

But then most of them belong to genera the species of which from shallow depths are comparatively thin, and more or less devoid of colour. For instance, I may mention *Næera*, *Lima*, *Cryptodon*, *Abra*, *Lyonsiella*, *Verticordia*, *Sarepta*, and *Dacrydium*. The deep-water species of such genera as have a decided epidermis (as *Malletia*, *Limopsis*, *Leda*, *Nucula*, and *Arca*) still retain it, with but little if any modification.

From a study of the Challenger collection it would therefore appear that the Lamellibranch fauna of the deepest parts of the Atlantic and Pacific Oceans is not of a very extraordinary, and certainly not of a special, character. The species are apparently few in number in comparison with those of shallow water, and new and peculiar generic forms which we naturally expected would have been discovered are of even still rarer occurrence.

In support of the theory that Molluscan life is comparatively scarce at great depths, I may give the following particulars. Species were obtained on forty-three occasions at depths of less than 100 fathoms, at twenty-four Stations at depths between 100 and 500 fathoms, at ten only in 500 to 1000 fathoms, and at thirty-three in 1000 to 2900 fathoms. At the different Stations of the first range, 384<sup>1</sup> species were collected, 148 at those of the second, 24 at those of the third, and 70 at those of the fourth, so that it will be seen that the average number of species per Station at the different ranges is as follows:—

At depths of	0 to 100 fathoms	9 species.
„	100 to 500	„ 6·16
„	500 to 1000	„ 2·4
„	1000 to 2900	„ 2·12

These figures therefore clearly show that the deeper the Challenger dredged the fewer were the species obtained.

Mr. Davidson, in his Report on the Brachiopoda of the Expedition, has arrived at a similar conclusion, for he observes that they “are more numerous both in species and individuals at depths of less than 500 fathoms,” and that it is “apparent that Brachiopoda do not, as far as our experience goes, generally abound in depths exceeding 500 or 600 fathoms; for out of one hundred and twenty-five dredgings in depths of from 1 to 600 fathoms, Brachiopoda were brought up twenty-two or twenty-three times, while in depths varying from 600 to 2900 fathoms they were obtained about sixteen times.”

<sup>1</sup> It should be remarked that a good many of the species were found at more than one Station, hence the total number of species here given from those four ranges greatly exceeds the actual number of different species in the collection.