coast of North America and the shoal-water extending across to Greenland, to the east by the median ridge, and to the south by the spur of the ridge joining the coast of South America at Cape Orange; and the south-western basin bounded to the north by this spur, to the west by the coast of South America, to the east by the median ridge, and to the south entirely open to the Antarctic Sea. In all our serial soundings in the eastern and the north-western basins, the temperature slowly fell to a depth of about 2000 fathoms, and from that depth it remained nearly uniform to the bottom, the difference in the readings beyond 2000 fathoms being so slight as to be well within the limits of error of observation with Six's thermometers, but, on the whole, showing a tendency to sink, or, at all events, showing no tendency to rise on the correction for pressure being applied, which they ought to have done had the temperature been absolutely the same. The bottom temperatures and the recorded temperatures below 2000 fathoms were slightly, but constantly, lower in the north-western than they were in the eastern basin, in the former averaging about 1°·6 C., and in the latter a little under 1°·9 C.

In the south-western basin the vertical distribution of temperature is different, and this difference appears to give the key to the whole question of the distribution of temperature at great depths in the Atlantic. On our return voyage, in February, 1876, four observing stations, numbered on Plates XXXIV. and XXXV. from CCCXVII. to CCCXX., were established. Two of these were in comparatively shallow water near the edge of, but still upon, the plateau which extends from the coast of South America to a distance of nearly 400 miles, and includes the Falkland Islands; the two remaining soundings, CCCXVIII. and CCCXIX., were well beyond the cliff of the plateau at depths greater than 2000 fathoms. All these soundings, the two deep ones particularly, indicate the presence of a great underlying mass of cold water, the isothermobath of 2° C.