prominent; base widely rounded, with rounded angles; the sides slightly curved and narrowed anteriorly, their margins more distinct behind than in front; its surface closely and finely punctured, and with a large yellowish spot at each anterior angle. Elytra broader and much longer than the thorax, with rounded shoulders, lateral margins distinct, they are finely and closely punctate; at the middle of the base there is a large spot which is divided by the suture, there is a smaller one about as distant from each side as from the base, across the middle there are 4, and there are 4 others behind, all of which are black.

Legs with fine grey hairs. Tarsi apparently tri-articulate, the small true 4th joint, however, is visible within the excavation of the 2nd, which is quite the length of the basal one, the terminal is as long as the preceding

two combined; claws thickened at the base.

Antennæ rather short and slender, 11-jointed, the basal 2 are thick, 3rd and 4th equal, moderately elongate, 5 to 8 decrease in length; the joints of the club gradually expanded, the terminal one broad and obtuse at the apex.

Underside black.

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

This valuable European ladybird is sometimes abundant in New Zealand. Two specimens were brought by Mr. Wallace from Macauley Island; in both the 4 median spots are transformed into 2. None were found on Sunday Island.

## ART. XXXVII.—Additions to the Coleopterous Fauna of the Chatham Islands.

## By Major T. Broun, F.E.S.

## [Read before the Auckland Institute, 22nd November, 1909.]

List.		Groups.
42. Leperina shandi, Broun	 • •	 TROGOSITIDÆ.
43. Lissotes dispar, Broun	 	 LUCANIDÆ.
44. Aldonus misturatus, Broun	 	 CRYPTORHYNCHIDÆ.
45 lineiter, Broun	 	 **

To these descriptions, owing to the kindness of Mr. Charles O. Waterhouse, of the British Museum, that of *Lissotes capito*, Deyrolle, has been added. This could not be obtained in New Zealand.

In my previous paper\* all the then known Coleoptera are recorded, and the species numbered consecutively for convenience of reference, so that in correspondence the number only of each species need be quoted instead of the whole name. This convenient system is continued in the present list.

We are indebted to a lady, Miss S. D. Shand, of Te Whakuru, for the collection of interesting beetles enumerated above, and it is hoped she may continue adding to our knowledge of such insects, of which about a twentieth part only have been brought to light.

<sup>\*</sup> Trans. N.Z. Inst., vol. xli, 1908, p. 145.

Group Trogositidæ. Gen., Man. N.Z. Coleopt., p. 177.

Leperina shandi, sp. nov.

Elongate-oblong, subdepressed, slightly nitid; fusco-piceous, elytra sometimes rufescent; legs, antennæ, and palpi piceo-rufous; labrum and sides of thorax reddish; squamosity yellowish, depressed, and chiefly confined to the sides of the thorax, thicker and suberect on the elytra, which also bear numerous distinct erect setæ, their margins with slender, outstand-

ing but short and rather indistinct setæ.

Head coarsely and irregularly punctured, and longitudinally rugose towards the front, it is almost or quite bald; the lateral protuberances in front of and below the antennæ well developed. Thorax 1½ lines long in the middle by 2½ broad, widest near the middle, slightly curvedly narrowed towards the prominent anterior angles, rather strongly sinuate-angustate behind, posterior angles rectangular, the lateral margins thick and reflexed, apex fringed with yellow hairs; the punctation very close and coarse, but becoming more distant towards the middle, and finer near the base and apex; its sides have small outstanding setæ. Scutellum transverse, rounded behind, and finely punctate. Elytra wider than thorax at the base, subparallel; each with 7 linear interrupted discoidal costæ, the sutural entire behind; interstices finely punctured; the sides are not costate but have three series of punctures or granules; there are very few dark scales.

Antennæ very scantily pubescent, basal joint large and gradually thickened, 2nd transverse, 3-8 as long as they are broad; club large, its basal 2 joints transverse and evidently dilated inwardly, the last longer and

rotundate. Legs and tarsi with fine yellow hairs.

Mandibles bifid at apex. Labrum emarginate in front, large, finely

nubescent.

Larger than  $L.\ browni$ , which measures  $4\times1\frac{5}{8}$  lines. The thorax is more transverse, more sinuate behind the middle, with thicker reflexed lateral margins, but it is entirely without the slender yet distinct yellow hairs of that species; its sculpture also is different. The elytral costæ are less numerously interrupted.

Length,  $5\frac{1}{2}$ - $5\frac{3}{4}$  lines; breadth, 2- $2\frac{1}{4}$  lines.

Te Whakuru, Chatham Islands.

Discovered by Miss S. D. Shand, in whose honour it has been named.

Obs.—Var. a: Nearly glabrous; mandibles not bifid, the inner extremity of each broad and obtusely truncate; unique as yet, may prove to be a distinct species;  $5\frac{1}{2} \times 2$  lines. Var. b: Hind angles of thorax more prominent;  $4\frac{1}{2} \times 1\frac{5}{8}$  lines.

