

very important one, since a pedicellaria is only a spine peculiarly modified. But it may be said that their supplementary character and abnormal shape give these parasol spines the position of what used to be carefully distinguished as pedicellariæ.

“*Ophiotholia* is indeed an *Ophiomyces* with this peculiar character, while *Ophiohelus* is an allied but distinct form. Both may be considered low genera, with elaborate appendages. The want of radial shields and imperfect calcification suggest their position, which is confirmed by the embryonic character of their arm-bones, which are longitudinally divided into the two halves they theoretically should have. These bones are so large and independent, even close to the tip of the arm, that it is not easy to understand how they can be spurs of the small side arm-plates, as they should be according to one theory. Unfortunately I could nowhere find a terminal joint, which would have shown how the arm-bones take their rise.

“These soft little creatures illustrate how small an influence certain kinds of the notorious ‘environment’ have in determining structure. Of the two species of this abnormal *Ophiohelus*, one comes from 82 fathoms, near the Barbados, and the other from 1350 fathoms, near the Fiji Islands. When we consider the differences of locality, light, pressure, and temperature (differences which are supposed to create varieties, or species so called), between these two Stations, we may well be a little sceptical as to the potency of such environment.

“These genera stand quite apart from others of the family, and call for diligent renewal of the endless search after those constantly increasing missing links.”

#### THE AZORES.

The ship only remained at the anchorage in Horta Bay, Fayal, from 4.45 P.M. on the 1st July till 11 A.M. on the 2nd, as, in consequence of small-pox being prevalent in the port, it was deemed advisable not to prolong the visit.

The Naturalists made short visits to the shore in the evening of the 1st and morning of the 2nd July. Horta is beautifully situated in a nook surrounded by volcanic hills, some of which are wooded to the top; one crater close to the shore is very conspicuous, and is cut into by the waves. The town is thoroughly Portuguese, and is built along the shore of a wide bay.

The afternoon of the 2nd July was spent in dredging in 50, 90, and 450 fathoms, in the straits between Pico and Fayal; a large number of animals were procured, very many of which have turned out to be new species (see Sheet 10).

The deposit was a volcanic mud, containing pumice, fragments of volcanic rock, plagioclase, sanidine, augite, magnetite, hornblende, biotite, and pelagic and other Foraminifera, Pteropods and other Molluscs, Cocoliths, Polyzoa, *Serpula*-tubes, and a few