

were present or not. Although on the side view the form, as figured by Grunow, differs from mine, still, in most respects, the form under consideration corresponds with Grunow's description, "Ueber einige neue und ungenügend bekannte Arten und Gattungen von Diatomaceen," 'Verhandl. der K. K. Zool. Bot. Gesel. Wien.,' Band xiii, 1863, p. 151, Taf. v, fig. 14. In Grunow's figure the outline sufficiently resembles that of mine, Pl. VIII, fig. 12, but the median line is straight; in mine it is doubly arched. The striæ are of uniform length throughout, slightly radiate, not reaching the median line, but forming a tolerably broad longitudinal space in the middle of the valve. In my form the striæ run up to the median line, except at the middle, where they form a tolerably large free space round the central nodule. They are parallel, rounded off towards the margin.

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*On CLAVOPORA HYSTRICIS—a NEW POLYZOON belonging to the FAMILY HALCYONELLEÆ.* By G. BUSK, F.R.S., F.R.M.S. With Pl. IX.

THE curious form here described was procured during the expedition of the Porcupine in the Mediterranean from deep water off the African coast, and was kindly submitted to me for examination by Dr. Carpenter.

From the inspection of a single specimen it is, of course, difficult to determine whether or not it represents the mature growth of the species, or may not be regarded as a young and growing bud. I am, however, inclined to think that it is full grown, from the circumstance that the substance appears to be completely differentiated into definite polypides and tissues. Amongst the latter the muscular seems to me to present such a remarkable peculiarity that even on that account alone it is worth while to place a brief notice of the animal on record.

The growth is about one eighth of an inch in height, and in the form of a club, with an expanded subglobular head, and it appears to have been affixed to some foreign base by short radical fibres. The stem or peduncle is constituted of a cellular tissue, not unlike that of plants. In each cell may be observed several fibres crossing it for the most part in a

direction parallel with the longitudinal axis of the stem. These fibres, in many, if not in most, of which an elongated nucleus may be perceived at about the middle of its length, are attached at either end by a slight expansion. Here and there one may be perceived bifurcated, but for the most part they are undivided. In general character they bear so close a resemblance to one form of involuntary muscular tissue that it can scarcely, perhaps, be doubted that they are contractile in function, and, consequently, that by their agency the *Clavopora* is capable of bending its stem in various directions.

The club-shaped upper extremity, as well as can be made out in the spirit specimen, consists of cells similar to those of which the peduncle is constituted, and containing like them the same peculiar contractile fibres. The cells, however, in this portion of the polyzoary are more expanded, and in several of them (fig. 3 a) may be distinctly perceived the body of a polypide in the contracted condition, and proceeding from it elongated, slender, nucleated fibres, representing the retractor muscles. I have been unable to determine with any certainty the number of tentacles with which the polypide is furnished, but should estimate it at from twelve to fourteen. The outer wall of the cellular space or zoecium presents an infundibuliform depression, marking the point at which the polypide was protruded.

From the characters above given I have little hesitation in referring the genus to the family of the *Halcyonellæ*, with the following diagnosis :

Class.—POLYZOA.

Order.—CTENOSTOMATA.

Fam.—*Halcyonellæ*.

Gen.—*Clavopora*, Bk.

Zoarium, simple claviform, subcapitulate, composed of distinct cells, traversed by nucleated (probably contractile) fibres.

Sp.—*C. Hystricis*. The only species.

Hab.—Mediterranean ; Carpenter.

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