

DESCRIPTION OF PLATE XXIIA.

- Fig. 1. *Cymodocea cordiforaminalis*, from above $\times 13$.
- | | | | |
|-----|---|---|----------------------------------|
| 1a. | „ | „ | inner antenna $\times 30$. |
| 1b. | „ | „ | outer antenna $\times 30$. |
| 1c. | „ | „ | first thoracic leg $\times 30$. |
| 1d. | „ | „ | abdomen from below $\times 24$. |

ART. XVI.—*On two Marine Mites.* By CHARLES CHILTON, M.A.

[Read before the Philosophical Institute of Canterbury, 6th April, 1882.]

Plate XXIIb.

AMONG some Crustacea collected from Lyttelton Harbour I have found two specimens of mites, belonging to two different species.

According to Semper,* sea-mites are “by no means rare.” Gosse has described three English species, one belonging to the genus *Pachygnathus* (Dugès) and the other two to the genus *Halacarus*, specially made for them. As my specimens appear to resemble these two latter sufficiently to be placed in the same genus, I have ventured to describe them.

Genus *Halacarus*, Gosse.

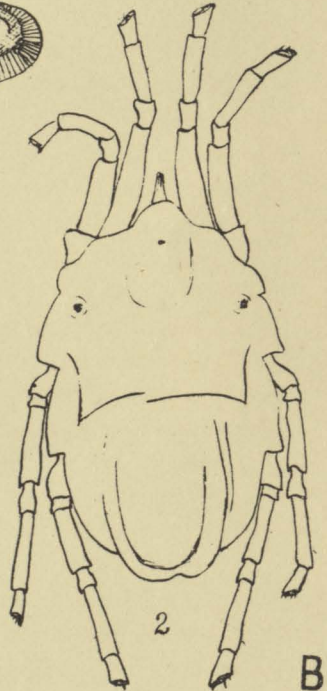
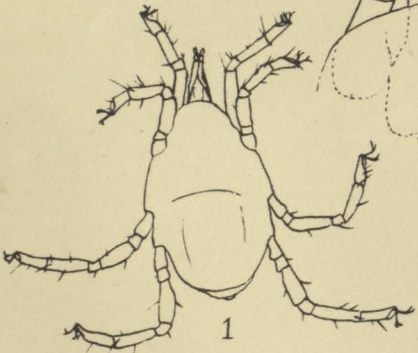
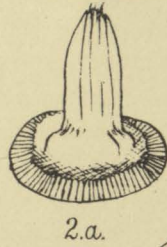
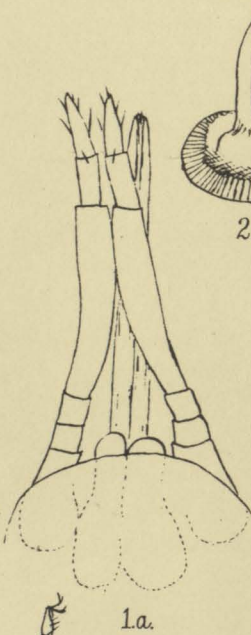
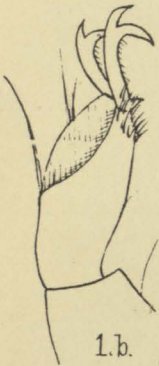
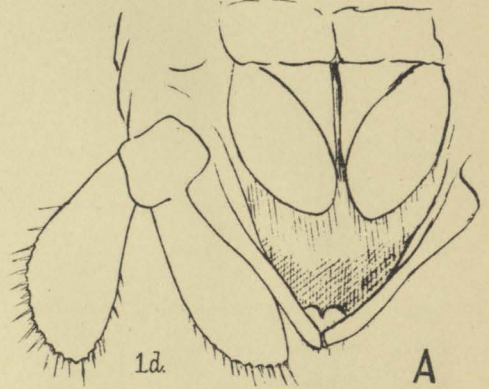
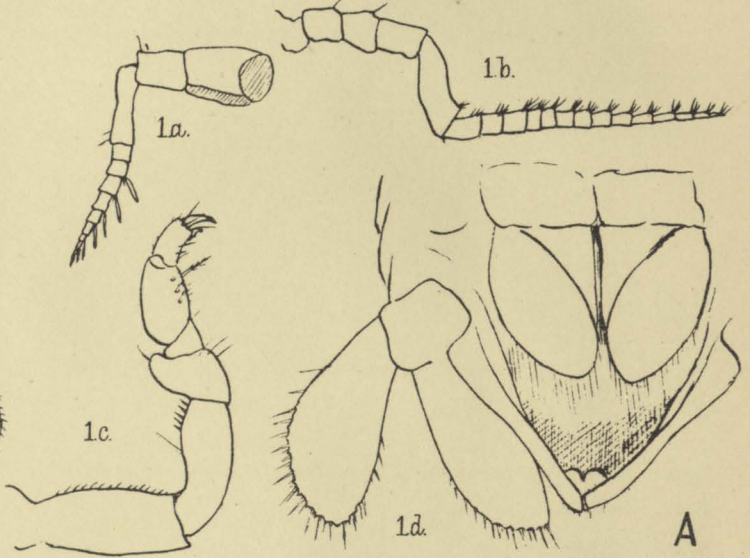
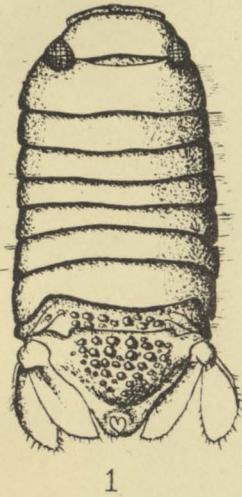
(Annals & Magazine of Natural History, ser. 2, vol. xvi., p. 27.)

