confine myself at present almost exclusively to the description of the phenomena of the deep water in the Atlantic so far as these have been worked out, I will not here repeat the narrative of the experiments in the Strait. I will, however, give a brief sketch of Dr. Carpenter's cruise in the Mediterranean, as the remarkable phenomena connected with the distribution of temperature and of animal life which he observed, illustrate while they contrast with the singularly different conditions which have been already described in the outer ocean.

The first sounding in the basin of the Mediterranean was taken on the 16th of August, lat. 36° 0′ N., long. 4° 40′ W., at a depth of 586 fathoms, with a bottom of dark grey mud. The surface temperature was 23°·6 C., and the bottom temperature 12°·8 C., about three degrees higher than at the same depth in the ocean outside. A serial sounding was taken to determine the rate of the diminution of temperature, with the following curious result :—

Surface	23°·6 C.
10 fathoms	20·9
20 „	18·6
30 „	17·5
40 „	16·7
50 „	15·6
100 „	12·8
586 „	12·8

Thus the temperature fell rapidly for the first 30 fathoms, more slowly for the next 20, from 50 to 100 lost only 3° C., and before reaching the depth of a hundred fathoms had attained its minimum tempera-