

125 fathoms.....	13°·8 C.	300 fathoms.....	8°·2 C.
150 " .....	13·3	350 " .....	7·2
175 " .....	12·6	400 " .....	—
200 " .....	11·1	500 " .....	5·75
225 " .....	10·1	550 " .....	5·3
250 " .....	9·2	600 " .....	4·25

The result shows that the Gulf-stream, in its restricted sense—that is to say, the mass of warm water which issues from the Strait of Florida and courses in a north-easterly direction at a little distance from the coast of North America—was, early in May, 1873, at the point where we crossed it and made our observations, about 60 miles in width, 100 fathoms deep, and its rate three knots an hour. I make the statement thus guardedly, because descriptions of the stream are somewhat discrepant, and I have no doubt that it varies at a considerable extent both in rapidity and volume, influenced by the season and by different meteorological conditions. It seems evident, as has been already observed by the American Coast Surveyors, that the Labrador return current, which is banked up against the American coast within the Gulf-stream, passes also under it to a certain depth. Comparing Fig. 91, a diagram constructed by combining the series of temperatures at Stations XLI. and XLII. just before entering the Gulf-stream, with Fig. 92, constructed from the soundings near the centre of the stream, we find that at a depth of 100 fathoms the temperature is nearly the same in both—in the former 18°·1 C., and in the latter 18°·3 C. At 200 fathoms, the temperatures are respectively 17°·4 C. and 11°·1 C., and the difference between them 6°·3 C.; at 300 fathoms, the temperatures are 17° C. and 8°·2 C., and the difference 8°·8 C.; at 400, they are 13°·7 C. and 6°·6 C., with a difference of 7°·1 C. They now begin once more to approach: at 500 fathoms, the temperatures are 8°·7 C. and 5°·75 C., with a difference of 3° C.; and at 600 fathoms they are 5°·3 C. and 4°·25 C., with a difference of about 1° C. The bottom temperature at 2425 fathoms at Station XLII. was 1°·8 C., and at Station