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Some New Ants from New Guinea. By Horace Donisthorpe, F.Z.S., F.R.E.S., etc.

The ants described in this paper form a small part of a large collection of over 2000 specimens sent to me by the California Academy of Sciences, San Francisco, to identify, and describe when necessary. They were all taken by Mr. Edward S. Ross (Associate Curator of Insects, in Charge), he having spent two months at Finschhafen, N.E. New Guinea, and nine months at Maffin Bay, Putch New Guinea. They are chiefly from Maffin Bay, 125 miles west of Hollandis.

Subfamily PONERINE.

Tribe RENEINI, nov.

 \S . Claws simple; mandibles articulated to the anterior angles of the head; no scrope for the scape; no ocelli in \S ; petiole articulated to the postpetiole for its whole breadth; only one spur to two posterior tibiæ; pygidium not furnished on each side with a row of spines.

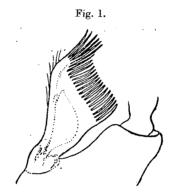
Renea, gen. nov.

- \$\xeta\$. Head oblong oval, quadrangular; mandibles long, triangular, masticatory border toothed; antennæ 12-jointed; maxillary palpi 2-jointed; labial palpi 2-jointed; eyes small, indistinct; sutures of thorax well marked; epinotum unarmed. Suture between post petiole and rest of gaster well marked; petiole articulated to post-petiole for its whole breadth. One spur present on two posterior pairs of tibiæ.
- β . Head somewhat globular, including eyes as broad as long; antennæ 13-jointed; maxillary palpi 2-jointed; labial palpi 2-jointed; mandibles narrow, pointed. Mayrian furrows present. Petiole articulated to postpetiole for its whole breadth. One spur present on two posterior pairs of tibiæ, as in \S .

Genotype Renea testacea, sp. n.

Renea testacea, sp. n. (Fig. 1.)

 very finely and closely punctured. Head oblong oval, quadrangular, posterior angles bluntly rounded, posterior border slightly excised in middle; mandibles long, triangular, masticatory border armed with 3 sharp teeth, the apical one being the longest, the central one being shorter than the one before it; clypeus slightly convex, anterior border narrowly margined, rounded and slightly projecting in middle, sinuate at sides; frontal carinæ short, very slightly divergent behind, not covering insertion of antennæ; frontal furrow fine, extending a short distance along the front; antennal foveæ shallow; antennæ 12-jointed, scape not nearly reaching posterior



Renea testacea, sp. n.

Spur on posterior pairs of tibiæ.

border of head, first joint of funiculus slightly longer and broader than the following 6 joints, which are short and transverse, joint before the club slightly broader and longer than the 6 joints preceding it, club 3-jointed, last joint considerably broader, and longer than the two preceding joints taken together; eyes very small, indistinct, consisting of three ommatidia. Thorax narrower than head, broadest at humeral angles; pronotum not very convex, posterior angles rounded, considerably longer than mesonotum; sutures between pro- and mesonotum, and meso- and epinotum well marked; mesonotum rather narrow, transverse; epinotum with sides rounded, angle between dorsal surface and declivity rather indistinct, declivity flat, shorter than dorsal surface.

Petiole articulated to post-petiole for its whole breadth, anterior surface slightly concave, armed with a large blunt tooth beneath pointing downwards; suture between post-petiole and rest of gaster well marked; gaster oval, bluntly pointed at apex, not as long as thorax. Sting well developed. Legs moderate, femora compressed; posterior pairs of tibia armed with one spur, which is rather broad, broadest along apical border, which is finely pectinate.

Long. 2.7-3 mm.

3. Shining blackish brown, legs and antennæ pale brownish yellow, first two or three of the joints of the funiculus paler; pubescence yellow, body clothed with short, scattered, outstanding brown hairs, less sparse

on gaster.

