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*Five new Species of Ant, chiefly from New Guinea.*

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*PONERINÆ.*

*Acanthoponera plaumanni*, sp. n.

♂. Reddish yellow, legs and scapes lighter, eyes, masticatory border and teeth of mandibles black; whole body shining, and furnished with longer and shorter erect yellow hairs; gaster clothed with rather long decumbent pubescence.

*Head* subquadrate, posterior border considerably emarginate, posterior angles thick with a blunt projection on each side; sides of head to base of mandibles almost parallel. The sculpture consists of longitudinal raised ridges enclosing a network of large, shallow, shining pits. *Mandibles* large, with scattered shallow punctures, furnished with 8 or 9 rather small blunt teeth, except the two last apical ones which are longer, the one at apex being the longer and bluntly pointed; *clypeus* convex and evenly arched, anterior border slightly emarginate in centre; *frontal area* indistinct; *frontal carinæ* slightly emarginate behind insertion of antennæ and then con-

tinued in a thin ridge to base of head, forming the upper side of a long, shallow, shining *scrobe* to receive the whole of the scape; *antennæ* moderate; *scape* not reaching posterior border of head by  $\frac{1}{3}$  of its length; *funiculus* with joints gradually increasing in length and breadth, forming a more or less 5-jointed club. *Thorax* narrowed to base; the sculpture on the dorsal surface and also on the sides of the pronotum is similar to that of the head, but the episternite and sternite of the mesothorax are smooth and shining with a few scattered shallow punctures; *pronotum* convex, broadest at anterior angles, which are rounded, and with a narrow neck in front for the reception of the head; *mesonotum* small, transverse, only slightly convex; *pro-mesonotal suture* semicircular, well marked; *meso-epinotal suture* only indicated by a furrow; *epinotum* with dorsal surface long, rather flat, furnished at base with two long, strong, projecting spines, which curve gradually, and very slightly inwards at apex; *declivity* abrupt, concave, smooth, shorter than the dorsal surface. *Petiole* armed above with a long sharp spine curving downwards, and beneath with a rounded projection ending posteriorly with a sharp tooth pointing backwards. The sculpture of the petiole is somewhat similar to that of head and thorax, only the apex of the spine and the projection beneath are very smooth and shining. *Gaster* covered with very small fine punctures, strangulation between *post-petiole* and rest of gaster considerable.

Long. 8.3 mm.

Described from a worker taken by Fritz Plaumann in Brazil, Nove Teutonia, lat. 27° 11' 8" S., long. 52° 23' W., September 1935.

I have looked up the descriptions of all the known species to date. This very fine insect is much larger than any of the others.

The distribution of the genus is peculiar; it is found in Central and South America, Chili, East Australia, and New Zealand.

#### MYRMICINÆ.

*Pheidole* (*Pheidolacanthius*) *barumtaun* \*, sp. n.

♂. Very dark brown, mandibles (except masticatory and basal borders, which are black), antennæ, apex of

\* Barumtaun was the name of Miss Cheesman's camp.

spines, clypeus, part of front and cheeks, epinotum, and parts of sides of thorax reddish, tarsi and articulations of the limbs yellowish. Whole body furnished with longer and shorter, scattered erect yellow hairs.

*Head* subquadrate; *posterior border* very emarginate in centre, forming large side lobes with rounded posterior angles; with strongly raised longitudinal ridges anteriorly, straight and regular in the front, curving outwards at the sides with some of the interstices covered with very small raised tubercles; posterior part of head (lobes) closely concentrically striate. *Mandibles* massive, convex, smooth, and shining, with a few shallow scattered punctures; *masticatory margin* without teeth; *clypeus* raised in centre and with a carina, longitudinally striate at sides

Fig. 1.

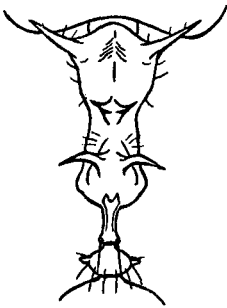


Fig. 2.



Fig. 1.—Dorsal view of thorax of soldier of *Pheidole* (*Pheidolacanthinus*) *barumtaun*, sp. n.

