continuous with the general basin of the North Atlantic.

The temperature of this ocean valley was investigated with great care during the first and second cruises of the 'Porcupine' in 1869, and the results were so very uniform throughout the area that it will be needless to describe in detail the slight differences in different localities. These differences, in fact, only affected the surface layer of the water, and depended merely upon differences of latitude. The temperatures in deep water may be said to have been practically the same everywhere. The first chain of soundings, taken by Captain Calver during the first cruise under the scientific direction of Mr. Gwyn Jeffreys, was between Lough Swilly and Rockall. The greatest depth, 1,380 fathoms, is in the middle of the channel, and a sounding at that depth, lat. 56° 24′ N., long. 11° 49′ W., gave a bottom temperature of 2°·8 C. A depth of 630 fathoms, No. 23, a little to the south of Rockall, gave a temperature of 6°·4 C., almost exactly the same as the temperature of a like depth in the warm area off the entrance of the Færoe Channel; and a temperature at 500 fathoms, one of a series taken at Station 21 with a bottom temperature at 1,476 fathoms of 2°·7 C., was 8°·5 C., rather less than a degree higher than the temperature at a corresponding depth at Station 87. At Station 21 the temperature was taken at every 250 fathoms.

Surface	13°·5 C.
250 fathoms	9 · 0
500 „	8 · 5
750 „	5 · 8