

water under the most careful management—from the place of its growth. But having obtained a piece of fresh-water sponge containing seed-like bodies, we may remove it without any danger to any distance, no great care being necessary, and the extinction of the life of the sponge being of no consequence for our purpose. We take it home, separate the capsules from the dead or dying sarcode, and make temporary ponds of water in which to observe their development. The circumstances being favourable for development, the germinal matter is seen to issue from the aperture, and as the process goes on, by placing our small pond with its contents under the microscope, we observe the skeleton-spicule grow from its commencement in a single cell, the cell gradually diminishing as the spicule increases in size until it is completed. We then find that it is carried about by the general sarcode, and fixed in position by being cemented to other spicules which have arisen in the same way, and that thus the skeleton is built up. Using a higher power, and plunging it into the water, so as to get the sarcode into focus, the flagellate sponge cells, which take up nutriment for the sustenance and growth of the general body, may be seen with the flagella in active operation. The sponge grows and increases in this kind of confinement sufficiently well to enable us in our own studies, and at our own convenience, to observe the whole process of development. We may also develop more than one capsule in the same watch-glass, and thus see the contents of all amalgamate to form one mass, each entirely losing its individuality, and thus obtain a clear conception of how the whole sponge-mass, such as the one we have now before us, has been produced.

The Rev. H. H. HIGGINS then read the following note on a collection of Cirripedes, made by Mr. Charles Darwin, and now in the Free Public Museum:—

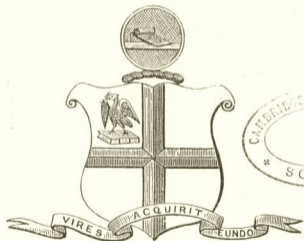
“ During my visit to London in June, 1880, on Museum

business, an opportunity was afforded me by Mr. Sowerby for the purchase of a large box containing a collection of *Balanidae* and *Lepadidae*. The specimens, which were without names, were wrapped in paper, and did not appear to have been unpacked for a considerable time. They had been in the possession of the late Mr. Taylor, whose conchological museum in the neighbourhood of Norwich is well known to have been very rich. In the course of unpacking the collection in the Liverpool Museum, the extraordinary number of little known forms, and their close agreement with the species described and figured in the monograph on the *Cirripedia* by Mr. Charles Darwin, Ray Society, 1854, convinced me that the collection must have been formed by Mr. Darwin himself. Accordingly, I wrote to him, and, in reply, received through his kindness a letter written by himself, which I now produce. Mr. Darwin states that, after having supplied the British Museum with a full series of all his species, having no further need of his duplicates, he parted with them to the late Mr. Sowerby, of London. Mr. Darwin very kindly expresses himself gratified that the collection should now be where it is appreciated. Evidence is wanting that the late Mr. Sowerby sold the collection to Mr. Taylor, but many similar transactions are known to have passed between them. The specimens are so numerous, and the correspondence so remarkable, that the internal evidence was quite satisfactory to myself before entering upon the enquiry. I have great pleasure in placing this interesting series of specimens before you: they are not considered suitable for constant public exhibition, but may be seen at the Museum by application to Mr. Moore, the curator. Many of the *Balani* are on corals, and might afford materials for the further illustration of Professor Semper's observations on the galls of corals."

The following communication was then read:—

PROCEEDINGS
OF THE
LITERARY AND PHILOSOPHICAL SOCIETY
OF
LIVERPOOL,
DURING THE
SEVENTIETH SESSION, 1880-81.

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