(2) *The Fjords.*—We have seen that the fauna of the littoral zone among the skerries, especially in the tidal area and laminaria belt, is abundant both in species and individuals. There is a diminution, however, as we penetrate farther into the fjords. In the tidal area of the inner fjords, and at greater depths also, we miss the limpet and the purple snail, while the hydroids to be found on the fucus in the skerries become less and less abundant, until even *Dynamena pumila* disappears.[1] This change in the fauna is mainly due to the decrease in salinity, since the surface of the inner fjords, for a great part of the year at any rate, is occupied by a layer of less saline water in which these forms cannot thrive. Far up the fjords, however, in the tidal area, we get the barnacle, the mussel *Mytilus*, and the black periwinkle, which seem to be less affected by a difference in salinity, though even they require a certain percentage of salt, since they disappear, for instance, from the tidal area in the more enclosed parts of the fjords, where, owing to the great accession of fresh water, the salinity is particularly low. The mussel and black periwinkle, it is true, may sometimes occur even here also, but only in fairly deep water. We also find the horse mussel in the fjords. The great thickets of *Laminaria hyperborea*, which are so characteristic of the skerries, are absent from the inner fjords, and so are most of the forms associated with them. In their place, however, we get *Laminaria digitata* and *L. saccharina*, but in comparatively small quantities. Littoral zone.

The difference between the inner fjords and the skerries is not so marked when we descend to greater depths, since a good many forms are equally at home in both. Some of the littoral fauna, like the lancelet, appear to avoid the fjords altogether.[2] Two forms, which rarely ascend far up the fjords of West Norway, are the lobster and the common edible crab; but the common shore crab (*Carcinus mœnas*) penetrates to their inmost recesses. The big black sea-slug (*Cucumaria frondosa*) is another form which abounds among the skerries and in the outer parts of the fjords, but very exceptionally penetrates far in. No doubt their absence is due to the feeble currents, or the greater or less accessions of fresh water prevailing in the fjords—local conditions that are bound to affect the distribution of the fauna.

The distribution of the two sea-urchins *Echinus esculentus*

[1] It is interesting to note that *Dynamena pumila* is also found in the estuary of the Elbe as far up as Cuxhaven.

[2] The reason for this may perhaps be that the lancelet requires pure sand or shell-sand to live in, while the bottom of the fjords generally consists of mud.