X. *Descriptions of three new species of* Hymenoptera (Formicidæ) *from New Zealand.* By FREDERICK SMITH.

[Read 6th September, 1876.]

SINCE the description of Mr. Wakefield's collection was in the press, three new and interesting species of *Formicidæ* have been sent to me by Mr. David Sharp; two belonging to genera not previously ascertained to inhabit New Zealand, namely, *Amblyopone* and *Ponera;* the type of the former genus is figured in Wiegm. Archiv. (1842), pl. vii. fig. 21, ♀. The type of the genus *Orectognathus* is figured in the Trans. Ent. Soc. Lond. (1852, 1853), pl. 21, fig. 9, ♀.

Fam. PONERIDÆ.

Ponera castanea.

Female.—Length 3½ lines. Chestnut-red, usually with the head and metathorax blackish; the mandibles and antennæ reddish, the margin of the former denticulate, and the tips of the joints of the latter fuscous or black; the head shining, very thinly punctured, and covered with a thin sericeous pile. Thorax oblong-ovate and very finely punctured, shining and finely pubescent; legs red, the calcaria pale testaceous. Abdomen smooth and shining, the apex rufo-testaceous, having a thin sericeous pile and a mixture of longer scattered pubescence; the node of the abdomen wedge-shaped, compressed above, with its upper margin rounded.

Worker.—Rather smaller than the female and of a brighter red, but closely resembling that sex; thorax elongate, attenuated at the base of the metathorax, which is as long as the pro- and meso-thorax, entirely smooth and shining; the node of the abdomen as in the female, the claws of the tarsi simple in both sexes.

Collected by Captain Brown at Tairua, near Mercury Bay, North Island.

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Amblyopone cephalotes.

Worker.—Length 4 lines. Black, with obscure rufo-piceous tints; the mandibles, antennæ and legs ferruginous. Head more than twice the width of the prothorax, subquadrate with the posterior angles rounded, the anterior margin narrowly obscurely rufo-piceous, a deep central channel anteriorly, extending from the insertion of the antennæ to the middle of the head; longitudinally striated, excepting the central and posterior areas, which are somewhat distantly punctured. Thorax elongate, shining, strangulated in the middle; the prothorax subglobose and distantly punctured; the mesothorax abbreviated; the metathorax elongate, narrower than the prothorax, the sides nearly parallel, obliquely truncate posteriorly; shining and distantly punctured. Abdomen smooth and shining; the first segment or node subglobose; the two following large, the second largest, both very convex and rounded; the apex of the abdomen rufo-piceous.

This species is very distinct from *Amblyopone australis*, the type of the genus, described by Erichson in Wiegm. Archiv. 1842; it is most closely allied to *A. obscura*, Smith, Cat. Form. 109. Erichson gives the number of the joints of the antennæ in this genus as 11-articulate; in the figure given of the type, they are represented 12-articulate, and this is the true number both in the female and worker, the male having, as usual, an additional joint.

Collected by Mr. Lawson at Auckland.

The genus *Orectognathus* was established by myself in the year 1854, in the "Transactions of the Entomological Society," vol. ii., New Series, 1852—1854, on a species of which only a few workers had been obtained in New Zealand; a second species has been found at Tairua by Captain Brown: an examination of the latter renders it necessary to give the generic characters with some important additions.

There are four genera of ants, all bearing a general facial resemblance; these are, *Daceton*, Perty; *Ceratobasis*, Smith, and *Strumigenys*, Smith, all from Brazil; the genus *Orectognathus*, of New Zealand, being the fourth. Winged females of the two first genera are known; and although the neuration of the anterior wing

is similar in some degree, yet, as in *Cerotobasis*, all the discoidal cells are wanting, and the structure of the antennæ so very different, their distinction is definite. *Strumigenys* is separated from the foregoing by having only six joints in the antennæ of the female and worker; the winged female not known. *Orectognathus* has 5-jointed antennæ, the male is not known; the female has not been taken in a winged state.

Genus ORECTOGNATHUS, Smith.

Head heart-shaped, deeply emarginate behind; mandibles porrect, bifurcate at their apex, near to which is a sharp tooth or spine; eyes lateral, of moderate size, and composed of a number of circular, convex, separated facets; antennæ inserted forwards on the head, being 5-jointed in the workers and females. Thorax oblong, much narrower than the head, widest anteriorly, and with a short, acute tooth at the margins of the prothorax; the mesothorax has also a small lateral tooth; the metathorax with two acute spines; legs simple. Abdomen ovate and binodose; the first node petiolated and clavate, the second globose.

Orectognathus perplexus.

Female.—Length 1¼ line. Pale ferruginous, the head closely and finely punctured; antennæ and mandibles paler than the head. Thorax shorter and narrower than the head; the prothorax rounded in front; the scutellum with the hinder margin rounded, somewhat projecting over the metathorax, which is armed with two compressed, acute spines; the entire thorax closely and finely punctured; the legs paler than the thorax; the anterior tibiæ with a spine at their apex, the intermediate and posterior pair simple. Abdomen slightly ovate, nearly globose; the first node petiolated and rounded, the second semi-globose, forming apparently the base of the abdomen.

Worker.—The same size as the female, differing principally in the form of the thorax, the anterior margin of the prothorax being rounded; the sides oblique, the upper surface being kite-shaped and posteriorly truncate, the angles of the truncation being armed with a spine; closely and finely punctured above; the legs and abdomen as in the female.

Collected at Tairua, near Mercury Bay, by Captain Brown.

In this species, the relative proportions of the joints of the antennæ differ from those of the type of the genus *O. antennatus*, in which the second joint of the flagellum is longer than the two apical joints, but in the present species the three basal joints are nearly of equal length, and the three united only a little longer than the apical joint; the general facies of the insect and the number of joints are the same.