. 194 (1859); Donisthorpe, Ann. Mag. Nat. Hist. (S. 10), ix. 575 (1932),

1 ♂, Maffin Bay, Dutch New Guinea, August 1944.
E. S. Ross Coll.

Subfamily FORMICINÆ.

Tribe CAMPONOTINI.

Camponotus (Tanaemyrmea) coxalis F. Smith, Journ. Proc.
Linn. Soc. Lond., Zool. iii. 136 (1858).

1 ♂, Maffin Bay, Dutch New Guinea.

Camponotus (Tanaemyrmea) variegatus F. Smith var.
flavotestaceus var. n.

2♂, Yellowish testaceous, head and gaster a little darker last three or four joints of antennæ pale yellow, eyes and teeth of mandibles black; clothed with very sparse, rather long, outstanding yellow hairs, and some very short decumbent ones.

Head narrowed to apex, broadest at base, posterior angles rounded, posterior border somewhat deeply excised in middle. Very finely reticulate with a few scattered larger and smaller punctures; *mandibles* large powerful masticatory border armed with six teeth, the apical ones larger and sharper, the last tooth longer than the rest; *clypeus* large, trapezoidal, slightly convex, indistinctly carinate, anterior border straight, projecting; *frontal carina* sharp, slightly raised, converging anteriorly and posteriorly, surface between flat; *eyes* moderately large and convex, round oval, situated slightly behind middle of sides of head; *antennæ* fairly long, 12-jointed, *scape* narrow at base, curved, extending beyond posterior border of head by about one-third of its length; all joints of *funiculus* longer than broad, second joint shorter than first, and following joints, last joint not as long as the two preceding taken together. *Thorax* longer than broad, narrowed in front and behind, broadest before base of pronotum, very finely transversely striate; *pronotum* narrowed to apex, sides margined; *suture* between pronotum and mesonotum, well marked; *mesonotum* shorter at disc than pronotum; *metanotum* distinct, narrow, transverse; *epinotum* long, narrow, arched, no marked angle between dorsal surface and declivity. *Scale of petiole* high, bluntly pointed and rounded above, anterior surface convex, posterior surface somewhat concave; *gaster* long oval, rather narrow, very finely

transversely striate. *Legs* moderately long, *tibiæ* compressed.

Long. 10 mm.

♂ colour, sculpture, and clothing as in 24.

Head much narrower, longer than broad, broadest anteriorly; *cheeks* straight; *eyes* larger in proportion and more convex, situated a little further back on head; *antennæ* much longer in proportion, *scape* extending as far back as base of pronotum. *Thorax* long and narrow; *metanotum* very faintly indicated posteriorly. *Gaster* somewhat shorter, narrower, and smaller in proportion. *Legs* as in 24.

Long. 6-7.5 mm.

♀, Colour, sculpture, and clothing as in 24.

Head less narrowed in front, more parallel; *mandibles* more powerful; *eyes* larger and more convex; *ocelli* moderate; *clypeus* transverse with a slightly more distinct carina; *antennæ* slightly longer in proportion, *scape* extending a little further beyond posterior border of head. *Thorax* rather large, convex, broadest before insertion of wings; *pronotum* somewhat narrow, transverse embracing mesonotum, anterior border narrowly margined with the rim bent back; *mesonotum* large, very convex anteriorly, somewhat flat posteriorly, posterior border straight in middle; *præscutellum* very narrow in middle; *scutellum* transverse oval, not very convex; *metanotum* very narrow and transverse; *epinotum* convex, shorter in proportion than in 24, no angle between dorsal surface and declivity. *Scale of petiole* slightly flatter, and broader in proportion, than in 24, upper border somewhat excised in middle; *gaster* moderate, not very voluminous. *Legs* as in 24. *Wings* moderate, *pterostigma* and *veins* light yellowish brown, a long *cubital* and closed apendiculated *radial cell* present.

Long. 11.5-12 mm.

Described from five soldiers, eight workers, and four winged females. Liki, Maffin Bay, Dutch New Guinea, August 1944. E. S. Ross Coll.

Camponotus (Colobopsis) wildæ, sp. n.

♀.—Shining black, *scape*, *femora* and *tibiæ* brown, *funiculus* and *tarsi* pale reddish yellow, *coxæ* and *trochanters* pale yellow, *mandibles* and truncate part of head

blood red. Clothed with not close yellow outstanding hairs.

