

ART. XV.—*On two new Isopods.* By CHARLES CHILTON, M.A.

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

Plate XXIIA.

Genus *Cymodocea*, Leach.

(Generic characters given in Miers' Catalogue N.Z. Crustacea, p. 113.)

Cymodocea cordiforaminalis, sp. nov. Pl. XXIIA., fig. 1.

Body rather convex, slightly more than twice as long as broad. Head much broader than long, eyes rather large. Segments of thorax smooth, or only minutely granular, coxæ of all densely covered with rather long, very fine, woolly setæ. First segment rather longer than the others, next five equal in length, last longer, produced backwards at its postero-inferior margin, posterior margin slightly convex, overlapping the abdomen. Abdomen of two segments; the first showing on each side impressed lines indicating that it is composed of three or perhaps of four segments, having an irregular row of small rounded tubercles, posterior margin straight in the centre, produced backwards on each side into the last segment. Last segment very convex, bearing on the convex part several round tubercles of various sizes, the largest being near the median line and in the anterior part of the segment. The two lateral portions on each side of the terminal notch produced backwards and inwards, so as to meet in the median line, the central tooth small and sharply-pointed, so that what is really the terminal notch appears as a heart-shaped opening in the end of the abdomen. Last pair of pleopoda with the rami equal, reaching very slightly beyond the end of the abdomen. Inner ramus with its inner edge entire, outer margin at first entire but distally curved and irregularly toothed and fringed with setæ. Outer ramus thickest about the middle, proximal portions of margin entire, distal portions dentate, more distinctly so at the extremity, and fringed with setæ.

Inner antenna with first joint of peduncle very stout, second also stout, third as long as the first but slender, being about four times as long as broad; flagellum shorter than the peduncle, of about 9–10 joints, bearing simple auditory cilia. Outer antenna with peduncle of five joints, first three subequal, fourth a little longer, fifth nearly twice as long as the fourth, narrow at proximal end but widening distally; flagellum longer than peduncle, of about 15 joints, each bearing a small tuft of short setæ. First pair of legs with basos and ischios long, the latter bearing on its outer distal margin four or five short stout setæ, meros broader than long, carpus small, propodos ovate with setæ on inner edge, some being plumose, dactylos large and strong, the end forming a claw distinct from the basal portion.

Colour—dark brown, usually with a white median streak on the anterior part of the thorax.

Length, about $\frac{1}{4}$ of an inch.

Hab. Lyttelton Harbour.

This species can be readily recognized by the peculiar character of the terminal notch of the abdomen. This appears, however, to be subject to some variation, for in one small specimen the median tooth was represented only by a very small rounded projection, and in another of the ordinary size the two lateral portions of the abdomen did not quite meet in the median line.

Genus *Jaera*, Leach.

(Bate's and Westwood's Brit. Sessile-eyed Crust., ii., p. 314.)

“Upper antenna very short. Lower antenna more than half the length of the animal. Legs uniform slender. Pleon coalesced into one segment, furnished with two minute subterminal uropoda. Pleopoda or branchial appendages covered by a large plate occupying the entire under surface of the pleon. Dactyla biunguiculate.”

Jaera novæ-zealandiæ, sp. nov.

Body narrow elliptical, length about two and a half times the greatest breadth. Head subrectangular, slightly more than twice as broad as long, produced into a slight median lobe between the antennæ. Eyes small, situated near the middle of the lateral margins. Inner antenna reaching to the third joint of the outer antenna, no flagellum distinguishable, basal joint very much larger and broader than any of the others, second and fifth joints equal and longer than the third and fourth, which are equal to one another, sixth (terminal) joint small, setæ few and short. Peduncle of outer antenna of five joints, first two equal and longer than the third, fourth and fifth equal and longer than any of the others, flagellum a little longer than the peduncle. Legs equal, all with propodos slender and longer than carpus, dactylos short ending in three curved hooks. Segments of thorax with short stout setæ on the lateral margins. Pleon nearly circular, lateral margins with short setæ, slightly emarginate at the base of the last pair of pleopoda. These are lateral, being situated at some distance from one another; they are short, each consisting of a short peduncle bearing two branches, inner one about as long as the peduncle and nearly twice as long as the outer branch, both tipped with short setæ.

Length, about $\frac{1}{10}$ of an inch.

Hab. Lyttelton Harbour.

This species resembles *Janira* and *Asellus*, and differs from *Jaera* in having the two terminal pleopoda separated from one another and not closely approximated in the centre as in *Jaera*; in other respects, however, it agrees well with *Jaera*.

DESCRIPTION OF PLATE XXIIA.

- Fig. 1. *Cymodocea cordiforaminalis*, from above $\times 13$.
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|-----|---|---|----------------------------------|
| 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.

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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.