

The question of the existence of a corpusculated fluid in the *Actiniæ* need hardly be discussed. The corpuscles have been too frequently observed to leave room for any doubt of their existence. I have never failed in discovering them when I have used a power of 450 diameters; and when the fluid was taken from the body of a polype placed during three days in well-filtered sea-water, the result was only in a slight degree less decisive—the corpuscles were not quite so abundant.

At present I can say but little on the albuminous character of the chylaqueous fluid. Experiments on the subject can be satisfactorily carried on only at the sea-side, where there are plenty of healthy polypes to cut up without running the risk of destroying old favourites. On the single occasion when I boiled some quantity of the fluid, milkeness was produced; but at a later period, when small drops taken from other animals were tested with nitric acid, I could not be sure that a change of colour took place in every case. The experiments were made on animals that had been kept both in natural and filtered sea-water; but testing the character of a minute drop of fluid is an operation so delicate and novel to me, that I hesitate to give an opinion from the results I then obtained.

It must be regretted that Mr. Lewes is so positive in his conclusions from what certainly look like hasty experiments; and in questioning their soundness I am justified by the author himself when he tells us, at p. 261, "We see the necessity of a cultivated caution in the acceptance of statements in matters so complex as those of biology."

I remain, Gentlemen,

Yours very truly,

E. W. H. HOLDSWORTH.

26 Osnaburgh Street, Sept. 1859.

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XXX.—*Description of several Species of Entomostracous Crustacea from Jerusalem.* By W. BAIRD, M.D., F.L.S.

[With two Plates.]

IN the month of July 1858, Edward Atkinson, Esq., a gentleman attached as surgeon to the consulate at Jerusalem, and who has resided in that city for some time, sent a quantity of dried mud from the pool of Gihon in Jerusalem to Mr. Denny at Leeds. By the kindness of this latter gentleman, I had a supply of this forwarded to me, which Mr. Denny states had been in all probability in a dry state for some months before it was despatched. It reached Leeds in the end of August, and the small parcel containing a supply reached me at the



British Museum on the 3rd of June, 1859. Mr. Atkinson, in a letter, informed Mr. Denny that if this mud were placed in fresh water, it would soon produce a crop of Entomostraca. This had accordingly been done at Leeds; and the result was as predicted. Placing the portion of mud which Mr. Denny had kindly sent me to the British Museum in water on the 3rd of June last, I was agreeably surprised to find several young animals of the class Entomostraca make their appearance seven days afterwards, or on the 10th of the same month. These I watched till they had assumed a sufficient degree of development, and I then discovered that they were the young of a species of *Estheria*. Shortly after this, fresh forms made their appearance; and by the middle of July I found I had a large crop of Entomostracous Crustacea, consisting of at least five different species. These I consider to be distinct from any yet described, and, both from their peculiar history and characters, worthy of a detailed description.

In addition to the species here described, Mr. Denny had the kindness to forward me a pair of a species of *Chirocephalus*, male and female, but which unfortunately died before I was able to secure them for description. They were of a pale whitish colour, and considerably smaller than the species found in Great Britain.

*Estheria Gihoni*. Pl. V. fig. 1.

Carapace oval, rather flat and compressed. Umbo rather prominent, and placed near the anterior extremity. Surface of shell encircled with prominent ribs, the intervening spaces being rather broad, slightly convex and irregularly excavately punctate. Anterior extremity slightly broader than the posterior. Dorsal margin, from the umbo to the posterior slope, nearly straight, the posterior half sloping downwards. Anterior and ventral margins rounded.

The body of the animal is of a beautiful red colour. The male is larger than the female, and the prehensile feet are rather large, and are furnished with strong hooks.

The head is large, and the sort of hood with which it terminates is long and rather sharp-pointed.

*Hab.* Pool of Gihon, Jerusalem. Mus. Brit.

*Daphnia Atkinsoni*. Pl. V. fig. 2.

*Female.* Carapace of an oval form; lower extremity pointed and terminating in a rather long spine, which is beset on all sides with short spines. Anterior margins of the valves armed with short setæ, which spring from the inner edge.

The head is rather large and prominent; beak of considerable



size. The superior antennæ, underneath the beak, are rounded, of considerable size, and terminated by four or five short setæ. The inferior antennæ have the basal portion stout and thick; the joints are all rough with minute spines; filaments plumose. In the number of joints and filaments it agrees with *D. pulex*. The surface of the carapace is rough with minute spines, and is finely reticulated; it is of a very light colour. The eye is large, and the black spot near the beak is very distinct, almost as much as that of the *Lynceidæ*. The abdomen is narrow, the lower edge armed with a row of short spines, and the terminating spines rather strong and hooked. The sixth segment of the body has three spurs or projections, the upper one of which is curved upwards, the lower sending off two rather long setæ, which are plumose only on the lower half of their length.

I have only seen females.

*Hab.* Pool of Gihon, Jerusalem.

Approaches very near *D. pulex*. Ehippia, from which these young most probably spring, are different in shape, being longer, narrower, and sharp-pointed.

*Cypris celtica.* Pl. VI. fig. 1.

Carapace wedge-shaped, like the most usual form of the stone implements known by the name of *celts*. Anterior extremity considerably broader than the posterior, and compressed. Posterior extremity pointed and compressed also. Dorsal margin rounded, convex. Ventral margin nearly straight, or very slightly sinuated. Surface of carapace very smooth and shining, destitute of all appearance of hairs or pubescence. The interior of the valves, owing to the compression of the two extremities, hollow in the centre only; each valve, for a short distance at each extremity, lying upon the other so as to fill up the hollow, and limit the space allowed for the animal, to about the centre.

Pediform antennæ furnished with a rather long pencil of plumose filaments. The colour of the shell is a light olive-green, with a lighter streak running diagonally across the posterior part of the carapace.

This species resembles somewhat the British species *C. clavata* in the shape of the carapace, but is shorter, has no hairs or setæ on its surface, and has larger pediform antennæ and feet.

*Hab.* Pool of Gihon, Jerusalem. Mus. Brit.

*Cypris orientalis.* Pl. VI. fig. 2.

Carapace of nearly a reniform shape; dorsal margin convexly rounded; ventral margin rather deeply sinuated. Anterior extremity slightly compressed. Posterior extremity nearly of the







Baird, William. 1859. "XXX.—Description of several species of Entomostracous Crustacea from Jerusalem." *The Annals and magazine of natural history; zoology, botany, and geology* 4, 280–283.

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