Head a little longer than broad, subquadrate, anterior portion of head abruptly truncate, flat, margined at sides, circular, enclosing the mandibles when closed, and clypeus, posterior angles rounded, posterior border straight, sculpture of anterior part of head behind the cut-off part, consisting of rather large, round, shallow punctures, enclosed by slightly raised ridges, the back of the head being smooth; *mandibles* broad, flat, striate and punctate, outer border round, masticatory border armed with four short but sharp teeth; *clypeus* longer than broad, oblong, flat, anterior border straight, posterior border round, carinate in middle; *frontal furrow* fine, narrow and shallow almost reaching median ocellus; *frontal carinae* wide apart, converging in front, parallel behind; *eyes* large, round oval, flat, situated rather far back on the sides of the head; *ocelli* moderate, not close together, situated on top of back of head; *antennae* 12-jointed, *scape* narrow at base, broader at apex, only slightly extending beyond posterior border of head; *funiculus* with joints, getting gradually broader to apex, first and last joint longer than broad, the rest transverse, last joint pointed and about as long as the two preceding taken together. *Thorax* not very robust, broadest just before insertion of fore wing; *pronotum* transverse, convex, forming a neck in front, very finely transversely striate and with a row of small punctures near base; *mesonotum* large suboval, slightly broader than long, not very convex, smooth with a few small punctures on each side at apex; *parapsidal* furrows very faint, anterior border rounded and narrowed to apex, posterior border straight; *præscutellum* and *metanotum* narrow, transverse; *scutellum* transverse, oval, rather flat, anterior and posterior borders straight; *epinotum* transverse, convex, rounded at sides, anterior border slightly and widely excised, angle between dorsal surface and declivity not marked; *declivity* shorter than dorsal surface. *Scale of petiole* low, transverse, rounded on sides and above, anterior and posterior surfaces almost straight; *gaster* long oval, sides gradually narrowed to apex which is pointed, rather flat, truncate anteriorly. *Legs* moderate, *femora* and *tibiae* compressed. *Wings* somewhat yellowish, iridescent, *pterostigma* and *veins* pale yellow brown, one large *cubital cell*, and closed *radial cell* present.

Long. 5 mm.

Described from a single winged female. Maffin Bay, Dutch New Guinea, 20. viii. 1944. E. S. Ross Coll.

This species comes in the typical group (group *truncatus*).

Camponotus (Colobopsis) vitreus F. Smith, Journ. Proc. Linn. Soc. Lond., Zool. iv. Suppl. 94 (1860).

1 large ♂, 9 ♂♂, 1 del. ♀. Maffin Bay, Dutch New Guinea, August 1944. E. S. Ross Coll.

Polyrhachis (Myrmatopa) edwardi, sp. n.

♀.—Deep black, mandibles, antennæ and legs reddish brown, tip of antennæ lighter. Head and thorax somewhat dull.

Head longer than broad, narrowed in front, broadest behind eyes, posterior angles and border rounded. Sculpture rather strong in the form of longitudinally raised ridges in anterior portion of head, on cheeks, and sides before eyes, and between frontal carinæ, more circular on back of head and behind carinæ; *mandibles* slightly more powerful, and teeth to masticatory border slightly sharper than in *rossi*; *clypeus* with only a faint suggestion of a central carina, the two teeth on the anterior border more marked; *frontal area* not quite so well defined, and no *frontal furrow* present; *frontal carinæ* somewhat higher and closer together; *eyes* slightly less prominent; *antennæ* as in *rossi*, but a little shorter, and second joint of *funiculus* likewise. *Thorax* with upper side margins very distinct from the tooth at humeral angles to the base of dorsal surface of epinotum. Sculpture of pro- and mesonotum similar to that of head in front, but somewhat stronger; that of the dorsal surface of epinotum not being longitudinal; *pronotum* transverse anterior border above neck rounded, sides of *neck* which is smooth and shining margined, the teeth at humeral angles short, but very distinct and pointed; *suture* between pro- and mesonotum well marked, deep; *mesonotum* considerably shorter than pronotum, sides rounded and narrowed to base; *suture* between meso- and epinotum distinct, but not so deep, nor so wide as suture between pro- and mesonotum; *epinotum* with *dorsal surface* transverse and not half as long as mesonotum, armed on sides of angle between

it and declivity with a short sharp upstanding tooth, the angle is abrupt, and the *declivity*, which is longer than the dorsal surface, is concave and smooth and shining posteriorly. *Scale of petiole* with anterior surface punctured as in dorsal surface of epinotum, armed with two fairly long sharp spines, rather wide apart, parallel and slightly pointing backwards; *gaster* very finely reticulately punctured.

Long. 5.5 mm.

Described from six workers. Maffin Bay, Dutch New Guinea, 20. 22. and 27. vi. 1947.

This species clearly belongs to the *wallacei* group of the subgenus *Myrmatopa*.

Polyrhachius (Myrmatopa) rossi, sp. n.

