

STATION 157.

occur but rarely, often two are found closely apposed, but not uncommonly three, four, or even more are so placed. It is, perhaps, with *Chætoceros remotum*, Cleve and Grunow [= *C. janischianum*, Castracane], the most characteristic species found on the surface.

The Chætocerotidæ and Rhizosoleniæ are abundantly represented in the surface waters, but they are only represented by the terminal calyptræ of the latter in the bottom ooze. Most of the delicately curved, though often large, forms of *Corethron*, and the singular cylindrical *Dactyliosolen*, have only been found in surface gatherings, whilst the remarkable *Trachysphenia australis*, Petit, var. *antarctica* (Schwarz) [= *Fragilaria antarctica*, Castracane], which abounds in the ooze, is much less common in the surface gatherings. Frustules of *Coscinodisci* and *Actinocykli* are also much less numerous in the surface gatherings than in the ooze at the bottom, but nearly all the species are present in the superficial waters found in the ooze.

The contents of the alimentary canals of several of the Echinoderms and Annelids were examined with the view of ascertaining whether or not a predilection was exhibited by the animals for any particular species of Diatoms; it was found, however, that they made use of the ooze as a whole, in all probability taking in the immediate surface layer containing specimens recently fallen from the surface, which, doubtless, still contained some organic matter. The tubes of the Annelids, and the test of the Foraminifera *Reophax nodulosa*, contained many of the large *Coscinodisci*, which would appear to have been to a greater extent selected than the others in the deposit.

The form, which Count Castracane has indicated as "*Fragilaria?* an *Terebraria?* sp.,"¹ may be regarded as the southern representative of *Fragilaria oceanica*, Cleve, from the Arctic Ocean, with which it shows in the general arrangement and character of the frustules a considerable amount of agreement. Among the Diatoms observed at this Station the following have been also recorded in the Arctic zone, a few of the species being almost cosmopolitan:—

<i>Navicula aspera</i> , Ehrenberg.	<i>Coscinodiscus subtilis</i> , Ehrenberg, var. <i>glacialis</i> , Grunow.
<i>Triceratium arcticum</i> , Brightwell.	„ <i>oculus-iridis</i> , Ehrenberg.
<i>Rhizosolenia setigera</i> , Brightwell.	„ <i>centralis</i> , Ehrenberg.
„ <i>styliformis</i> , Brightwell.	„ <i>normanni</i> , Gregory.
<i>Chætoceros decipiens</i> , Cleve.	„ <i>kutzingii</i> , A. Schmidt.
„ <i>atlanticum</i> , Cleve.	„ <i>eccentricus</i> , Ehrenberg.
<i>Coscinodiscus decrescens</i> , var. <i>polaris</i> , Grunow.	„ <i>lineatus</i> , Ehrenberg.
„ „ var. <i>repleta</i> , Grunow.	

Among the peculiarly Antarctic species found at this Station may be noted the following:—

<i>Pleurosigma antarcticum</i> , Grunow.	<i>Trachysphenia australis</i> , Petit, var. <i>antarctica</i> (Schwarz) [= <i>Fragilaria antarctica</i> , Castracane].
<i>Amphiprora antarctica</i> , Grunow.	

¹ Bot. Chall. Exp., part iv. p. 47, pl. xxv. fig. 1.