

The scientific staff consisted of Dr. Carpenter, Mr. P. Herbert Carpenter (who had gone through his apprenticeship in making analyses under unfavourable circumstances in the former cruise with Mr. Hunter, and was now prepared to undertake this task on his own account), and myself; and our intention was, in accordance with our original programme, to go carefully over again the region which we had examined in the 'Lightning,' to test with better appliances and more trustworthy instruments the singular distribution of temperatures in the 'warm' and 'cold' areas, to map out as accurately as we could the paths of the warm and cold currents, and to determine the influences of these currents upon the character and distribution of animal life.

We left Stornoway on the afternoon of Sunday the 15th of August, and made straight for the scene of our most successful 'warm area' dredging of the year before. We were equally successful on this occasion, and procured several good specimens of *Holtenia*, and a beautiful series of *Hyalonema*, ranging from 2 mm. in length up to 30 and 40 centimetres, and thus giving all the stages in the development of the wonderful 'glass rope,' and proving to demonstration its relation to the body of the sponge—Dr. J. E. Gray's so-called *Carteria*.

The most interesting novelty however which rewarded us was a very fine Echinid belonging to the Cidaridæ to which I had given the name *Porocidaris purpurata* (Fig. 11). I believe I am justified in referring this handsome species to the genus *Porocidaris*, although in it the special character is absent on which that genus was founded by Desor. Some