Specimens of the Asexual Generation.

Specimens of Blastozooids, or the "nurse-form" of *Doliolum*, were obtained at the following localities :—

(1.) April 2, 1874; Station 162, off East Moncœur Island, Bass Strait; surface; surf. temp. 63°·2; twenty specimens, varying in size from 5 mm. to 1·5 cm. in length and from 1 mm. to 4 mm. in breadth. The average breadth is 2 mm.

(2.) October 21, 1875; Station 288, South Pacific; lat. 40° 3′ 0″ S., long. 132° 58′ 0″ W.; surface; surf. temp. 54°·5; two specimens.

(3.) February 11, 1876; Station 318, South Atlantic; lat. 42° 32′ 0″ S., long. 56° 29′ 0″ W.; tow-net at trawl down to a depth of 2040 fathoms; bottom temp. 33°·7; thirty specimens.

(4.) Same place and date; tow-net at surface; surf. temp. 57°·5; five specimens.

(5.) April 11, 1876; Station 350, North Atlantic; surface; lat. 7° 33′ 0″ N., long. 15° 16′ 0″ W.; surf. temp. 84°; one specimen.

(6.) April 13, 1876; Station 352, North Atlantic; surface; lat. 10° 55′ 0″ N., long. 17° 46′ 0″ W.; surf. temp. 77°·7; one large and one small specimen (mounted as microscopic objects).

(7.) May 3, 1876; Station 353, North Atlantic; lat. 26° 21′ 0″ N., long. 33° 37′ 0″ W.; surf. temp. 70°·7; one specimen.

(8.) May 7, 1876; North Atlantic; lat. 34° 22′ 0″ N., long. 34° 23′ 0″ W.; surface, at night; surf. temp. 67°·5; six large specimens (in bad condition).

These Blastozooids are large, and have long narrow bodies provided with nine wide muscle bands (see Pl. III. fig. 9) and a dorsal outgrowth, which in some specimens is very large.

The nerve ganglion is placed between the fourth and the fifth muscle bands. The first and ninth bands are much narrower than the rest, and are evidently the sphincter muscles of the branchial and atrial apertures. The seventh and eighth muscle bands are interrupted in the mid-dorsal line, and their free ends are diverted posteriorly to enter the dorsal outgrowth which springs at that point from the body wall (Pl. III. fig. 9, *s.*). The muscle bands of these specimens are very much wider than those of the Blastozooid of *Doliolum müilleri* as figured by Keferstein and Ehlers,[1] and I am unable to refer them to any known species. Possibly they belong to one of the new species of which the sexual forms have been described above; or they may not all belong to the same sexual form. It is impossible to refer them to their species until the life-histories have been worked out on living material.

[1] Zoologische Beiträge, Pl. 10, fig. 1.