

XL.—*Descriptions of new Coleoptera from New Zealand.* By Captain THOS. BROUN.

SINCE the publication of my last paper in the Ann. & Mag. Nat. Hist. for 1893 (vol. xii.) the researches of several gentlemen, whose names appear in the following pages, have enabled me to add nine new genera and ninety-five species to the list. The species now known to exist amount in round numbers to two thousand seven hundred and sixty.

The numbers ("No. 2324," for instance) refer to species described in the 'Manual of New Zealand Coleoptera.'

List of Species.

Group CNEMACANTHIDÆ.

Mecodema scitulum.
—— lineatum.
Metaglymma modicum.
—— oregoide.

Group LICINIDÆ.

Dichrochile cephalotes.

Group ANCHOMENIDÆ.

Ctenognathus actochares.
Tarastethus strenuus.
—— dubius.
—— simulans.

Group FERONIDÆ.

Pterostichus Lewisi.
Sympiestus modestus.

Group ZOLIDÆ.

Zolus femoralis.

Group ANISODACTYLIDÆ.

Lecanomerus pallipes.

Group HYDROPHILIDÆ.

Cyloma Stewarti.

Group ALEOCHARIDÆ.

Ocalea crepera.
Calodera sericophora.
—— granifer.
—— diversa.
—— vestita.
—— tumidella.
—— bituberculata.
—— fungicola.
Aleochara semifusca.
Encephalus latulus.

Group XANTHOLINIDÆ.

Othius puncticeps.

Group STAPHYLINIDÆ.

Cafius algophilus.
Quedius sciticollis.
—— conspicuellus.
—— scutellaris.
—— puncticollis.
—— ambiguus.
—— taieriensis.

Group PÆDERIDÆ.

Lithocharis cæca.
Hyperomma sanguineum.

Group OMALIDÆ.

Omalium fusciventre.
—— australe.
—— Philpotti.
—— perplexum.

Group Cnemacanthidæ.

Mecodema scitulum, sp. n.

Shining, black, tarsi and antennæ nigro-piceous.
Head constricted immediately behind the eyes, this part

with fine punctures; it is nearly smooth behind; the lateral rugæ, as well as those in front, are neither numerous nor deep; on the forehead there are six deep longitudinal striæ, near each eye there is a puncture with four or five setæ. *Labrum* smooth, broadly rounded in front, with six setigerous punctures. *Eyes* distant from thorax, rather small, very prominent, the genæ swollen below them. *Mandibles* elongate, wrinkled. *Antennæ* stout, the basal four joints nude, the others pubescent. *Thorax* slightly broader than long (7×6 millim.), widest near the front, very gradually narrowed backwards, a good deal but not abruptly narrowed near the base, the posterior angles obtusely rectangular, apex slightly and widely incurved, base subtruncate; the lateral margins are entire, somewhat dilated and rounded in front, with eight or ten setigerous punctures along each; basal fossæ not large, close to the sides but not reaching the base; there is a slight impression between them, the central groove hardly extends beyond the frontal curvate impression, the short longitudinal striæ near the front and base are scarcely discernible, and the transverse striolæ on the disk are rather fine and do not reach the sides. *Elytra* elongate, a little narrowed towards the shoulders; they are punctate-striate, the punctures are rather close and moderately fine throughout; the seventh and ninth interstices are slightly elevated, the former have about four punctures; the sculpture of the lateral channels is shallow and indefinite, but several irregularly-placed punctures are visible; there are two large punctures behind the scutellum, the base itself is rather depressed and smooth; there are very few setæ behind. *Legs* elongate; *front tibiæ* simple, the middle pair somewhat angulate at the outer extremity.

Underside shining black, nearly smooth. *Head* with six setigerous punctures in a transverse series on the raised part behind the mentum. *Last ventral segment* with one puncture near each side.

In *M. simplex*, Castelnau, the outer striæ of the elytra have large square punctures; there are several other differences, but, on the whole, it is the nearest ally.