Head somewhat globular, including eyes as broad as long, posterior angles rounded, posterior border almost straight: mandibles very narrow, pointed, meeting when closed; clypeus convex on disc, anterior border straight, narrowly margined, furnished with a row of very short hairs, posterior border pointed, and extending between the fontal carinæ; frontal carinæ much as in \u2012; insertion of antennæ not covered; eyes very large, convex, slightly kidney-shaped; ocelli moderate, situated on vertex of head: antennæ 13-jointed, moderately long, very gradually increasing in length and breadth to apex, scape short, about as long as the two first joints of the funiculus taken together, first joint small, round, slightly broader, but shorter, than second joint, last joint longer than the two preceding joints taken together. narrowed in front and behind, broadest at insertion of forewings; pronotum transverse, furnished with a short neck: mesonotum convex in front, flat towards base; mayrian furrows present; præscutellum transverse, narrow; scutellum moderate, round oval, convex; metanotum narrow, transverse; epinotum long, angle between dorsal surface and declivity fairly distinct, declivity shorter than dorsal surface, slightly concave. Petiole pedunculate, articulated to post-petiole for its whole breadth, anterior surface flat, rounded above; post-petiole broader than petiole, suture between it and rest of gaster distinct, but not much constricted at sides; gaster long, oval, narrowed in front and behind; epipygium pointed. Genitalia exserted; annular lamina on dorsal surface curved at apex, with a very small sharp point in middle, on ventral surface at apex in middle, with a rather long, but not very sharp spine; stipites with blunt round points; squamulæ broad oval, transverse; volsellæ narrow at base, broadened at apex, with a small, but not very marked hook at inner apical angle; sagittæ thin, compressed, sharply pointed at apex. Legs moderately long and narrow; femora compressed, two posterior tibiæ with one spur similar to those of \(\beta\). Wings iridescent; pterostigma yellowish brown, veins pale yellow, one discoidal cell, one large cubital cell, and closed radial cell present.

Long. 4 mm.

Described from ten workers and four males, Maffin Bay, Dutch New Guinea, June 16th and 20th (males 20th) June, 1944. E. S. Ross Coll.

Tribe ODONTOMACHINI.

Odontomachus rossi, sp. n.

\$\times\$. Head and thorax black, mandibles, gaster, petiole and legs raw sienna, antennæ brownish yellow, apex of last joint pale yellow; very shining, with sparse longer and shorter outstanding hairs.

Head short, without mandibles, about as long as the width across eyes, mostly smooth, longitudinally striate between frontal carinæ and on front, narrowed anteriorly, slightly concave from eye to posterior angles, posterior border rather deeply excised and finely margined, posterior angles rounded in the form of two lobes; cheeks prominent in middle, sinuate on each side, a large raised rounded prominence is present above each cheek forming the outer border of a deep broad furrow; mandibles not quite as long as head, flat above, armed at apex with two strong broad teeth, rather broadly pointed and situated one above the other, the under one furnished with a short. sharp tooth towards base, masticatory border with a double edge, both very finely serrate, a bluntly pointed projection or tooth is present at apex before the apical teeth; clypeus with anterior border widely and deeply excised, forming two rounded projections, one on each

side, convex posteriorly in front of a rather deep longitudinal furrow between frontal carinæ: frontal carinæ with a lobe on each side anteriorly covering insertion of antennæ, convergent behind: eyes rather small, but convex, situated on a rounded prominence behind cheeks; antennæ 12-jointed, fairly long; scape long and curved, extending as far as the posterior border of the lobes of the head; funiculus very gradually increasing in breadth towards apex, last joint long and pointed, longer than the two preceding taken together. Thorax narrow, considerably longer than head, broadest across humeral angles, furnished with a long narrow neck which is transversely striate: epinotum long, transversely striate, dorsal surface considerably longer than declivity, which is short, slightly concave, and smooth in centre. Petiole furnished with a rather short, stout, bluntly pointed spine; gaster narrow, oval, pointed at apex, broadest just before apex of first segment (post-petiole). Sting long and slender.

Long. 5.5-6.7 mm.

 \circlearrowleft . Colour and structure much as in \backsimeq . Eyes considerably larger and more prominent; ocelli present; spine of petiole somewhat longer in proportion, and slightly more pointed. Sting longer in proportion.

Long. 8 mm.

Described from fourteen workers and two dealated females. Maffin Bay, Dutch New Guinea, August, 1944. E. S. Boss Coll.

Subfamily Myrmicinæ.

Tribe MYRMICINI. TRICYTARUS, gen. nov.

