VI

The plankton of the cold water on the Newfoundland Bank The Newwas very poor in species, *Ceratium arcticum* and *Peridinium* foundland *parallelum* being the commonest forms. There were, besides, (Stations 70a few diatoms, such as *Chætoceras atlanticum*, *C. criophilum*, ^{79, 30th June-Ioth July.) and *Rhizosolenia semispina*, all well-known species in the Norwegian Sea. In the harbour of St. John's, on the other hand, we found the plankton quite abundant, consisting of northern forms, both neritic and oceanic : the species of *Chætoceras* (decipiens, debile) predominated.}

Our northern section across the Atlantic contributed largely The northern to our knowledge of the distribution of species, since it showed Atlantic section.

(Stations 81-92, 12th-24th July.) 00 2 63

FIG. 249. - CHÆTOCERAS PERPUSILLUM (CP.).

us that a great many tropical forms are still to be found in lat. $45-50^{\circ}$ N. These particular waters had been very little studied previously, and it was extremely interesting to follow all this Atlantic flora on its passive journey northwards. On the whole, its character remains unchanged, though of course the number of species becomes considerably reduced. During the first half of the section, on the western side of the mid-Atlantic ridge, there were a few small degenerate neritic diatoms belonging to the species which occur in the Atlantic water-masses south of Iceland : namely *Chætoceras schüttii*, *C. laciniosum*, and others. It seems unquestionable that they are derived from the American coast, and follow the current as far as Iceland. At Station 85 I also came across a remarkable little *Chætoceras*, that Cleve found in 1897 in the Skagerrack and named *Chætoceras perpusillum*

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