Fig. 2.—Lateral view of thorax of worker of *P. (P.) barumtaun*, sp. n.

of anterior border, which is emarginate in centre; *frontal area* narrow, smooth, shining, rather deeply scooped out with rounded basal border, a narrow furrow extends to base of head, becoming much deeper between the lobes; *antennal carinae* divergent posteriorly; *antennae* short; *scape* not quite reaching the transverse striæ of the lobes of head; *funiculus* with last three joints slightly longer than the rest; *eyes* small, situated in front of centre of sides of head. *Thorax* smooth and shining; *pronotum* furnished with two long, strong, pointed spines projecting outwards, and slightly forwards at apex, a little longer than a third of the length of the thorax; *mesonotum* with a raised transverse carina with sharp

small teeth at each corner; *epinotum* with two long spines projecting outwards and curving slightly backwards at apex, not as long as those of the pronotum, dorsal surface of *epinotum* slightly convex, *declivity* abrupt, of equal length to dorsal surface, slightly concave; *petiole* long and narrow anteriorly, with a thin, raised, rather high transverse projection posteriorly; *post-petiole* narrow, transverse, transversely striate, with a short projecting tooth at each side; *gaster* round, smooth, and shining.

Long. 6 mm.

♀. Colour and hairs much as in the ♂, only in some specimens the dark brown parts are nearly black. Very smooth and shining.

*Head* rounded in front and behind, posterior border margined; *mandibles* long, longitudinally striate, and with a few scattered punctures, masticatory border furnished with two long sharp teeth at apex, two shorter ones close to them, and one short tooth just before base; *clypeus* convex with a round projection before frontal area; *frontal area* shallow with well-marked side borders, rounded at base; *frontal carinæ* short, pointed at apex; *antennal foveæ* concentrically striate; *antennæ* long; *scape* extending beyond posterior border of head by nearly half its length; *funiculus* with last three joints about as long as the rest. *Thorax* narrow; *pronotum* armed with two long divergent spines, projecting forwards and curving slightly downwards at apex, about as long as two-thirds of the thorax; *mesonotum* armed with two short, erect acute spines; *epinotum* armed with two long curved spines, pointing backwards, not as long as those on the pronotum, with two short acute spines projecting upwards a little before the middle of the epinotal spines. *Petiole* long and narrow, raised to a projecting blunt ridge at apex; *post-petiole* broader than *petiole*, narrowed in front, dorsal surface round; *gaster* oval.

Long. 3.2 mm.

♂. Dirty pale yellow, head behind front and at sides of and behind eyes black, scutum of mesonotum and scutellum marked with blackish patches, sides of thorax and middle of femora and tibiæ brownish.

Typical *Pheidole* male; *ocelli* large, situated on a prominence at back of head; *mandibles* small, armed with two

small sharp teeth; *Mayrian furrows* not very distinct. *Wings* iridescent; one *discoidal cell*, one large and one small *cubital cell*, and a long closed *radial cell* present, *pterostigma* and *veins* yellow.

Long. 4.2 mm.

Described from eight soldiers, a number of workers, and four males, taken by Miss L. E. Cheesman in a nest in rotten wood on Mount Lina, Cyclops Mountains, Dutch New Guinea, 3500-4500 ft., March 1936.

Types in Brit. Mus. Coll.

This ant is quite distinct from all the other known species of this interesting subgenus.

It is perhaps as well to mention here that in my opinion *Pheidole* (*Pheidolacanthinus*) *armata* Smith [Journ. Proc. Linn. Soc. Lond., Zool. viii. p. 75, pl. iv. fig. 8 (1864) sub *Pheidolacanthinus armata*] is the soldier and *P.* (*P.*) *quadrispinosa* Smith [Journ. Proc. Linn. Soc. Lond., Zool. viii. p. 72, pl. iv. fig. 6 (1864) sub *Myrmica quadrispinosa*] is the worker of the same species. Which being the case the former name will sink as a synonym. Professor G. Hale Carpenter has kindly lent both types to me, and both were taken by A. R. Wallace at Salwaty, New Guinea.

