PLATE XV.

Fig. 10. *a*, *b*. *Diplomphalus subantialba.*
Fig. 11. *a*, *b*. *D. huttoni.*
Fig. 12. *a*, *b*. *D. moussoni.*
Fig. 13. *a*, *b*. *Hyalina microreticulata.*
Fig. 14. *a*, *b*. *H. allochroida.*
" *c*. Part of the shell, showing the ribs and reticulated interstices.
Fig. 15. *a*, *b*. *Hyalina allochroida*, var. *sericata.*
Fig. 16. *a*, *b*. *H. allochroida*, var. *lateumbilicata.*
Fig. 17. *a*. *Limnæa alfredi.*

ART. XXV.—*Notes on a Collection of* Pselaphidæ *from the Neighbourhood of Clevedon, Southern Wairoa.*

By Captain T. BROUN.

[*Read before the Auckland Institute, 19th August, 1889.*]

MR. GEORGE MUNRO, of Clevedon, having been kind enough to carry out my wishes regarding the collection of *Pselaphidæ*, I am thus in a position to add three new species to our already tolerably large list. These species, whose descriptions are attached, have been named as follow: *Bryaxis munroi*, *B. forficulida*, and *B. foveatissima*. The first-named species is dedicated to the discoverer. The male is remarkable on account of the armature of the front coxæ, which bear long spine-like processes; by the presence of a pair of acute slender tubercles on the hind part of the basal segment of the abdomen; and, further, by the first joint of the posterior tarsus being furnished with a slender, elongate, spiniform protuberance, several times longer than the joint itself. In other respects the insect, or, more correctly speaking, the body, appears somewhat similar to *Bryaxis dispar*, *B. impressifrons*, and *B. fraudulenta*, but the structure of the antennæ is essentially different. I need not in this place enter into details pertaining to these important and curiously-formed organs, as they are fully described in the annexed papers. The second species, *Bryaxis forficulida*, is another curious well-differentiated form—in fact, it is, I believe, without parallel among the group *Pselaphidæ*—I had almost stated, among the order *Coleoptera*, and might indeed have said so had I not recollected that an Australian genus of the *Rhyncophora*, or weevil tribe, bears nearly similar organs. The hind-body and elytra conjointly form an elongate-oval figure terminating in a pair of appendages, or forceps, not unlike those of an earwig—indeed, so much alike are they that the specific name is intended to indicate the resemblance. I am sorry to say I have seen but one specimen, the only one that has been found

as yet. The third species, *Bryaxis foveatissima*, is primarily distinguished by the presence of four foveæ placed in a transverse row on the front of the head. The genus *Bryaxis* consists of a large number of species from Europe, North America, Japan, and other regions. In these species there are usually two frontal and two interocular foveæ: sometimes the former are obsolete or but little developed, in other cases the two on the vertex are indistinct or wholly absent; it seldom happens that all four foveæ are distinctly impressed. In the present instance the interocular impressions are well marked—quite as distinctly as the frontal ones—so here we have another easily-recognised species. I may here state that considerable value is attached to these foveæ on the head as a means of classification: one European author, Herr Reitter, of Vienna, has even proposed to establish a new genus, to be made up of such species of *Bryaxis* as exhibit well-developed frontal foveæ —at any rate, that is one of the characteristics he relied on.

I feel very much gratified at the result, so far, of Mr. Munro's researches. It is only about a year ago that he began collecting beetles near his residence, and soon after I had explained to him my desire for "minute reddish insects," and the different ways in which they may be captured, he set to work, and found not only the three curious species already referred to, and some smaller *Euplectus* allies not yet determined, but also male examples of species that had been described from specimens of the other sex only. These, I may add, are a great acquisition to a typical collection.

The brief remarks I have offered may serve as an encouragement to others who may feel disposed to devote some of their leisure to the collection of the smaller creatures of New Zealand—creatures which, I fear, are doomed to extinction during the process of "land-improvements," so called: reckless waste or irremediable destruction of splendid forests might, I often think, more aptly express what goes on.

Bryaxis munroi, n. sp.

Impunctate, shining, red, head and thorax darkest, tarsi fulvous; clothed with elongate conspicuous hairs.

Head uneven, the sides broadly raised, the interval depressed owing to the foveæ appearing confluent, the interocular foveæ well marked. *Thorax* widest before the middle, each side with a fossa-like contraction behind. *Elytra* ample, somewhat curved laterally, sutural striæ fine but distinct. *Legs* elongate; posterior *tibiæ* a little bent near the extremity; basal articulation of hind *tarsi* armed with an elongate, spiniform, slender process extending more than half-way along the second joint. Under-side pubescent.