3. Mandibles very short, sharply pointed. Antennæ 13-jointed; maxillary palpi 5-jointed; labial palpi 3-jointed; ocelli situated on occiput of head. Mayrian furrows well marked; epinotum armed with two tubercles. Petiole long and narrow. No spurs to tibiæ present; claws very small. One discoidal cell, one cubital cell, and closed radial cell present.

Genotype Tricytarus parviumgulatus, sp. n.

Tricytarus parviumgulatus, sp. n.

3. Blackish brown, legs lighter, antennæ and tarspale yellow. Clothed with longer and shorter outstanding yellow hairs.

Head narrowed in front and behind, strongly rounded from eye to base, posterior angles rounded, posterior border small, slightly excised; mandibles very short, sharply pointed; clypeus small, flat on disc, anterior border rounded, with a slightly raised narrow margin, sinuate at sides; eyes large, round, very prominent, situated in front of middle of sides of head: ocelli fairly large, situated on occiput of head; antennæ long, filiform, 13-jointed; "scape very short, not as long as second joint of funiculus; first joint small, short, globular, broader than the following joints, last joint a little longer than the one preceding it. Thorax short, oval, narrowed in front and behind, convex on disc; pronotum narrow, transverse, furnished with a short neck; mayrian furrows very distinct, dividing the mesonotum into two lateral lobes; præscutellum narrow, transverse, depressed, with widely separated, short, narrow longitudinal striæ, the spaces between the striæ deeply hollowed out: scutellum broad oval, very convex and prominent, somewhat rugosely and closely punctured; metanotum very narrow, transverse, slightly raised; epinotum finely coriaceously punctured, armed with a small tooth or tubercle on each side at angle between dorsal surface and declivity, which is somewhat rounded, declivity slightly shorter than dorsal surface. Petiole rather long, narrow, slightly narrowed to base and before margins of apex, in profile very slightly raised in middle; post-petiole considerably shorter, very slightly broader and a little higher than petiole, slightly narrowed anteriorly and posteriorly, convex on disc; gaster long oval, concave beneath, broadest at apex of first segment, which is as long as the remaining segments when extended. Genitalia enclosed in gaster.

Legs rather long and slender; no spurs to tibiæ present; claws very small. Wings slightly dusky; veins and pterostigma light brown, one discoidal cell, one long cubital cell and closed radial cell, about as long, but narrower

than cubital cell, present.

Long. 4 mm.

Described from three males, Maffin Bay, Dutch New Guinea, August, 1944. E. S. Ross Coll.

Tribe SOLENOPSIDINI.

Monomorium (Monomorium) angusticlava, sp. n.

\$\times\$. Slender, smooth and shining, clothed with a few short, scattered yellow outstanding hairs. Head and gaster black, femora broadly blackish in middle, thorax, petiole, and post-petiole reddish yellow, legs and antennæ

paler, club a little darker.

Head longer than broad, sides subparallel, posterior angles rounded, posterior border slightly excised; mandibles narrow, pointed slightly, overlapping, masticatory border armed with four teeth, apical tooth longest and sharpest, the one preceding it longer and sharper than the two following ones; clypeus bicarinate, the two carinæ terminating anteriorly in two small teeth; frontal carinæ parallel in front, slightly divergent behind; eyes round oval, slightly convex, consisting of about fourteen omitidia; antennæ 12-jointed, slender; scape not reaching posterior border of head, 1st joint of funiculus longer and slightly broader than the next seven joints; club 3-jointed. 1st joint about as long, but not as broad as 2nd joint, last joint longer than the two preceding taken together. Thorax slender, narrower than head; suture between pro-mesonotum and epinotum well marked; epinotum convex, unarmed, angle between dorsal surface and declivity not apparent. Petiole pedunculate furnished with a node higher than post-petiole; post-petiole globular, rounded above and at sides not broader than petiole; gaster long oval. Legs moderate; femora spindle-shaped.

Long. 1.7 mm.

Described from sixteen workers. Maffin Bay, Dutch New Guinea, 27th June, 1944, and August, 1944. E. S. Ross Coll.

This species comes in the *carbonarium* group, it is slightly smaller and more slender, and the antennæ, especially the club, are distinctly narrower. This latter character is also the case when compared with *floricola*, *minutum*, etc.