Smith also described his genus *Pheidolacanthinus* as having 11-jointed antennæ; whereas in the type-specimen they are 12-jointed.

*Pheidole* (*Pheidolacanthinus*) *elegans*, sp. n.

♂. Very dark brown, nearly black, mandibles, antennæ and tarsi yellow, femora and tibiæ light brown; very smooth and shining; a few scattered erect hairs are present, chiefly on the head, antennæ, and limbs.

*Head* rounded behind and narrowed in front; *clypeus* slightly convex, anterior border almost straight; *frontal area* very indistinct; *frontal carinæ* short, nearly parallel; *antennæ* moderate; *scape* extending beyond the posterior border of the head by barely the length of the first joint of the funiculus; *funiculus* with last three joints slightly longer than the rest. *Thorax* narrowed to base; *pronotum* armed with two long strong spines about a third as long as the thorax, projecting outwards and very slightly forwards; no *pro-mesonotal* suture; the *pronotum* and *mesonotum* when seen from above forming a diamond,

the two upper sides (pronotum) being shorter than the two lower sides (mesonotum); the *mesonotum* ends in a raised angle; no *meso-epinotal suture*; the *epinotum* with its dorsal surface scooped out from this angle to base, where it is armed with two sharp divergent spines, shorter than those of the pronotum, curved slightly downwards at apex. *Petiole* long, narrow, terminating posteriorly in a narrow raised ridge; *post-petiole* round, convex, slightly broader than petiole; *gaster* small, somewhat oval.

Long. 2.2 mm.

Described from four workers, taken by Miss L. E. Cheesman, walking on a rubber tree, at Kokoda, Papua, 1200 ft., August 1933.

Type in Brit. Mus. Coll.

Fig. 3.

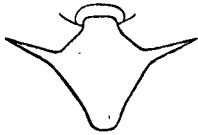


Fig. 4.



Fig. 3.—Dorsal view of front of thorax of worker of *Pheidole* (*Pheidola-canthinus*) *elegans*, sp. n.

Fig. 4.—Lateral view of thorax of worker of *P. (P.) elegans*, sp. n.

*Podomyrma pulchellus*, sp. n. (Figs. 5 & 6.)

The whole body very shining, black with an orange-coloured head, the mandibles darker with teeth black.

*Head* large, subquadrate, covered with strongly raised regular ridges, the interstices being smooth, posterior border margined and evenly emarginate; *mandibles* massive, strongly longitudinally striate and with small scattered punctures, armed with six strong teeth; *clypeus* large, flat, finely longitudinally striate; *frontal area* smooth, well defined; *frontal carinæ* divergent, arched, continued as one of the raised ridges on head; *eyes* large, round, prominent; *antennal fovea* deep; *antennæ* thick; *scape* curved, finely longitudinally striate and punctate,

considerably broadest at apex, not reaching posterior angles of head by one-third of its length; *funiculus* with first joint as long as the two following taken together, gradually increasing in thickness to apex, last three joints pubescent. *Thorax* broadest in front covered with regular raised ridges, which are not as close as those of the head, interstices smooth; *prenotum* armed with two pointed spines projecting forwards and outwards; no *pro-mesonotal suture*; *mesonotum* separated from *epinotum* by a deep furrow; *epinotum* armed with two small teeth, which are wanting in some specimens; *petiole* long, armed at sides of base with two strong triangular teeth projecting outwards and a raised

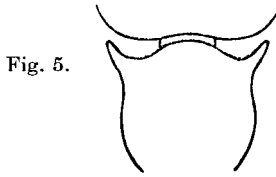


Fig. 5.

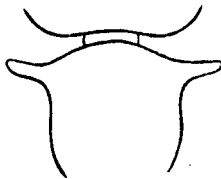


Fig. 6.

Fig. 5.—Front of thorax of worker of *Podomyrma pulchellus*, sp. n.  
 Fig. 6.—Front of thorax of worker of *Podomyrma ruficeps* Smith.

transverse ridge with sharp corners on centre of dorsal surface and a blunt tooth at base on under side pointing forwards; *post-petiole* broad, flattened in centre forming two lobes rounded at sides; *gaster* rounded in front, considerably narrowed to apex. *Legs* strong, femora considerably dilated in middle.

