Art. V. Descriptions of some Species of Crustaceous Animals; by S. Hailstone, Jun. Esq.: with Illustrations and Remarks, by J. O. Westwood, Esq. F.L.S. \&c.

Ord. Macroúra, Fam. Palæmónide, Gen. Pontóphilus, Sp. trispinòsus Hailstone. (fig. 25.)


A female: $a$, The external foot-jaws; $b$, one of the fringed hairs at the extremity of the penultimate joint, highly magnified; $c$, extremity of the first pair of legs; $d$, extremity of the second pair ; e, extremity of the third pair. All the figures magnified.

On March 1. 1834, several individuals of a species of Pontóphilus (.fg. 25.) were brought to me, which had been caught in a shrimping net upon this coast. They had only three spines upon the thorax ; one in the middle, and one on each side of it. Their colour was much like a shrimp's, but paler, less clouded, and with a sprinkling of golden blots. Their length, about an inch. They were called by the man who had caught them "pug-shrimps:" he said that he had never observed them before this last winter. I shall be glad to learn whether this species has been described, and, if it has, in what book. Leach (Malacostraca Podophthalma Britannia, t. 37. A.) has figured only one species (the P. spinòsus Leach, the Egèon loricàtus Risso), but not the one in question. The females were with spawn. - June 3. 1834.
[July, 1834.] I send a description of two crabs, which I have found upon this coast; and, if you can inform me whether they are undescribed, I shall be obliged. They are not in Leach's Malacostraca. To this paper may be appended with propriety the communication I made to you of the new Pontóphilus, which must, of course, be denominated trispinòsus. - 16. Undercliffe, St. Leonard's, Hastings, July, 1834.
[We have prefixed, rather than appended, the communication on the Pontóphilus trispinòsus Hailstone, to preserve the order of time. We place next in order Mr. Hailstone's descriptions of the two crabs.]

Ord. Brachyùra, Fam. Mäìadæ, Gen. Hỳas, Sp. [? coarctàta, in a young state] serràtus Hailstone. (fig. 26.)

$a$, The external foot-jaw, magnified; $b$, the abdomen, magnified.
Description. - A male. External antennce distant; the first joint larger than the second, and dilated externally, its outer margin serrrated with 5 or 6 teeth; the second joint nearly the length of the first, with one prominent tooth, or spine, on its apex at its outer side, and several obsolete ones behind; apices (tips) of the remaining joints with strong hairs or bristles. - External double palpi (a) with the first joint of their internal peduncle dilated internally, notched at its external apex for the reception of the second joint, which is emarginate at the internal apex. - Shell elongated, tuberculated, rounded at the posterior extremity, slightly convex, rostrated in front ; the rostrum fissured, its segments divaricating, but approximating at their termination, their outer margins serrated, their inner ones obsoletely so. The sides behind the eyes, with a spear-shaped process, its margin serrated; the orbits of the eyes obsoletely serrated above and beneath, where the surrounding part of the shell is rough with short spines. Bristly. - Eyes not thicker than their peduncles. Each peduncle is furnished with three spines; one irregularly cloven, placed at its termination, immediately upon the eye; one at the anterior side of the peduncle, midway; and another a little below, nearer the orbit of the eye.-Abdomen (b) 7-jointed, carinate and emarginate; the first six joints of about equal length; the first joint broad, the second narrower, the third and fourth somewhat broader, the fifth narrowest, the sixth rather broader, the seventh subtriangular; the apex rounded ; the first six joints somewhat arcuate at their posterior margins; the posterior corners produced, in the sixth
joint the most strongly so. - Fect. First pair of legs shorter and scarcely thicker than the others, didactyle (two-fingered), and equal ; the internal margins of the fingers toothed; the second pair longest; the third, fourth, and fifth pairs shorter and nearly equal in length; claws somewhat arcuate, the most so in the fifth pair. All of the legs covered with strong hairs or bristles.

Of this crab I have found three specimens, all males, among some sertularias brought to shore by the trawl net. The shell of the largest of them measures about $\frac{1}{4} \mathrm{in}$. in length. If this species of Hyas, as I take it to be, be undescribed and unnamed, the epithet serràtus may with propriety be appropriated to it.

