

the mean depth of the Atlantic is a little over 2000 fathoms. An elevated ridge rising to an average height of about 1900 fathoms below the surface traverses the basins of the North and South Atlantic in a meridional direction from Cape Farewell, probably as far south at least as Gough Island, following roughly the outlines of the coasts of the Old and the New Worlds.

A branch of this elevation strikes off to the south-westward about the parallel of 10° N., and connects it with the coast of South America at Cape Orange; and another branch crosses the eastern trough, joining the continent of Africa probably about the parallel of 25° S. The Atlantic Ocean is thus divided by the axial ridge and its branches into three basins: an eastern, which extends from the West of Ireland nearly to the Cape of Good Hope, with an average depth along the middle line of 2500 fathoms; a north-western basin, occupying the great eastern bight of the American continent, with an average depth of 3000 fathoms; and a gulf running up the coast of South America as far as Cape Orange, and open to the southward, with a mean depth of 3000 fathoms.

The Nature of the Bottom.—Except in the neighborhood of coasts, where the deposit at the bottom consists chiefly of the débris washed down by rivers, or produced by the disintegration of the rocks of the coast-line, the bed of the Atlantic, at depths between 400 and 2000 fathoms, is covered with the now well-known calcareous deposit, the globigerina ooze, consisting, as has been already described (vol. i., p. 198), to a great extent of the shells, more or less broken and decomposed, of pelagic foraminifera. In the Atlantic the species producing the ooze are chiefly referable to the genera *Globigerina*, *Orbulina*, *Pulvinulina*, *Pullenia*, and *Sphæroidina*, the two latter in smaller proportions.

One very beautiful form occurs at the bottom, sparingly on account of the extreme tenuity of its shell. *Hastigerina Mur-*