♀. Length $13\frac{1}{2}$, breadth 4 lines.

Northern Wairoa. The Hon. E. Mitchelson was kind enough to send me a specimen.

Mecodema lineatum, sp. n.

Elongate, slightly convex, shining; black, legs nigropiceous, the palpi and glabrous joints of the antennæ rufopiceous.

Head not broad, the back part with rugæ and punctures intermingled; the sides and forehead bear longitudinal wrinkles, the middle is nearly smooth; near each eye there is a large puncture, with a cluster of four or five long setæ arising therefrom. *Labrum* rounded in front, with six setigerous punctures there; there is a central depression at the base from which several rugæ radiate. *Mandibles* rather short and thick, wrinkled. *Eyes* prominent. The *antennæ* reach to beyond the middle of the thorax, the last six joints bear fine pubescence. *Thorax* almost as long as broad ($5\frac{1}{2} \times 6$ millim.), abruptly contracted near the base, which is a little emarginate; this narrow portion has straight sides and rectangular angles; the sides, from the anterior angles backwards, are but little rounded for two thirds of their length, the margins are subcrenate, having eight or ten setigerous punctures along each; the front and base have short longitudinal rugæ, the transversal striæ on the disk become deeper near the sides, the median groove does not attain the apex, the basal fossæ are rather small, they are close to the sides and become sulciform towards the base. *Elytra* elongate-oval, slightly and gradually narrowed towards the shoulders, with numerous elongate setæ behind; on each elytron, near the suture, there are two nearly regular series of moderate punctures, connected by very feeble linear marks that can hardly be termed striæ; the punctiform sculpture outside these is more irregular and a little coarser, the posterior sculpture is coarse and confused, and is mixed with many fine wrinkles; on the dorsum there are numerous short, transversal, feebly impressed lines. *Legs* elongate; *intermediate tibiæ* moderately asperate; *front tarsi* with the external angles of the basal three joints somewhat prolonged.

Underside black. *Mentum* with two setigerous punctures, its central tooth almost bifid. Penultimate articulation of the *labial palpi* bisetose. Back of the *head* covered with short rugosities. *Prosternum* medially rounded in front, nearly smooth along the middle, its flanks with rather shallow distant punctures. *Mesosternum* transversely wrinkled, its sides with punctiform sculpture. *Metasternum* nearly smooth, there being only a few rugæ behind. *Terminal ventral segment* with two setigerous punctures at each side of the middle.

I do not think this can be Castelnau's *M. crenicolle*, which is larger and differently marked. Redtenbacher's *M. crenaticolle* is described as being "obscure cupreo-æneo," a term manifestly inapplicable to *M. lineatum*. These seem to be the nearest allies.

♂. Length $11\frac{1}{2}$, breadth $3\frac{1}{2}$ lines.

Papakura (Ligar's Bush). One male.

Metaglymma modicum, sp. n.

Glossy, black ; legs, antennæ, and palpi pitchy red.

Head rather large, smooth, constricted behind the eyes, and with a fine linear transverse impression above, the inter-antennal furrow deep. *Eyes* convex and prominent. *Mandibles* estriate, long and stout. *Antennæ* with fine distinct pubescence on the six terminal joints, the basal joint quite red. *Thorax* about one seventh broader than long, very much but not abruptly contracted behind ; the sides moderately rounded, with rather narrow simple margins ; posterior angles rectangular but blunt, the base and apex only slightly incurved ; the disk is smooth and slightly convex, the dorsal groove is not deep and does not reach the apex ; the basal fossæ are rather small, deep, and punctiform, they are situated close to the sides but at some little distance from the base. *Elytra* oblong, narrowed towards the shoulders, broadly rounded behind ; each elytron has eight dorsal, well-marked, closely and distinctly punctured striæ ; the two sutural are not so deep as the outermost ; the first, third, and fifth interstices are a little wider than the others ; the smooth area between the eighth and marginal striæ is somewhat convex, the posterior sculpture is coarse and irregular, the base is smooth. The outer extremity of the *front tibiæ* is prolonged but not dilated externally, the middle pair are but little asperate and only moderately dilated, and the posterior are smooth and hardly at all incrassate at the apex.

