

surrounding mud, and we can only conclude that the bottom here must be scoured by the action of currents.

Some very interesting discoveries were made by the "Michael Sars" in 1904 in a southern part of the depression between lat. 58° and 59° N., at a depth of 292 metres, the temperature being 5.83° C., where the young-fish trawl brought up a quantity of amphipods, cumacea, *Euchaeta norvegica*, etc. Among these forms there were two that were particularly noticeable, namely *Epimeria loricata*, of which there were many specimens, full-grown as well as young, and *Acanthozone cuspidata*, of which there was one young specimen. Both these species were hitherto only known to exist in more northern latitudes, the former not having been met with to the south of the Malangen fjord, and the latter not south of the Trondhjem fjord, where several other arctic forms have their southern limit.¹

The faunal conditions on hard bottom and on sand at the upper part of the Norwegian depression, from about 100 metres down to considerable depths, are very like those in the Norwegian fjords, but differ in many respects from those of the central parts of the North Sea. The sponges resemble those taken on hard bottom in the deep parts of the fjords. Among the hydroids there was *Sertularella gayi*, a form that is absent from the central portion of the North Sea, but is one of the commonest deep-water hydroids of the fjords. *Crangon allmanni* and *Pandalus annulicornis* again were represented only by young individuals in the central portion, whereas at the edge of the depression our appliances brought up numbers of full-grown specimens. Other forms that we failed to find in the central area, but which occurred on the edge of the Norwegian depression, were: *Hippasterias plana*, *Solaster endeca* and *S. papposus*, *Antedon* sp., *Psolus squamatus*, *Nymphon strömi* (of which we secured only one solitary specimen in the central portion, in spite of repeated trawlings and dredgings, though quite common on the edge of the depression), *Crania anomala* (common), *Porella* (characteristic of hard bottom in the fjords), as well as one or two other bryozoans, *Scaphander punctostriatus*,

¹ The following are a few of the other forms taken at the same time, showing that the boreal fjord and plateau forms occurred together; several of them are met with in the arctic region, and may perhaps be of arctic origin:—Amphipods: *Epimeria cornigera*, *Pardalisca abyssii* (in quantities), *Lilljeborgia fissicornis*, *Rhachotropis* (two or three species). Cumacea: *Eudorella emarginata*, *Campylaspis verrucosa* and *C. horrida*, *Hemilamprops cristata*. Isopods: *Apscudes spinosus*, *Munnopsis typica*, *Rocinela dammoniensis*. Decapod crustaceans: *Pontophilus norvegicus*, *Pandalus bonnierii*, *Hippolyte polaris*, *Bythocaris simplicirostris*, *Caridion gordonii*. Molluscs: *Rossia* sp., *Torrellia vestita*, *Portlandia tenuis*, *Pecten hoskynsi*, *Cardium minimum*. Echinoderms: *Ophioscolex glacialis*, *Antedon tenella*. Worms: *Filigrana implexa* (in quantities).