“Body covered above with a well-defined shield, either entire or transversely sulcated; under surface divided across the middle; rostrum head-like consisting of a bulbous tip, tapering to a point, divided longitudinally beneath, allowing the protrusion of a pair of slender filiform mandibles; palpi terminated by a fang-like unguis; feet cursorious, tipped with two falcate unguis; directed two forward and two backward, thighs remote. Marine.”

Halacarus parvus, sp. nov. Pl. XXIIb., fig. 1.

Body oval, narrower in front than behind; notched at the bases of the legs, a slight transverse depression between the bases of the third pair of legs, anterior margin between the bases of the first pair of legs convex. First two pairs of legs arising close together, third and fourth more remote from one another. Legs subequal, third and fourth very slightly longer than the first and second and with fewer setæ; all with the first two joints short, third long and somewhat expanded, fourth short about as broad as long, fifth about as long as the third, last joint about two-thirds as long as the fifth, bearing two very movable curved hooks, each of which has two teeth at the end, the main one being larger and more curved than the

* Animal Life (Inter. Nat. Sc. Series, vol. xxxi.), p. 433.



C. Chilton, del.

On two new ISOPODS and on two MARINE MITES.



accessory one; proximal part of the concave edge of the main tooth and the concave edge of the secondary tooth, pectinated. The last joint of the leg has two or three long setæ on its outer edge and many short ones at the base of the two hooks; a portion of the end appears to be hollowed out so as to form a resting-place for the hooks when they are bent back upon the joint. A few setæ are scattered over all the joints of the legs.

Palpi of six joints; basal one rather large, partly concealed when seen from above by the anterior margin of the shield of the body, second and third joints short, about as broad as long, fourth very long, slightly expanding distally, fifth joint small, about twice as long as broad, sixth slightly longer than the fifth, tapering at the end and bearing a few short setæ. Each palp is directed inwards so that the two meet and the distal half of the inner margins of the fourth joints are in contact. Below can be seen the rostrum, which is long and slender, reaching almost to the end of the palpi. Anus terminal. Vulva enclosed in a circular space a little anterior to the anus.

No eyes visible. Colour, light brown.

Size of body, excluding rostrum, about $\frac{1}{40}$ of an inch.

Hab. Taken between high- and low-water marks, Lyttelton Harbour.

Halacarus truncipes, sp. nov. Pl. XXIIb., fig. 2.

Body elliptical, deeply notched at the bases of the third and fourth pairs of legs, less so at the bases of the first and second pairs, a notch on each side just behind the second pair of legs, slightly produced in front so as to form a rounded lobe between the first pair of legs. Eyes three, one median, very small a little behind the anterior margin of the head; the other two forming a pair, one on each side just behind the second pair of legs and near the marginal notch already mentioned, each of the paired eyes enclosed within a circular mark. Body-shield with a transverse depression midway between the bases of the third and fourth pairs of legs. This does not extend right across the body, but is met on each side by a slight longitudinal depression extending anteriorly and outwards as far as the bases of the third pair of legs. Behind the transverse depression are two longitudinal ones extending right to the end of the body, the enclosed median portion is raised above the lateral parts, especially on each side next the depression, thus forming two slight ridges which meet behind. Anus on the under side of the animal a little anterior to the end of the body, vulva enclosed in a circular space a little anterior to the anus.

Body divided below by a transverse depression midway between the bases of the third and fourth pairs of legs, this depression met on each side by a longitudinal depression; these two longitudinal depressions extend backwards and converge, meeting just behind the anus.

Legs equal in size and similar in form. First joint short, expanding distally; second very short, as broad as long; third long, rather slender; fourth short; fifth about as long as the third, slender; sixth about half as long as the fifth, end oblique, no hooks of any kind distinguishable, only one or two short setæ at the end of the joint. All the legs almost entirely free from setæ.

Rostrum short, no palpi visible. When seen from below it appears to arise out of a circular depression bordered by a stiff fringe. The rostrum appears to contain lancet-shaped organs of some kind, but nothing more can be made out without dissection. Colour, brown.

Length, about $\frac{1}{5}$ of an inch.

Hab. Lyttelton Harbour, between tide-marks.

EXPLANATION OF PLATE XXIIb.

- Fig. 1. *Halacarus parvus*, from above $\times 40$.
 1a. " " rostrum from above $\times 120$.
 1b. " " end of one of the legs $\times 244$.
 2. *Halacarus truncipes*, from above $\times 30$.
 2a. " " rostrum from below $\times 72$.

ART. XVII.—*Occurrence of a Species of Ophideres, Boisd., new to New Zealand.* By R. W. FEREDAY, M.E.S.L.

[Read before the Philosophical Institute of Canterbury, 30th November, 1882.]

ON the 13th March last a boy brought me a moth found fluttering in the grass in the yard at the back of my office in Colombo Street, Christchurch. It was alive and vigorous when handed to me, but, unfortunately in a very dilapidated condition, the forewings almost entirely denuded of scales, and the exterior margin of both wings frayed and jagged.

The moth precisely resembles—so far as the dilapidated state of the forewings admits of comparison—the *Ophideres archon* of Felder figured in *Reise der Novara*, Lep. 4, pl. cxiii., fig. 3.

In all probability it has been introduced in some way, and is not an indigenous species. Felder's specimen appears to have been taken in Siam.

The following is a description of the insect:—

Female.—General colour of body and appendages ochraceous and pale ferruginous grey; eyes large and prominent; palpi recurved, and ascending above the head the length of the third joint, third joint half the length of the second, clavate, resembling a drumstick, the knob black tipped with pale ochraceous, second joint densely clothed, the underside velutinous; proboscis robust, of moderate length; antennæ simple, rather more than