The fourth (apical) *ventral segment* has two punctures on each side of the middle at the apex, and each side of the thorax bears about six setæ, the normal condition in this genus. The *labrum* is usually broadly rounded, but in this species it is widely emarginate in the middle.

This is smaller than No. 2324, its nearest ally ; the thoracic fossæ are not large, nor do they extend inwards as in that species ; the legs are more slender and the hind tarsi are more elongate, besides other differences.

Underside smooth and shining.

♂. Length 7, breadth $2\frac{1}{4}$ lines.

Wellington. Mr. J. H. Lewis caught this on the sea-beach.

Metaglymma oregoide, sp. n.

Elongate, moderately narrow, slightly convex ; brilliant, pitchy black, the legs, antennæ, and palpi piceo-rufous.

Head smooth, with a well-marked transverse linear impres-

sion behind the eyes; the inter-antennal furrow is not deep, and there is no longitudinal groove between the side of the forehead and the mandible. *Eyes* small but prominent. *Labrum* rounded. *Thorax* elongate ($3\frac{3}{4}$ millim. long by 4 broad), only slightly wider before the middle than it is elsewhere, very gradually narrowed posteriorly, its sides but little curved and only indistinctly marginated, the hind angles obtuse and indistinct; the surface is smooth, the central channel is rather fine and does not reach the apex, the basal fossæ are small and punctiform and are about as far from the sides as they are from the base. *Elytra* oblong-oval, finely margined, the shoulders rounded; on each elytron there are eight rather fine striæ, they are only feebly impressed near the smooth base, the eighth does not extend as far forwards as the middle thigh; they are only finely punctured, the sculpture becomes coarse and irregular behind.

The *antennæ* reach backwards to the middle of the thorax, their five or six terminal joints bear more fine pubescence than do those of *M. monilifer*. The external apical prolongation of the *front tibiæ* extends about as far as the apex of the basal joint of the tarsi, the outer extremity of the middle pair is angularly produced to the same extent as that of *M. monilifer*, the posterior are only slightly incrassate. The terminal joint of the *maxillary palpi* is moderately slender.

There is no species of *Metaglymma* like this; it looks more like Castelnau's *Oregus inæqualis*. The thorax is very similar, there being no abrupt posterior contraction; the space beyond the eighth elytral stria and also the marginal channel are nearly smooth, there being only some shallow punctures.

Length $7\frac{1}{2}$, breadth $2\frac{1}{4}$ lines.

Christchurch. Found by Mr. Suter in his garden.

Group *Licinidæ*.

Dichrochile cephalotes, sp. n.

Subdepressed; the head, thorax, and scutellum dull pitchy black, with dense minute granular sculpture; elytra shining, violaceo-piceous, the margins paler; the legs and basal joint of the antennæ pale brown, joints 4 to 11 of these latter darker, opaque, and pubescent.

Head large, as long (mandibles exclusive) but not as broad as the thorax; the sides but little rounded and only slightly narrowed behind the eyes; there are four more or less evident interocular punctures. *Eyes* only moderately

convex. *Antennæ* filiform, attaining the middle thighs, their second joint obviously shorter than the third. *Thorax* about a third broader than long, widest before the middle, more, yet only very gradually, narrowed behind than in front; posterior angles rounded, the anterior nearly rectangular; lateral margins rather fine, the apical and basal still finer; the apex widely, the base more deeply incurved; its surface rather flat, with some indistinct transverse rugæ, the central channel not abbreviated; basal fossæ represented by elongate impressions extending about halfway towards the front, they are hardly broader than the median groove; there are two shallow curvate impressions near each side in front. *Elytra* oblong-oval, obliquely, but hardly at all sinuously, narrowed apically; their striæ are sharply impressed but impunctate; there is a short scutellar stria on each, 3 to 7 are more or less irregularly interrupted or confused behind; interstices broad, not convex, third bipunctate, sixth sometimes punctured.

