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XXIV.—On a supposed Pterobranchiate Polyzoan from Canada

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this; at least I have seen specimens, apparently belonging to *G. annulatum*, in which the hand is slightly granulated above.

Goniosoma anisodon, De Haan.

A female specimen laden with ova is in the collection, also without definite locality.

[To be continued.]

XXIV.—*On a supposed Pterobranchiate Polyzoon from Canada.* By the Rev. THOMAS HINCKS, B.A., F.R.S.

SOME years since, I received from my father, the late Professor Hincks, of University College, Toronto, a short notice of a Polyzoon which he had obtained in the neighbourhood of that city, but was unable to identify with any described form. Some of its characters were so remarkable and, at that time, so entirely without parallel, that I could not venture (in the absence of specimens) to publish an account of it or to give any opinion upon it. He had no further opportunity of investigating its history; and, so far as I know, it has not been noticed since by any other observer.

Later discoveries, however, have supplied a clue to the interpretation of this aberrant type, in some particulars at least; and reading my father's brief and popular diagnosis by their light, we may find in it the indication of a form which, though unique in some respects, has now its allies and its definite place in our system.

Under these circumstances I think it may be interesting and useful to publish some account of it (however imperfect), accompanied by my father's rough sketch of the polypide: it may stimulate those who have the opportunity to search for it, and possibly lead to its rediscovery.

The description given of it, so far as it goes, may, I have no doubt, be relied upon. Professor Hincks was not, indeed, in any special way a student of the Polyzoa; but his knowledge of animal forms was extensive and accurate, and he was a practised and careful observer.

In a letter bearing date December 20, 1868, he writes:—"I want your assistance in respect to a freshwater Polyzoon found in this neighbourhood, which I must attempt to describe to you. It was found attached to a sunken boat in the river Humber, which falls into Lake Ontario two or three miles west of Toronto.

"The common substance of the colony, resembling sarcode, is in masses of some extent, $1\frac{1}{2}$ inch deep, and has the little animals protruded all over it. *The ciliated tentacles, about 100 in number, in four rows on two finger-like extensions, the distinct anal canal, and the nervous ganglion leave no doubt of the creature being a Polyzoon of the order Hippocreptia.* The ova (statoblasts) are also abundant, with their marginal anchor-like hooklets; but it does not seem to me to agree with any of the genera which I can find described; much less can I determine the species. *The two branches of the lophophore do not form a horseshoe figure, but are more entirely separated, thus* (fig. 1). I add a faithful though rude sketch of the Polyzoon (fig. 2), seen in one direction; it does not show the flexure of the alimentary canal, but it shows the lophophore well; and if you plant the animal as one of a multitude on a gelatinous or sarcode mass (polyzoarium) common to them all, you will have a right idea of its life."

Fig. 1.

Fig. 2*.

The remarkable feature of this Canadian Polyzoon is the tentacular corona, the peculiarity of which is insisted on in the description, and clearly shown in the accompanying sketch. The tentacles, instead of being disposed in a horseshoe figure and forming a continuous series, as in the ordinary freshwater (or Phylactolamatus) species, are borne on two distinct erect lobes, which are separated at the base. They constitute, therefore, *two* series, which are ranged along the edge of the finger-like processes. The structure of the corona, in fact, exactly resembles that which we find in the genus *Rhabdopleura*, Allman, and which is characteristic of the Pterobranchiate group of Polyzoa. In what other points the Canadian species may differ from the typical form of the Phylactolamata, or how far it may agree with it in general character, we have not at present the means of judging; but we have, I think, sufficient ground for believing that there exists in the fresh waters of Canada a Pterobranchiate polyzoon which is separated from

* This figure, though not a facsimile of the original drawing, accurately represents its essential points.

Rhabdopleura by differences probably ordinal in value, and which in some of its characters and in general appearance resembles the ordinary *Phylactolæmata*.

It is unnecessary to insist on the interest that must attach to such a form should it exist. I trust that this notice may meet the eye of some one who may have the opportunity of searching the locality from which my father's specimen was obtained, and to whom the point to be solved may appear of sufficient importance to warrant a thorough investigation.

XXV.—*The Sponge-fauna of Norway ; a Report on the Rev. A. M. Norman's Collection of Sponges from the Norwegian Coast.* By W. J. SOLLAS, M.A., F.G.S., &c.

[Continued from p. 144.]

[Plates X., XI., XII.]

Order TETRACTINELLIDA, Marshall.

Tribe **PACHYTRAGIDA**, Carter.

Group *GEODINA*, Carter (Family *Geodiidae*, O. Schmidt).

Genus 1. *GEODIA*, Lmk. Type *G. gibberosa*, Lmk.

(*Pyxitis*, Sdt.)

2. *CYDONIUM*, Fleming. Type *C. zetlandicum*, Johnst.

(*Geodia*, auct.)

3. *PACHYMATISMA*, Bwk. Type *P. Johnstoni*, Bwk.

4. *CAMINUS*, Sdt. Type *C. Vulcani*, Sdt.

5. *PLACOSPONGIA*, Gray. Type *P. melobesioides*, Gray.

The sponges belonging to the group *Geodina* have been known to naturalists for nearly two centuries, though for the greater part of this time they were lost in that chaotic assemblage which formed the genus *Alcyonium*. It was in 1815 that Lamarck* defined, under the name of *Geodia*, the first genus of the *Geodine* group; but so powerful a hold had the imaginary *Alcyonian* character of these sponges upon the minds of the zoologists of those days, that even after the generic distinctness of *Geodia* was perceived it was still retained,

* Mém. du Mus. d'Hist. Nat. i, p. 333, 1815.