Tribe MERANOPLINI.

Meranoplus astericus, sp. n.

Head broader behind than in front, about as long as broad, broadest a little before eyes, posterior border almost straight, posterior angles rounded; sculpture consisting of slightly raised narrow longitudinal ridges. and similar transverse ones, forming an uneven network: mandibles short, stout, longitudinally striate, masticatory border armed with a few rather blunt, short teeth: clupeus transverse, not very convex, anterior and posterior borders rounded, two fine narrow longitudinal ridges are present on each side: frontal carinæ widely separated. extending to base of head, and forming the upper margins of deep scrobes above the eyes, for the reception of the antennæ: antennæ 9-jointed club large three-jointed last joint long, pointed, as long as the two preceding taken together; eyes round, prominent, situated at sides of head near posterior angles. Thorax: pro-mesonotum short and broad, raised, sculpture consisting of a network of slightly raised narrow ridges, the ground work being smooth and shining; no pro-mesonotal suture present. anterior angles armed with two spines joined together. the upper long and sharp, the lower short and blunt. posterior angles armed with two long, sharp spines, the upper one being the shorter, projecting outwards and slightly downwards, the lower long and straight, projecting backwards; epinotum long, flat, smooth and shining, sloping downwards, considerably lower than pro-mesonotum, armed with two fine short sharp spines. or teeth, at angle, which is slight, between dorsal surface and declivity, declivity shorter than dorsal surface. Petiole with a rather high bluntly pointed node, rounded above, anterior surface flat or slightly concave, posterior surface convex rounded: post-petiole petiole, globular, with a high rounded node, sculpture consisting of a fine raised network of ridges; gaster rather large broad ovate, slightly convex above and below, excised at junction with post-petiole, bluntly pointed at

apex, very finely coriaceously punctured, giving it a dull appearance. Legs moderately long, claws small.

Long. 3.2–3.5 mm.

Described from five workers. Maffin Bay, Dutch New Guinea, June 10th, 1944. E. S. Ross Coll.

Tribe TETRAMORIINI.

Dyomorium, gen. nov.

Q. Head subrectangular; antennæ 12-jointed; maxillary palpi 2-jointed; clypeus projecting posteriorly between the frontal carinæ, posterior border laterally in the form of a raised ridge, which borders the antennal foveæ in front. Pro-mesonotal suture absent; meso-epinotal suture distinct; epinotum unarmed. Petiole pedunculate; post-petiole narrowed anteriorly and posteriorly. Hairs not clavate.

Genotype D. ireneum, sp. n.

Dyomorium ireneum, sp. n.

\u2205. Brownish red, gaster blackish; furnished with longer and shorter soft outstanding yellow hairs.

Head rather long, subrectangular, finely longitudinally striate on front and at sides, with a few small scattered punctures, posterior angles somewhat bluntly rounded, posterior border slightly excised; mandibles large, massive, subtriangular, sharply pointed, outer border not strongly curved, masticatory border hollow, with an edge above and below, armed with a tooth to each at apex, the upper edge provided with three very blunt: teeth or projections, in middle; maxillary palpi small, consisting of two short joints; clupeus with anterior border rounded in middle, sinuate at sides, projecting posteriorly between the frontal carinæ in a bluntly rounded point, posterior border laterally in the form of a not very narrow; slightly raised ridge which borders the antennal foveæ in front; frontal area small, triangular, somewhat deeply impressed; frontal furrow narrow, and not deep, situated in a narrow, smooth and shining longitudinal space between the striæ on front, reaching about centre of head; eyes large, oval, rather flat, situated a little behind centre of sides of head; antennæ moderately long, scape curved, not nearly reaching posterior border

of head, funiculus with first joint small, but longer and narrower than next six joints, which are short and transverse, eighth joint longer and broader than those preceding it, which almost gives the appearance of a 4-jointed club, last joint pointed, as long as the two preceding taken together. Thorax with a few small. shallow, scattered punctures, longer than broad, narrowed behind, somewhat constricted in middle, broadest at humeral angles, which are very bluntly pointed, or angled; pronotum with a short neck; pro-mesonotal suture wanting, meso-epinotal suture distinct and rather profound: epinotum unarmed, rounded above and slightly at sides, angle between dorsal surface and declivity rounded, declivity somewhat concave, and a little shorter than dorsal surface. Petiole narrow, with a fairly long peduncle, slightly narrowed in front, and furnished with a small tooth anteriorly beneath, pointing downwards; post-petiole narrowed in front and behind, broadest before apex, where it is broader than the petiole; gaster long oval, narrowed in front, pointed at apex, broadest behind centre and a little before apex of first segment, which is much longer than the rest of the gaster. Legs moderately long, femora spindle-shaped; intermediate and posterior tibiæ without spurs.