Underside piceous; the head with a broad smooth line along the middle, elsewhere finely wrinkled.

This species may be distinguished from *D. anthracina*, its nearest ally, by the silky opacity of the anterior half of the body, the larger head, unusually thick mandibles, more basally narrowed thorax, and by the peculiar colour of the elytra.

♀. Length $4\frac{3}{4}$, breadth $1\frac{3}{4}$ lines.

Ngatira, near the Rotorua railway. One female.

Group Anchomenidæ.

Ctenognathus actochares, sp. n.

Black, shining; the femora and the first and third antennal joints more or less piceous; the remaining joints of the latter, as well as the tarsi and palpi, are rufous; tibiæ usually pitchy red.

Head oviform, the constriction behind the eyes continued above as a more or less evident impression; the middle is convex. *Thorax* large, only about a sixth broader than long, widest near the middle; its sides rounded, with broad channels and reflexed margins; they are sinuate-angustate behind, but there is a very short straight space near the posterior angles; these are nearly rectangular, but generally obtuse; the base is truncate or almost so in the middle, but its sides are slightly curved forwards; the dorsal furrow is broad, and, as seen from the sides, does not reach the base or apex; the disk has some obsolete undulating striæ, and the depression or fossa near each hind angle is more or less curvedly prolonged

forwards inside the lateral channel. *Elytra* broad, their sides slightly rounded and a good deal obliquely narrowed posteriorly; the base is incurved and has distinct raised margins; the striae are deep and regular, the interstices are broad and slightly convex, the subapical puncture on the third is seldom distinct. The *tarsi* are grooved along each side of the middle, the anterior less evidently than the others.

This should be placed near No. 45, which most nearly resembles it. The thorax of *C. actochares* is more cordiform, it seems longer, and the basal portion and angles are very different. The eyes are rather longer. The last ventral segment has five punctures along each side of the middle in some examples, but only two in others.

♂. Length $6\frac{1}{3}$, breadth $2\frac{3}{8}$ lines.

Wellington. Found inside the harbour and along the coast outside by Mr. J. H. Lewis.

Tarastethus strenuus, sp. n.

Shining, rufo-castaneous; palpi fulvescent, legs and antennae chestnut-yellow.

Head with broad frontal impressions, the space between the antennae distinctly punctured. *Thorax* about one fifth broader than long, the apex almost, if not quite, as wide as the base, this latter feebly emarginate; its sides moderately rounded, behind the middle they are narrowed but hardly at all sinuate, with rectangular posterior angles; the central channel is not deep and nearly reaches the apex, the basal fossae are obsolete, the whole basal region is rather closely punctured. *Elytra* broader than the thorax, ovate-oblong, the lateral margins broad as far as the apical sinuosities; they are only moderately punctate-striate.

Larger than *T. puncticollis*, the thoracic margins finer; the elytra more broadly rounded apically, the striae less deep and their punctures less coarse and not so close; the outer striae obsolete near the shoulders; the subapical plicae are well developed. As my specimen is a little immature, the ordinary colour is probably piceous.

In *T. alpinalis* the eyes are less convex, the basal fossae of the thorax are well marked, but the punctures near the base are not nearly so numerous or close, the central space (and that near each side) is nearly smooth, and the basal region, as seen from behind, appears depressed.

♀. Length $2\frac{3}{4}$, breadth quite $1\frac{1}{8}$ lines.

Napier (Hastwell). One, found by Mr. H. Suter.

Tarastethus dubius, sp. n.

Nitid, piceous, slightly rufescent; the legs, antennæ, and palpi rufo-testaceous.

Head more or less punctate across the middle. *Thorax* about a sixth broader than long, slightly narrower in front than at the base, the sides only moderately curved, gradually and not sinuously narrowed behind; basal angles rectangular; the discoidal furrow almost reaches the base and apex, the whole basal region is rather flat and closely punctate, but the fossæ are shallow, narrow, and indistinct. *Elytra* broader than the thorax, their grooves and punctures rather fine, the former more distinct behind, but more or less obliterated near the base; the posterior carinæ normal.