Long. 10–13·4 mm.

Described from seven workers taken by Miss L. E. Cheesman at Humbolt Bay, E. New Guinea, Mount Nomo, and Njan-limon, W. New Guinea, February and April 1936.

This beautiful species differs from *Podomyrma ruficeps* Smith [Journ. Proc. Linn. Soc. Lond., Zool. vii. p. 20 (1863)

Mysol] by the fact that the raised ridges on head and thorax are not interrupted by transverse net-work, by being more shining, and the clypeus less striate. The spines on the thorax project forwards, and not at right angles as in *nigriceps*, and are sharper. The epinotum being sometimes armed, the petiole is thicker and shorter and armed with teeth at the sides, and the dorsal surface is not armed with a small sharp projecting tooth; the post-petiole is broader, much smoother, and possesses two distinct lobes; the gaster is not longitudinally striate at base. From *P. dohertyi* Emery [Ann. Mus. Stor. Nat. Genova, xxxviii. p. 558 (1897), Moluccas] to which species judging by the description it appears to be nearest, chiefly by the important character of the spines of the pronotum projecting forwards; also by the epinotum sometimes armed, and the sculpture.

#### FORMICINÆ.

##### *Polyrhachis (Myrmotherinax) d'urvillei*, sp. n.

♂. Head, thorax, petiole, scapes of antennæ, palpi, and base of first six joints of funiculus dark brown; the last five joints of the funiculus and the last tarsal joints are yellow. Mandibles, clypeus, area between the frontal carinæ, insertion of the antennæ, legs, and gaster reddish brown, teeth black. Head, thorax, and petiole finely granulate, that of the petiole being slightly coarser; gaster shining, very finely reticulate transversely, and with very small scattered punctures, covered with very short, sparse, decumbent pubescence. The legs are very finely granulate and clothed with similar pubescence to that of the gaster. Some specimens are altogether lighter in colour; probably callows.

*Head* ovate, narrowed in front and rounded behind, broadest across the centre of the eyes; *mandibles* very finely longitudinally striate, and with very small, shallow, scattered punctures, armed with four strong sharp teeth; *clypeus* large, somewhat convex, with a strong central carina, neatly notched at centre of anterior border, which is somewhat advanced, with a rather sharp small tooth at each corner; *frontal area* not very distinctly defined behind; *frontal carinæ* with high sharp edges, emarginate in centre and slightly narrowed behind;



*frontal furrow* very shallow, but distinct, reaching to nearly the base of the carinæ; *antennæ* long; *scapes* extending over about two-thirds of the mesonotum; *eyes* round, prominent. *Thorax* margined, narrowed to base; *pronotum* narrowed in front, broadest at shoulders, which are distinctly dentate; *pro-mesonotal suture* deep and well defined; *meso-epinotal* distinct, but not so deep; *epinotum* armed with two strong, sharp, projecting sub-parallel spines, dorsal surface somewhat concave; *declivity* abrupt and also concave; *petiole* armed with three sharp spines, of which the centre one is considerably the longest, the two side ones very slightly curved inwards. *Gaster* moderate. *Legs* long.

Long. 6 mm.

♀. Colour as in ♂, sculpture stronger, longitudinally striate on *mesothorax* and *scutellum*; *pronotum* with shoulders entirely rounded; *epinotal spines* short, thick, and slightly curved inwards; *spines of petiole* thicker in proportion to those of the ♂ and the centre one not so much longer than the side ones. *Wings* yellowish; *pterostigma* and *veins* brownish yellow.

Long. 10 mm.

♂ and ♀ type in the Brit. Mus. Coll.

Described from a number of workers and two winged females taken with a woven nest on a leaf by Miss L. E. Cheesman in New Guinea; sea-level, Hollandia, Humbolt Bay, April 1936.

Named after Dumont d'Urville, who was the first to anchor (in the ship 'L'Astrolabe') in Humbolt Bay, and named the Cyclops mountains.