Long. 5.5 mm.

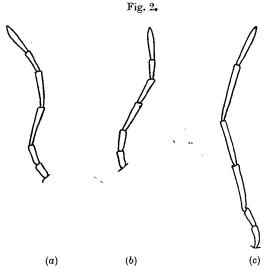
Described from a single worker. Maffin Bay, Dutch New Guinea, June 20th, 1944. E. S. Ross Coll.

Subfamily Formicinæ.

Tribe ACANTHOMYOPSINI.
PARAPARATRECHINA, subgen, nov.

Paratrechina (Paraparatrechina) pallida, sp. n. (Fig. 2.)

eyes and teeth of mandibles black. Body clothed with sparse scattered macrochètes or bristles, more numerous on head and gaster; there are three pairs on the pronotum, one pair on the mesonotum, and two pairs on the epinotum. The number of these bristles in some specimens appears to differ on the pronotum and epinotum, or they may have been broken off, but in every case there is only one pair present on the epinotum. A fine silky yellowish white pubescence occurs on the head and thorax.



(a) Maxillary palpi of (Paratrechina) (Paratrechina) longicornis Latr.
(b) ", ", ", (Nylanderia) jægerskyældi Mayr.
(c) ", ", ", (Paraparatrechina) pallida, sp. n.

Head round oval, longer than broad, narrowed in front and behind, posterior angles rounded, posterior border slightly excised, viewed in profile the head is rounded above, highest after insertion of antennæ, and somewhat concave beneath; cheeks rounded; mandibles long, narrow, crossed when closed, masticatory border armed with four teeth, the apical one long and sharp, the one next to it small and narrow, the two behind that a little broader and longer; clypeus rather large, transverse, convex, anterior border slightly rounded, posterior border angled in middle; clypial fovea not joined to

antenal fovea; frontal carinæ short, subparallel; eyes fairly large, round oval, convex, situated on top of sides of head, slightly behind middle: antennæ long, 12-jointed. filiform, scape extending beyond posterior border of head by more than half its length, funiculus with all joints longer than broad, first joint longer than second, lastjoint not quite as long as the two preceding taken together; palpi long, maxillary palpi very long, 6-jointed, labial palpi 4-jointed. Thorax long, narrow, narrower than head, only slightly constricted in middle: pronotum narrowed in front, forming a neck, convex on disc, broadest at base, sides finely margined; suture between pronotum and mesonotum fine, but distinct; suture between mesonotum and epinotum more deeply impressed: slightly depressed in middle; epinotum. slightly convex on disc, and sloping and rounded to base, angle between dorsal surface and declivity not marked, declivity longer than dorsal surface. Scale of petiole rather narrow, somewhat high, and slightly bent forward. upper surface truncate: gaster short oval, narrowed in front and behind; pointed at apex. Legs long, slender.

Long. $\overline{2} \cdot 3 - 2 \cdot 5$ mm.

Described from ten workers. Maffin Bay, Dutch New Guinea, 10th and 20th June, 1944. E. S. Ross Collection.

Tribe CAMPONOTINI.

Polyrhachis (Myrma) relucens Latr. v. breviorspinosa, v. n.

\u2209. Differs from the typical form in having shorter spines to the pronotum and the petiole.

Described from three workers. Liki Island, Maffin Bay, Dutch New Guinea, August, 1944. E. S. Ross Collection.

Polyrhachis (Myrmhopla) lucens, sp. n.

Q. Clothed with bright goldenish pubescence, similar to that of *Polyrhachis* (*Myrma*) reluscens Latreille, which it considerably resembles in size and shape. *Pronotum* armed with two short sharp teeth, broad at the base; epinotum armed with two short bluntly pointed spines, projecting outwards; petiole with two moderate outer spines partly embracing first segment of gaster, two small teeth occur in the middle between the two spines and a third shorter tooth is situated just above them.

