north of Denmark Strait, Spitsbergen, Franz-Josef Land, Novaya Zemlya, the coast between the White Sea and the Kara Sea, as well as the plateau of Jan Mayen and the deep central basin of the Norwegian Sea.

Boreo-arctic region of the Norwegian Sea.

In addition to these purely boreal and purely arctic areas there are transitional areas, designated *boreo-arctic*, which may be found wherever boreal and arctic water-masses meet Such areas occupy more or less extensive tracts, and exercise a distinct influence upon the distribution of the fauna. The temperature is not so high as in the boreal region, except perhaps at the surface, varying between 0° C. and 3° or 4° C., though in the shallower parts a far higher temperature is found in summer, due to the heat of the sun, and as a result there are certain boreal littoral forms that occur also in the boreo-arctic region.

The following are boreo-arctic areas: the south-western portion of the Barents Sea, from the East Finmark and Murman coasts to the White Sea, where a branch of the Gulf Stream, flowing eastwards, is gradually blended with arctic water; the north and east coasts of Iceland, where branches of the Gulf Stream unite with the East Iceland Polar Stream[1]; the Iceland-Faroe ridge, where the East Iceland Polar Stream meets the Gulf Stream; the Wyville Thomson Ridge, over which the Gulf Stream passes into the Norwegian Sea, where a mixture of the two waters undoubtedly takes place, but this boreo-arctic area is of small importance compared to the others; and the continental slope on the eastern side of the Norwegian Sea, where there is a narrow area of mixture between Atlantic water and arctic water, resulting in temperatures slightly higher than 0° C. A weak branch of the Gulf Stream flows along the west coast of Spitsbergen, giving rise to a very limited boreo-arctic belt, though, generally speaking, the west side of Spitsbergen must be considered purely arctic. The shallower parts of the coastal waters, as well as the inner portions of the fjords, from Lofoten to the North Cape, are boreo-arctic.

North Atlantic.

The topographical conditions in the North Atlantic are much like those of the Norwegian Sea, but the hydrographical conditions are dissimilar. On the eastern side the coast banks of both Europe and North-West Africa are bathed by much warmer water than those of corresponding parts of the Nor-

[1] I ought to state, however, that owing to the influence of the East Iceland Polar Stream the north-eastern coast must perhaps be considered a purely arctic area.