## Group Lucanidæ.

Lissotes dispar, sp. nov.

Oblong, moderately transversely convex, nitid; fusco-niger, legs piceorufous; the lateral and basal margins of the thorax thinly, the sides and apical portion of the elytra more thickly, clothed with short fulvescent setæ; the two hind pairs of tibiæ fringed with slender outstanding setæ.

Mandibles large, strongly curvate, the right one reflexed at the extremity so as to clear the left; on each, near the base, there is a short inner angular projection; just in front of these, and a little lower down, there is a much larger one which touches its fellow during repose; above, near the inner margin of each mandible, from the middle backwards, there is an elongate obtuse elevation.

Head about as large as the thorax, its frontal portion slightly but broadly concave; in front of each eye there is an elongate and rather deep lateral cavity, the margin there is curvate and elevated, behind each eye there is a prominent angular lobe, its sides consequently are rather widely incurved near the middle; it is minutely and distantly punctured, but more distinctly and closely on the hinder part.

Thorax twice as broad as long, widest in front, gradually narrowed backwards till near the base, where the sides are rather more oblique; its apex is widely but not deeply sinuate towards the sides, with rounded angles; base subtruncate, the posterior angles not rounded, nearly rectangular; the disc is minutely and distantly punctured, its sides more dis-

tinctly, on some spots indeed quite coarsely.

Scutellum smooth, short and broad, rounded behind.

Elytra only slightly longer than broad, a little contracted towards the base, with obtusely prominent shoulders, which, however, are partly concealed by the thoracic angles; their sculpture is irregular, being rather densely punctured at the base, somewhat rugosely near the apices, and more coarsely at the sides; on each elytron there are 5 or 6 indefinite striæ, and between the middle and side 2 more or less obvious, but not very regular, series of rather coarser punctures than those on the disc.

Anterior tibiæ externally, at the extremity, strongly bidentate, and with 2 or 4 smaller teeth along their sides; the intermediate unidentate medially and obtusely prominent at the outer extremity; the posterior simple,

slightly flexuous.

Underside shining, nigrescent, distinctly and closely punctate, and bearing short flavescent setæ; those on the femora and front of prosternum

more elongate.

Undoubtedly nearly allied to *L. capito*, Deyrolle, but differing therefrom, judging by its description as recorded by Parry, in sculpture, coloration, and form. The head is not parallel-sided; the thorax is not at all dilated posteriorly, its anterior angles are rather strongly rounded, the basal nearly rectangular, just the reverse of its contour in *L. capito*.

Male.—Length (mandibles inclusive), 12 lines; breadth,  $5\frac{1}{2}$  lines.

Te Whakuru, Chatham Islands.

Professor C. Chilton kindly sent me a damaged specimen received by him from Miss S. D. Shand.

Lissotes capito, Deyrolle.

Male.—Large, depressed, deep chestnut, the forehead and legs of a

lighter hue, head and thorax very large.

Head very large, with a triangular impression on the forehead, parallel at the sides, anterior angles rounded, shallowly semicircularly emarginate in front, tuberculated laterally behind the eyes; above smooth, without any trace of punctuation; beneath with a rather large triangular impression on each side for the reception of the antennæ in repose, these similar in structure to those of the allied species, the 3 apical joints produced into leaflets. Prothorax much dilated behind, anterior margin nearly straight; sides oblique, sinuated towards the middle, posterior margin semicircularly emarginate; anterior angles slightly, posterior angles strongly rounded; lateral and posterior margins finely ciliated; above smooth, with a slight depression on each side, near the anterior margin; middle of disc and lateral margins slightly punctate. Scutellum short and broad, truncate behind. Elytra subparallel, slightly narrowed anteriorly; shoulders somewhat

prominent in front, margined and ciliated at the sides, shining, covered with a sparse punctuation and a very short hispid golden-silky pubescence, each elytron with 4 rather obsolete ridges.

Beneath with the abdomen somewhat thickly punctate, the punctuation sparser on the legs and thorax, with a pubescence similar to that on the upper surface, but shorter and denser; legs clothed with longer hairs, disposed in ciliæ on the intermediate and posterior tibiæ, the anterior tibiæ armed externally in front with 2 large teeth, and behind with 5 or 6 small ones.

Female.—Parry.

Body subdepressed, broad and flat, strongly punctured; anterior angles of the head less produced than in the male, armed with a minute tubercle behind the eyes, which are partially divided by the canthus. Prothorax slightly rounded at the sides, posterior angles scarcely emarginate, with a faint central longitudinal channel and a shallow depression on each side. Elytra, as in the male, slightly costate. Scutellum exceedingly small, transverse. Mandibles short, tridentate at the apex. Tarsi short.

Parry adds that he is indebted to M. Henri Deyrolle for permission to incorporate the description of the male in the present paper, and to the kindness of Mr. F. Pascoe to add a description of the female. A single example of the male exists in the collection of Count Mnizech, and both sexes in that of Mr. Pascoe, their habitat being the Chatham Islands, situate

about four hundred miles from the eastern coast of New Zealand.