♀.—Shining black, the last three or four joints of the tarsi, and five or six of the antennæ, apex of masticatory border of mandibles, palpi and articulations of the antennæ yellowish red. Finely reticulately punctured.

Head slightly longer than broad, narrowed in front and behind, broadest just behind eyes, posterior angles and border rounded; *mandibles* powerful, triangular finely, longitudinally striate, with small shallow punctures at base, and a row of three or four larger ones along masticatory border, masticatory border armed with four strong teeth, the apical one being the longest and sharpest; *clypeus* large, transverse, convex, with a strong carina in centre, anterior border rounded, armed with a short, thick tooth on each side not far from centre; *frontal area* small, triangular; *frontal furrow* short; *frontal carina* sharp, raised, space between flat, convergent at articulations of the antennæ; *eyes* round, large, convex, protruding; *antennæ* 12-jointed, long, *scape* extending nearly to base of mesonotum; *funiculus* with all the joints longer than broad, getting gradually broader to apex, second joint shorter than first and third, last joint pointed, about equal to the two preceding joints taken together. *Thorax* longer than broad, broadest before base of pronotum; *pronotum* large, transverse, narrowed in front, sides rounded and with distinct margins at their lower edges, the disc is somewhat flat, and the humeral angles are slightly and very bluntly projecting, from this projection there is a slightly raised ridge or margin to

base of pronotum; *suture* between pronotum and mesonotum round, well marked; *mesonotum* shorter than pronotum and epinotum, flat on disc, broadest anteriorly, narrowed to base, the ridge or margin at sides of disc more marked and distinct than in pronotum; *suture* between mesonotum and epinotum not present; *epinotum* with side margins on *dorsal surface* not quite so sharp as in mesonotum ending in a small sharp projecting tooth on each side, at angle with declivity; *angle* between dorsal surface and declivity rather abrupt; *declivity* not quite as long as dorsal surface, slightly concave, shining. *Petiole* narrow, anterior surface convex, posterior surface concave, transversely striate, armed with two fairly short, sharply pointed spines, divergent and slightly pointing backwards; *gaster* short, round, first segment as long as the rest together. *Legs* long.

Long. 5.5 mm.

♀.—Colour, sculpture, and structure much as in ♂.

Head somewhat larger and longer in proportion; *eyes* larger and more prominent; *ocelli* moderate, situated at back of head; *mandibles* more powerful and teeth stronger in proportion. *Thorax* large and convex, narrowed in front and behind, broadest at insertion of fore wings; *pronotum* narrow, transverse; *mesonotum* large, convex, overhanging pronotum, sculpture stronger, consisting of close longitudinal ridges, a narrow longitudinal line, or furrow, extends from apex of mesonotum, and divides into four short lines on the highest part of the same; *praescutellum* very narrow and deep in centre; *scutellum* with anterior border straight, posterior border rounded, only slightly prominent, and somewhat rugosely punctured on disc; *metanotum* narrow, transverse, smooth, overhung by scutellum; *epinotum* with *dorsal surface* transverse, not longer than declivity, sides faintly margined above, armed with two teeth at angle before declivity which are stronger in proportion than in ♂; *declivity*, concave, smooth and shining, shorter than dorsal surface, spines of *petiole* more divergent and thicker in proportion than in ♂; *gaster* longer and more voluminous. *Wings* pale yellow, *pterostigma* and *veins* pale brownish yellow, one large *cubital cell* and closed *radial cell* present.

Long. 8.5 mm.

Described from one worker and one winged female, Maffin Bay, Dutch New Guinea, 20. vi., and August, 1944. E. S. Ross Coll.

This species is somewhat intermediate between the *chang* and the *wallacei* groups of the sugbenus *Myrmatopa*, but nearer to the former.

Polyrhachis (Polyrhachis) bellicosa F. Smith, Journ. Proc. Linn. Soc. Lond. iii. 142 (1859).

9 ♀♀, Maffin Bay, Dutch New Guinea, 10. vi., 20. vi., 27. vii. 1944. E. S. Ross Coll.

Polyrhachis (Chariomyrma) aurea Mayr v. *obtusa* Emery, Ann. Mus. Stor. Nat. Genova, xxxviii. 589 (1897).

2 ♀♀, Maffin Bay, Dutch New Guinea, 20. vi. 1944. E. S. Ross Coll.

Polyrhachis (Myrmhopla) sexspinosa Latreille, Fourm., 126 (1802).

9 ♀♀, Finschhafen, New Guinea, 15. iv. 1944. E. S. Ross Coll.

Tribe ACANTHOMYOPSINI.

Paratrechina (Nylanderia) vaga Forel, Mitt. Zool. Mus. Berlin, ii. 26 (1901).

1 ♀, Maffin Bay, Dutch New Guinea, August 1944.