Described from a single dealated female. Maffin Bay, Dutch New Guinea, August 1st, 1944. E. S. Ross Collection.

Polyrhachis (Myrmhopla) cyrtomyrmoides, sp. n.

♥. Colour, sculpture and general appearance of a Cyrtomyrma. Black, shining, legs and antennæ just as in Curtomurma, brown, trochanters and apex of funiculus lighter, finely reticulated, with small scattered punctures, epinotum finely transversely striate, puncturation of sternites of meso- and metathorax somewhat Head large, convex, only slightly broader than thorax, transverse posteriorly, narrowed anteriorly, sides rounded from behind eves to posterior angles, which are rounded, posterior border slightly excised in middle; mandibles strong, very finely striate, masticatory border armed with five strong sharp teeth; clypeus large, convex, anterior border slightly projecting and finely margined in middle, posterior border slightly excised in centre; clypeal foveæ well marked; frontal area indistinct; frontal furrow very fine, but distinct, continued between the frontal carinæ to near their base; frontal carinæ with sharp raised edges, emarginate in front, convergent behind, space between concave; eyes fairly large, round, projecting, situated behind centre of sides of head. Thorax broad, convex, narrowed behind; pronotum transverse, convex, projecting anteriorly in a short, not very narrowly bordered neck, anterior angles armed with very distinct, short, but sharply pointed teeth; suture between pro- and mesonotum very fine, but distinct; epinotum armed with two long, strong, sharply pointed divergent spines projecting outwards and backwards (these spines are covered with fine striæ and small punctures), declivity long, flat, apex narrowly margined, a suture above it forms a narrow transverse border. Petiole armed with two long curved spines embracing the first segment of gaster, two small teeth are present between the spines; gaster short, round.

Long. 5 mm.

Q. Similar in colour, sculpture and structure to $\noinder Eyes$ more prominent; ocelli present; spines of epinotum slightly shorter, of petiole slightly longer, teeth between petiole spines indistinct. Wings pale yellow, pterostigma

and veins pale yellowish brown; one large long cubital cell, a long closed radial cell present. The cubitus extends as far as the margins of the wing. The punctures of the præscutellum and scutellum are larger and more distinct than those of the rest of the body.

Long. 5.5 mm.

Described from a worker and a winged female. Maffin Bay, Dutch New Guinea, August, 1944. E. S. Ross Collection.

Polyrhachis (Cyrtomyrma) dentata, sp. n. (Fig. 3.)

Head broad, massive, broadest at base, narrowed anteriorly, broader at base than thorax, posterior angles rounded, posterior border excised and truncate in middle;

Fig. 3.



Polyrhachis (Cyrtomyema) dentata, sp. n. Scale.

mandibles massive, masticatory border armed with four sharp teeth, the apical one being considerably the longest and sharpest; clypeus large, convex, anterior border truncate, and slightly raised, with a very small tooth at each corner; frontal area very indistinct; frontal furrow very fine and narrow, continued between the frontal carinæ almost to their base; frontal carinæ long, sinuate in middle; eyes large, round, not very convex. situated considerably behind middle of sides of head; Thorax broad, massive, convex; present. pronotum furnished with a short transverse neck, slightly excised in front, and not very narrowly margined, shoulders rounded; suture between pro- and mesonotum fine and not deep, but very distinct: suture between meso- and epinotum not indicated; epinotum unarmed, the posterior border of the declivity deeply and narrowly margined; scale with four pointed teeth, the outer pair being long and slightly curved, the inner pair being shorter, but fairly long, and not close together.

Long. 5.5-6.5 mm.

Described from 3 \(\xi \xi \), Maffin Bay, Dutch New Guinea, August. 1944. E. S. Ross Collection.

This species differs from all the others described in my monograph on the subgenus *Cyrtomyrma* in my group in which the shoulders are rounded and the epinotum unarmed, in that the teeth of the scale are considerably larger (see Donisthorpe, Ann. & Mag. Nat. Hist. (11) i. pp. 246-67, 16 figs (1938)).