Obs.—The above descriptions have been copied from the "Transactions of the Entomological Society of London," 1873, p. 339. In that volume figures are given on pl. v. Unfortunately, tracings of these were not asked for, and therefore not sent, so that we in New Zealand remain in doubt regarding the size of the insect and the structure of the mandibles.

Group CRYPTORHYNCHIDÆ. Gen., Man. N.Z. Coleopt., p. 482. Aldonus misturatus, sp. nov.

Convex, oblong-oval, moderately nitid; fusco-piceous, antennæ and tarsi piceo-rufous; sparingly clothed with oviform slender scales and erect

moderately coarse setæ, all of which are flavescent.

Rostrum slightly shorter than thorax, a little arched, slightly narrower behind the antennal insertion (between the middle and apex) than in front, closely and rugosely but not coarsely punctured near the extremity, irregularly and rather indefinitely tricarinate and punctate behind, abruptly constricted at the base. Thorax very little broader than long, conical, base bisinuate, its obtuse angles resting on the elytra, it is much narrowed towards the rufescent apex, which is sometimes a little constricted; the disc rather coarsely closely and more or less confluently punctured, interstices irregularly rugose, the lateral sculpture granular; it bears a few squamæ, the setæ are most apparent at the sides. Elytra rather wider than thorax at the base; the shoulders prominent, but obtuse in front; they are subparallel as far as the hind thighs, moderately narrowed but not abruptly declivous behind; they are rather strongly punctate-striate, more sharply impressed behind than on the dorsum with rugose and asperate interstices, the sides apparently have coarse serial punctures; the setæ are most conspicuous towards the sides and extremity.

Scape slender, not quite reaching the eye; 2nd joint of funiculus subclavate at apex and obviously longer than the basal one, 3-6 short and nearly equal, 7th larger, about as broad as the oblong-oval, triarticulate, finely

pubescent club.

Femora notched and subdentate underneath; tibiæ nearly straight, somewhat compressed, with well-developed terminal hooks, their inner angles spiniform, the setæ more slender than those on the elytra. Tarsi hairy, 1st joint elongate, slender at the base, 2nd oblong yet shorter than the basal one, 3rd short, moderately expanded and bilobed, the terminal

about as long as the basal, with simple claws.

Underside shining, rufo-piceous, the sides of the breast with flavescent scales or squamiform setæ, abdomen with fine setæ. Prosternum deeply emarginate in front, rostral canal without sharply defined borders, becoming shallow between the coxæ, and not extending into the mesosternum. Mesosternal process broad, not concave, transversely rugose. Metasternum rather short, punctate, with slender squamæ at the sides. Basal ventral segment as long as the metasternum, broadly medially impressed, rather coarsely but not closely punctured, its apical suture extremely fine, but deep at the sides, distinctly and broadly angulate between the coxæ; 2nd segment shorter, more distantly and finely punctate, transversely impressed behind the middle. The sculpture of the prosternum seems to consist of punctures and minute tubercles, which, however, owing to the thick vestiture, are not easily seen.

Female.—Rostrum as long as thorax, cylindric, rather slender, shining, finely and distantly punctate. Antennæ elongate, slender, and medially

inserted.

Length (rostrum exclusive),  $3\frac{1}{4}$   $4\frac{3}{4}$  lines; breadth,  $1\frac{1}{2}$   $2\frac{1}{8}$  lines.

Te Whakuru, Chatham Islands.

Both sexes forwarded by Miss S. D. Shand.

This cannot be Dr. Sharp's A. chathamensis, which is clothed above with numerous erect setæ only, whilst the thorax is described as "very rough, with tubercular sculpture."

Aldonus lineifer, sp. nov.

Convex, oblong-oval, only slightly shining, fusco-piceous, antennæ and tarsi pitchy-red; elytra very scantily clad with pale suberect squamæ,

and short erect, pale and infuscate setæ.

Rostrum longitudinally rugose and punctate almost to the extremity, and indefinitely carinate along the middle from its base to the point of the antennal insertion. Thorax with moderately coarse punctures and more or less distinct plane intervals, the sides more rugosely and closely punctate but without discernible tubercles or granules, the mesial line smooth; the scales on the sides, in front, are oviform and depressed; there are some similar ones at the base, but on the disc they are slender and indistinct, or altogether absent. Elytra coarsely striate-punctate, quite striate behind, the punctures suboblong, distinctly separated, and encroaching on the interstices in many parts; the suture and interstices finely punctate and rugose. Femora with slender, depressed, elongate scales; the tibiæ with outstanding, moderately fine setæ.

Eyes large, nearly flat, rounded outwardly, truncate inwardly, just

free from the thoracic margin, as in the preceding species.

The more scanty vestiture and the sculpture of the thorax render this species distinct.

Male.—Length (rostrum exclusive),  $2\frac{3}{4}$  lines; breadth,  $1\frac{1}{8}$  line.

Te Whakuru.

Miss S. D. Shand. Unique.