This is closely allied to *T. strenuus*, and future research may prove that it is a varietal form only; the elytra, however, are certainly different in shape, they are gradually narrowed backwards from the middle thighs, and the sides and margins become narrow before reaching the apical sinuations.

Length $2\frac{3}{4}$, breadth $1\frac{1}{8}$ lines.

Wellington. A mounted specimen was sent to me by Mr. G. V. Hudson, numbered 141. The abdomen is not distinctly punctured.

Tarastethus simulans, sp. n.

Rufo-piceous, shining; legs reddish, the antennæ, palpi, and tarsi rufo-testaceous.

This makes a near approach to *T. puncticollis* (No. 1799), but differs therefrom in having rather larger but less convex eyes. The *forehead* is more or less distinctly punctured, The *thorax* is broader, its posterior narrowing is longer and more gradual; the basal fossæ are large, when seen from the side they appear well limited, but they extend towards the middle as broad depressions, which is not the case in No. 1799; the basal punctuation is not so close, some parts being nearly smooth; the lateral rims are finer towards the front, the disk is quite free from the minute scattered punctures visible in Sharp's *T. puncticollis*, and there is a curvate impression in front. The *elytra* are less narrowed posteriorly; the apices, indeed, are rather broadly rounded, and the outer striæ are not so deeply impressed. The *anterior tarsi* have the fourth joints somewhat prolonged underneath in the form of membranous lobes.

Underside more or less punctate; the middle of the abdo-

men, the epipleuræ, and the flanks of the prosternum are smooth.

Length $2\frac{5}{8}$, breadth $1\frac{1}{8}$ lines.

Capleston, Westland. Two examples found by Mr. Cavell.

Group Feroniidæ.

Pterostichus Lewisi, sp. n.

Elongate, subparallel, only slightly convex, shining; black, the tarsi and antennæ piceous.

Head rather large, much narrower than the thorax, with a few fine, sometimes obsolete, transverse striæ behind, and some oblique or curved ones between the eyes; frontal impressions elongate. *Thorax* not appreciably broader than long ($6 \times 6\frac{1}{2}$ millim.), slightly wider near the front than it is elsewhere, the sides but little rounded, gradually and slightly narrowed behind the middle; the posterior angles are rectangular, but in one example there is a slight thickening of the margins that causes the angles to appear prominent; across the surface there are some fine striæ; the deep dorsal channel is somewhat expanded towards, but does not reach, the front margin; there is a rounded impression near each anterior angle; the basal fossæ are a little flattened externally and generally exhibit a smaller outer fovea in each; the middle of the base is slightly depressed and wrinkled. *Elytra* slightly narrowed towards the dentiform shoulders, the apices broadly rounded; each elytron has seven discoidal striæ, these are much interrupted; here and there the elongate impressions are replaced by punctures, the sculpture becomes coarser behind.

Scutellum striate. *Thorax* with four or five setæ on each side. The last *ventral segment* in the male has two punctures at each side of the middle, the female has three.

Like No. 1791 (*P. irregularis*). The surface less glossy; the genæ more swollen behind the eyes; the inter-antennal groove shorter, in the transverse direction; the second joint of the antennæ rather longer; the sculpture of the head and thorax very much finer; the humeral angles are more dentiform and the sculpture of the elytra is different, the large punctiform depressions seen in *P. irregularis* being almost absent in this species.

Length $9\frac{1}{2}$, breadth $3\frac{1}{8}$ lines.

Wellington. Four examples were found in a ravine behind the city at different times by Mr. J. H. Lewis, whose name has been given to the species.

Sympiestus modestus, sp. n.

Oblong, subparallel, shining, pitchy black; legs rufopiceous, antennæ red, tarsi and palpi pale red.

