following note about *Holopus*, which, unfortunately, was not obtained in any of the Challenger dredgings:—

"Holopus is one of the most curious of the recent Crinoids, and appears to be sessile throughout life. The basals and radials enclose a tubular chamber, in which the viscera are contained; and this is attached directly to the rock on which it rests by a spreading calcareous expansion, instead of being borne on a stem, as most other Crinoids are, for the The central mouth is protected by five triangular oral plates, whole or part of their life. as in Hyocrinus and Thaumatocrinus, and surrounded by five massive arms, which are articulated in pairs to five axillary plates that rest on the edge of the cup. Only half a dozen specimens are known, most of which have been brought up by fishermen's lines in the neighbourhood of Barbados. One very young individual was obtained by the U.S. Coast Survey steamer 'Blake,' in 100 fathoms, off Bahia Honda, and a fragment of a larger one in 110 fathoms off Montserrat. The genus is not known to occur out of the Caribbean Sea, and was not dredged by the Challenger. It is closely allied to a remarkable fossil known as Cyathidium, which occurs in the upper Chalk of Faxöe in Zeeland, and also to some singular sessile Crinoids characteristic of the Middle Lias in central and western Europe. Certain Palæocrinoids and Cystideans also seem to have been sessile like *Holopus*, and not stalked like most of the Pelmatozoa."

## BERMUDA TO HALIFAX, NOVA SCOTIA.

The vessel left the neighbourhood of Bermuda on the 21st April, and at first a course was shaped towards New York. After crossing the Gulf Stream and obtaining soundings and temperatures to the edge of the 100 fathom bank off the American coast (see Sheet 9), the ship was steered to the northeastward for Halifax, Nova Scotia, arriving there on the 9th May. The usual dirty weather was experienced on the passage towards New York: occasional strong winds, amounting sometimes to a gale, with light breezes intervening, and after crossing the Gulf Stream thick fogs, with rain, until close in to the land.

On the 28th April the sounding line parted as it was being hove in, but later on the dredge brought up a specimen of the bottom. On the 29th the sea was so short and heavy that in keeping the ship head to wind, in order that a sounding might be obtained, the rudder took charge and carried away the wheel ropes, so that the attempt had to be abandoned for that day.

On the 30th April at 2 P.M. the temperature of the surface water, which, since leaving Bermuda, had varied between 65°0 and 70°0, rose to 71°5, and continued at a temperature of from 71°0 to 73°0 until 6 A.M. on the 1st May, when it rose to 75°0. At that hour