material from representative stations, and upon observations of the living organisms on board ship.

The coast banks of North Europe. (Stations 1-10, 9th-20th April.)

All our first stations about the middle of April, with the exception of Stations 1 and 5, that were close in to land and had a less abundant flora, had an extremely plentiful diatom-plankton, such as we only get in the waters of North Europe during the spring. Our experiments with the closing-net, which, thanks to the fine calm weather, were made with the utmost exactitude at Stations 3 and 10, showed that by far the larger number were to be found between the surface and a depth of 100 metres, though even at a depth of 100 to 150 metres there were still quite considerable quantities. The character of the flora was mainly northern, especially in the case of the oceanic species. Among the principal forms we got *Rhizosolenia hebetata* forma *semispina* and *Nitzschia seriata*. Neritic diatoms were also numerous, and some had resting-spores. They are of a distinctly southern character compared with the species which occur, for instance, along the coasts of the North Sea; further, they belong to a local flora, which does not seem to have any direct connection with the North Sea. On the whole, these neritic diatoms are so small in their dimensions that they show signs of an "oceanic degeneration."

Besides them, there was an addition of subtropical species, especially in the deeper layers, and especially at the southernmost stations, Nos. 9 and 10, consisting of both diatoms and peridineæ, not in any great quantity, but still occurring regularly. These are the northernmost outposts of the Desmoplankton, including such species as *Planktoniella sol*, *Ceratium gibberum*, *Dinophysis schüttii*, and *D. uracantha*.[1]

The coast banks of South Europe and North Africa. (Stations 11-41, 21st April-22nd May.)

Throughout the stretch of sea along the coasts of South Europe and North Africa our investigations were carried on comparatively close to the coast, and the plankton was generally found to be poor both in quality and quantity as soon as we stood at all far out from the land. It was then composed

[1] As representing this area, I here give a list of species from Station 7, depth 0-20 metres :—
Oceanic diatoms: *Chætoceras decipiens*, *C. densum*, *C. convolutum*, *C. peruvianum*, *C. atlanticum*, *C. dichæta*, *Coscinodiscus centralis*, *C. marginatus*, *Euodia cuneiformis*, *Thalassiosira subtilis*, *Asteromphalus heptactis*, *Rhizosolenia alata*, *R. semispina*, *R. stolterfothii*, *R. shrubsolei*, *R. acuminata*, *R. amputata*, *Dactyliosolen antarcticus*, *Nitzschia seriata*, *Thalassiothrix longissima*.
Neritic diatoms: *Chætoceras diadema*, *C. schüttii*, *C. contortum*, *C. coronatum*, *C. scolopendra*, *Bacteriastrum varians*, *Eucampia zodiacus*, *Thalassiothrix nitzschioides*, *Cerataulina bergonii*, *Dactyliosolen tenuis*, *Thalassiosira decipiens*, *T. excentrica*, *T. nordenskioldii*.
Peridineæ: *Ceratium tripos* forma *atlantica*, *C. lamellicorne* forma *compressa*, *C. azoricum*, *C. furca*, *C. arietinum*, and several others.
Coccolithophoridæ: *Distephanus speculum*, *Coccolithophora pelagica*.