Male.—Antennæ hirsute, 10-articulate: basal joint longest, cylindric; 2nd and 3rd joints longer that broad; 4th rather shorter than these; 5th nearly twice the length of 4th; 6th shorter than the preceding one; 7th almost quadrate; 8th transverse; 9th largest, nearly obconical, not exactly truncate at apex, acuminate towards one side at the extremity; 10th almost rotundate, with a short, broad, terminal protuberance hollowed out underneath; the two apical joints asperate. *Prosternum* somewhat granulated on the middle. Anterior *coxæ* armed with elongate spines. Basal segment of *abdomen* very large, bearing a pair of spiniform tubercles near its extremity; intermediate segments much reduced, almost linear.

Female.—Antennæ similar in structure to those of the other sex, except as follows: 11-jointed; 9th joint considerably larger than 8th, quadrate; 10th nearly twice the breadth of its predecessor; 11th largest, subovate, obtusely prominent at apex.

In facies this species resembles Nos. 234, 235, and 1,699. *B. dispar* is at once differentiated by the form of the terminal joints (9 and 10) of the antennæ. In *B. impressifrons* all but the four basal joints of the antennæ have a roughened aspect; and the protuberance of the penultimate articulation assumes the form of a hook directed backwards; and, moreover, the sculpture of the head and thorax is altogether different. In *B. fraudulenta* the last six antennal joints are rough-looking, and, what is more characteristic, the head is angularly produced between the antennæ, and seems plane above when viewed in certain ways.

Length, $\frac{7}{8}$ line; breadth, $\frac{3}{8}$ line.

The species is dedicated to Mr. George Munro, of Clevedon, to whom I am indebted for seven specimens, as well as numerous examples of other species of this interesting group.

B. forficulida, n. sp.

Elongate, convex, nitid; elytra and legs of a paler red than the other parts of the body.

Antennæ stout, not short, pubescent, 10-articulate: basal joint rather larger than 2nd, and somewhat flattened above; 3rd and 4th nearly equal, and bead-like; 5th not so large as 2nd, yet larger than the preceding one; 6th shorter than 5th; 7th and 8th quite transverse; 9th large, subquadrate, oblique at apex, foveate below; 10th as broad as 9th, at least one-third longer, obtusely pointed; these two terminal joints roughish. *Head* smooth, frontal foveæ obsolete, the vertical small but distinct. *Thorax* unimpressed, widest before the middle. *Elytra* oblong, sutural striæ finely marked; they bear some minute brassy hairs. *Hind-body* much narrowed

posteriorly, as long as elytra, not much deflexed, pubescent, its segments very distinct, the terminal furnished with a pair of yellow forceps. *Legs* elongate, hind tibiæ a little flexuous.

This very curious creature is, I believe, without parallel in the *Pselaphidæ*. The elytra and hind-body conjointly form an elongate-oval figure terminating in a pair of appendages not unlike those of an earwig. The antennæ nearly resemble those of Nos. 236, 239, and other allied forms. Fem. incog.

♂. Length, $\frac{7}{8}$ line; breadth, $\frac{3}{8}$ line.

The only specimen I have seen was picked out from a collection which was sent by Mr. George Munro, of Clevedon.

B. foveatissima, n. sp.

Body infuscate, glabrous, shining, and, owing to the abruptly-deflexed abdomen, appearing somewhat shortened behind, where it is broadest; legs and antennæ yellow.

Head subquadrate; antennal tubercles but little elevated, and seeming to form a continuous smooth linear space between the antennæ, immediately behind this there is a row of four small but distinct foveæ, and on the vertex two other foveæ. *Antennæ* moderately short and stout, pubescent, 2nd articulation nearly as long as the exposed portion of the basal one; 3rd rather longer than 4th, both of which are narrowed towards the base; 5th distinctly broader but not longer than 3rd, not symmetrical, being a little cut away towards one side; joints 6–8 broader than the preceding ones, transverse, united together by narrow central stalks so that evident gaps exist between the wider parts; 9th largest, oblong, with a median cavity near the front; 10th half the bulk of the penultimate, obtusely produced: the two last-mentioned punctate. *Thorax* smooth, widest just before the middle. *Elytra* large, widest behind, sutural grooves not deeply impressed. *Hind-body* smooth, very sparingly and indistinctly clothed, nearly vertical. *Legs* stout; anterior tibiæ medially incrassate; intermediate gradually dilated, but tapered off near the extremity; posterior bicurvate, inwardly near the base and outwardly beyond.

The laxly-articulated 6th, 7th, and 8th antennal joints, and the presence of four frontal foveæ, will lead to the recognition of this species. The former character is not, I find, confined to this species. Its nearest allies are *B. impar* and *B. munda*. The structure of the under-side I have been unable to examine.

♂. Length, $\frac{5}{8}$ line; breadth, quite $\frac{1}{4}$ line.

Discovered near Clevedon by Mr. G. Munro. Only one has been obtained as yet.