

ature observations taken during this early part of the cruise were not so numerous or so complete as we could have wished. The bottom temperatures are given in Appendix A of this chapter. Those off the coast of Portugal corresponded very closely with the observations made in the *Porcupine* in 1870, and in the *Shearwater* in 1871.

A serial sounding was taken on the 15th of January off Cape St. Vincent, which showed a great uniformity in the temperature at that season for the first 200 fathoms:

Surface.....	16°·1 C.	125.....	13°·6 C.
25.....	15 ·5	150.....	12 ·8
50.....	15 ·5	175.....	12 ·8
75.....	15 ·3	200.....	12 ·5
100.....	14 ·2		

and another near the island of Gomera on the 12th of February, at intervals of 10 and 20 fathoms, gave the same result:

Surface.....	18°·3 C.	120.....	16°·3 C.
10.....	18 ·0	140.....	15 ·7
20.....	17 ·9	160.....	15 ·0
30.....	17 ·9	180.....	14 ·3
40.....	17 ·8	200.....	14 ·2
50.....	17 ·8	220.....	13 ·7
60.....	17 ·7	240.....	13 ·3
70.....	17 ·7	260.....	13 ·1
80.....	17 ·6	280.....	12 ·7
90.....	17 ·5	300.....	12 ·2
100.....	16 ·6		

A sounding taken at the same station at intervals of 100 fathoms down to 1000, showed an entire modification in the distribution of the band of abnormally warm water between 300 and 800 fathoms, which presents so marked a feature in the temperature sections off the west coast of Europe:

Surface.....	18°·9 C.	600.....	7°·2 C.
100.....	15 ·0	700.....	6 ·4
200.....	13 ·2	800.....	5 ·5
300.....	10 ·8	900.....	4 ·7
400.....	9 ·0	1000.....	3 ·4
500.....	7 ·6	1620—bottom.....	2 ·3