

stomatous types existed in Palæozoic times;"<sup>1</sup> although in the Mesozoic and Tertiary strata fossil CHEILOSTOMATA are numerous. The palæontological evidence as to the antiquity of the CYCLOSTOMATA is fully confirmed and strengthened by the embryological researches that have recently been so carefully and accurately made by various authors; for instance M. Barrois<sup>2</sup> says that the study of the structure of the larva and of the formation of the cell coincides with palæontology in furnishing us with perfectly concordant results, which are conclusive as to the antiquity of the CYCLOSTOMATA. Many of the species even have a wide distribution in time, for out of the thirty-three included in this collection, fourteen have already been identified in the fossil state.

No fossil forms belonging either to the CTENOSTOMATA or to the Entoproctan Polyzoa have hitherto been identified, but Mr. Vine has thrown out a hint, in a paper on *Ascodictyon*,<sup>3</sup> that perhaps *Ascodictyon filiforme* may be a primitive representative of the stoloniferous Vesiculariadae, or possibly of the Entoprocta. That this latter order is of great antiquity is also confirmed by its embryonic history, for the same eminent authority, above quoted, M. Barrois,<sup>4</sup> after the most careful and elaborate comparison of the larvæ of the various Ectoproctan and Entoproctan groups, comes to the conclusion that "the larvæ of Entoprocta represent the primitive type from which all the others are derived."

#### A.—NORTH ATLANTIC REGION.

STATION 75, lat. 38° 38' N., long. 28° 28' 30" W.; 450 fathoms; volcanic mud.

*Idmonea milneana*, C.

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*Idmonea irregularis*.

CAPE VERDE ISLANDS, 100 to 120 fathoms.

*Hornera frondiculata*.

STATION 36, lat. 32° 7' 25" N., long. 65° 4' W., off Bermuda; 30 fathoms; coral.

*Crisia denticulata*, var. *patagonica*.

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*Amathia lendigera*.

CAPE VERDE ISLANDS, 10 fathoms.

*Crisia conferta*, D.

STATION 109, 0° 55' 38" N., long. 29° 22' 35" W., off St. Paul's Rocks; shallow water.

*Crisia denticulata*, B, D.

<sup>1</sup> Vine, *Quart. Journ. Geol. Soc.*, vol. xl. p. 332, 1884.

<sup>2</sup> Barrois, *Ann. and Mag. Nat. Hist.*, ser. 5, vol. x. p. 391 (footnote).

<sup>3</sup> Vine, *Ann. and Mag. Nat. Hist.*, ser. 5, vol. xiv. p. 87.

<sup>4</sup> Barrois, *loc. cit.*, p. 401.