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$a$, The outer antenna; $b$, the external foot-jaw ; $c$, the abdomen. All the figures much magnified.
Description. - A male. External antenne (a) half the length of the body, distant, setaceous, inserted at the sides of the rostrum, before the eyes; first joint very short, and thicker than the second, which is about twice its length; third joint narrower than the second, of the same length as the first ; the remaining joints elongate, the last subulate. External double palpi (b) with the first joint of their internal peduncle notched at its external apex for the reception of the second joint, which is rather shorter and suboval, its inner margin fringed with hairs; palpi 3-jointed, hairy.Shell subtriangular, tuberculated, rostrated in front with a very short rostrum, which is bifid, its segments sloping. Anterior part of the shell with two spines, the one behind the other, the anterior one very small; the posterior part of the shell with one prominent spine in the same line. - Eyes not thicker than their peduncles, which are very long, thick, and swollen; not retractile within their orbits.-Abdomen
(c) 6-jointed, carinated ; first joint broad and longest; second, narrower and shorter; third, as broad as the first, and shorter; fourth, fifth, and sixth of the same breadth, the fourth being as long as the second; the fifth shorter, and the sixth abruptly narrow and arcuate. - Legs. Anterior pair shortest and thickest, equal, didactyle, as long as the body; hands slightly compressed. Four hinder pairs very long and slender. The claws of the two anterior of the four hinder pairs slightly hooked at their extremity; those of the two posterior pairs arcuate.

This crab I have found very abundantly along with the preceding one. (fig. 26.) I am at a loss to what genus to refer it. The shortness of the rostrum will preclude its being placed among the Macropòdiæ, to which genus its characters in other respects are most nearly assimilated. All the individuals I possess are males. The length of the shell of the largest is about one tenth of an inch. - St. Leonard's, Hastings, July 11. 1834.
[We, subsequently to receiving the preceding descriptions from Mr. Hailstone, asked him to favour us with sketches, or a sight of specimens, of the animals. He sent us on Nov. 7, 1834, specimens of the Pontóphilus, Hỳas, and Macropòdia, already described; and specimens of a form of Porcellàna, accompanied by the following descriptions of two forms referable to this genus:-]

Along with these specimens, of which you have descriptions of mine, i. e. a species of Pontóphilus, another of Hỳas, and a species allied to the Macropodiadæ, I send you two distinct, as they appear to me, species of Porcellàna, both of them differing from the P. platychèles. I should be obliged to you to submit them to the judgment of your adviser in Crustacea. I send you descriptions of them, in case they should prove to be undescribed species; but, as I can hardly suppose this to be the case, I shall be obliged for their specific names when you return me the specimens. Of the smaller species there are four specimens, but, I am sorry to say, very imperfect ones.

Should any of the species represented in the specimens sent prove to be known ones, I shall be glad to receive their names, and a reference to the book in which they are described. Probably you could inform me whether there is any manual describing all the species of Crustàcea known. I possess Leach's Malacostraca Podophthalma Britannice, and Samouelle's Entomologist's Compendium, containing an abstract of Dr. Leach's arrangement, and a description of each genus, and of one species of it. I have, also, the Règne Animal, with Latreille's arrangement; but this does not describe more than the genus.

Ord. Macroúra, Fam. Galatèada, Gen. Porcellàna, Sp. minùta Westwood. (fig. 28., magnified.)
Description. - A female. Anterior margin of the shell with three lanceolate projections; the middle one the most
 prominent, depressed at its point ; all denticulated as well as the upper margin of the orbits of the eyes, which are obsoletely so. On the margin of the shell, behind each eye, are three spines; and twothirds of the remaining margin is serrated. Thigh of the first pair of legs much dilated at its internal apex; which dilatation is denticulated, and the rest of the apex of the thigh the same. - The worist with its internal margin wavy, and almost imperceptibly denticulated as well as its apex. -Hands compressed, inner margin slightly denticulated, external deeply serrated and ciliated, one third broader than the wrists. Claws depressed. - Shell one eighth of an inch long; squamose, scales mostly ciliated and mottled with red and yellow when dead. - The individual here described is a female, and was taken with spawn last June [1834] out of the chambers of a mass of E'schara retifórmis which had been dredged up off Hastings.

Porcellàna, second species. [The card which had borne, by the mark, the specimen of this species, was found, on opening the box, to have slid from its place, and to be nearly denuded of objects.]
Description. - Anterior margin of the shell with a blunt projection, deeply channeled down its middle and depressed, denticulated. Before each eye is a sharp spine; and two thirds of the margin of the shell behind each eye is serrated. -Thigh of the first pair of legs produced at its internal apex with a spine. -Wrists spinulose, with two prominent spines on their inner margins. -Hands compressed, about the breadth of the wrists; their external margin serrated. Claws depressed. - Shell one tenth of an inch long, scaly, pellucid. Found among sertularias in June, 1834. - 2. Denmark Place, Hastings, Nov. 7. 1834.

Vol. VIII. - No. 49.


[^0]:    Ord. Brachyùra, Fam. Macropodìadæ [Gen. Macropòdia, Sp. ? Phalángium, in a young state]. ( fig. 27.)

