

It seems probable that the distribution of marine animals is determined by the extremes of temperature rather than by the means. The mean winter temperature of the surface and of moderate depths off the north coast of Norway is about 2° C., and the extreme about 0° C.; and on the coast of Greenland the mean sinks to -1° C., and the extreme to -3° C.

The temperature of the trough between Scotland and Færoe at the depth of 500 fathoms is from 0° to -1° C., and we find in that trough, along with many undescribed forms which are special to very deep water, every one of the echinoderms hitherto found on the coast of Scandinavia and Greenland, with the single exception, I believe, of *Ophioglypha stüwitzii*, a shallow-water Greenland form among the ophiurids, and of one or two holothurids which have as yet evaded us.

The temperature of the telegraphic plateau at 1,000 to 2,000 fathoms is apparently usually from 3° to 2° C., and at 2,500 fathoms in the Bay of Biscay it is 2° C. From 800 to 2,000 fathoms all along the west coasts of Scotland, Ireland, and France, we have dredged Scandinavian echinoderms in abundance, and from the deep water as far south as the coast of Portugal I have received examples of some of the best marked northern forms, such as *Echinus elegans*, D. and K.; *Toxopneustes drobachiensis*, O. F. MÜLLER; *Brissopsis lyrifera*, FORBES; *Tripylus fragilis*, D. and K.; the magnificent *Brisinga coronata*, G. O. SARS (Fig. 7), and *B. endecacnemos*, ABSJÖRNSEN; *Pteraster militaris*, M. and T.; *Ophiacantha spinulosa*, M. and T.; *Ophiecten sericeum*, FORBES; *Ophioglypha sarsii*, LÜTK.; *Asteronyx lovéni*, M. and T.; and *Astero-*