Head evidently narrower than the thorax, with large, broad, smooth frontal impressions. *Eyes* very convex and prominent. *Thorax* subquadrate, about one fifth broader than long, its sides slightly sinuate-angustate behind the middle, posterior angles exactly rectangular, the anterior rounded; the dorsal groove scarcely reaches the apex and is very narrow near the base; the basal fossæ are elongate and sulciform, the space between these is slightly depressed. *Elytra* ovate-oblong, the three sutural striæ on each are distinctly punctured, but the punctuation becomes obsolete behind; the fourth is interrupted or less distinct at the base, the outer striæ are more or less effaced.

In this genus the species are difficult to separate satisfactorily unless they are compared side by side. The following notes will aid their identification.

No. 1804, the typical species, is larger than *S. modestus*; the basal joint of the antennæ is darker than the others, the elytra are less glossy than the thorax, which latter has slightly obtuse basal angles. These characters are not applicable to *S. modestus*.

No. 1338. — Frontal impressions distinctly sculptured, almost quite punctate; eyes less convex than in *S. modestus*.

No. 1805. — Striæ of elytra narrow and finely punctured, so that the striæ are more conspicuous than their punctures, just the reverse of what is seen in the other species; its eyes are like those of No. 1338 but are rather smaller.

No. 2439. — This is a larger insect with very conspicuous eyes.

♂. Length $2\frac{1}{2}$, breadth $\frac{7}{8}$ lines.

Dyer's Pass, Canterbury. One example, found by Mr. Suter in June 1893.

Group Zolidæ.

Zolus femoralis, sp. n.

Subovate, rather elongate, a little convex, shining; pitchy black, elytral margins and mandibles red, the antennæ, palpi, tibiæ, and tarsi yellowish red.

Head rather small, with a groove near each eye, the frontal impressions elongate and rather shallow. *Thorax* almost as long as it is broad, a little wider at the base than in front; the sides before the middle are moderately rounded, near the

base they extend outwards, only very slightly, however; between the base and the middle there is a moderate sinuation; the posterior angles are rectangular; the dorsal groove almost reaches the apex and is quite distinct behind; the basal fossæ are very large, but become shallow near the central groove; the punctuation near the base is feeble, the plica near each side is well marked. *Elytra* oval, much broader than the thorax, the lateral margins and channels broad; their striæ, though distinct, are not deep nor broad, and they are only very finely punctured; the fifth is bordered behind by distinct carinæ; interstices broad, not convex, the third tripunctate; at each side near the shoulder there are three or four setigerous punctures, there are similar ones behind.

There are two setigerous punctures on the *forehead* and one near the back part of each eye. The *antennæ* barely attain the middle thighs; their second joint is as long as the first, it is nearly glabrous; the third is nearly bare at the base. The *front tarsi* are narrow; their basal joint is shorter than the terminal one, the second is longer than broad; the third and fourth are cordiform, the latter is shorter than the former.

The nearest species is *Z. carinatus* (No. 1339). This is a little narrower, with a shorter thorax; its sides are more rounded at and before the middle and more sinuated behind; the basal impressions are larger, but the punctures there are much finer and less numerous; the last puncture on the third interstice is situated behind the posterior femur, in No. 1339 it is placed in line with the front of the thigh; the scutellar striolæ are represented by series of fine punctures; the apices of the elytra are more broadly rounded; the hind tarsi are feebly grooved above.

♀. Length $3\frac{5}{8}$, breadth $1\frac{3}{8}$ lines.

Wellington. I received my specimen from Mr. J. H. Lewis; he found it on the 2nd September, 1893.

[To be continued.]

MISCELLANEOUS.

A new instance of Commensalism: Association of Worms of the Genus Aspidosiphon with Madreporarian Polyps and a Bivalve Mollusk. By M. E.-L. BOUVIER.

IN their 'Monographie des Turbinolides,' published in 1848, Milne-Edwards and Jules Haime mentioned the association of Gastropod mollusks with Madreporarian polyps, which they subsequently assigned ('Histoire naturelle des Coralliaires,' t. ii. p. 51, 1857, and