April 25th.—We sounded in 2600 fathoms, with a bottom temperature of 1°·8 C. The mud from the sounding was reddish and very smooth, containing scarcely any foraminifera and only a very small proportion of carbonate of lime. Serial temperatures were taken to 1500 fathoms at intervals of 50 fathoms (Appendix A), and for the first 200 at intervals of 20 fathoms:

Surface	21°·1 C.	120 fathoms	18°·8 C.
20 fathoms	20 ·5	140 "	18 ·5
40 "	20 ·0	160 "	18 ·2
60 "	19 ·4	180 "	17 ·3
80 "	19 ·0	200 "	17 ·7
100 "	18 ·9		

During the day the force of the wind gradually increased, and toward night-fall it was blowing half a gale from the south-west, with a steadily falling barometer and vivid sheet-lightning on the northern horizon. The gale continued during the night and for the greater part of the following day, the wind veering round to the north-west, and the sea running so high as to render sounding or dredging impossible; toward evening, however, the weather moderated, and the barometer rose. Owing, probably, to the change of the direction of the wind, the temperature of the air was 7° C., below that of the day before.

On the 27th, at a distance of 450 miles from Sandy Hook, the depth was 2850 fathoms, with a bottom of reddish-gray ooze containing some *Globigerinæ*, and a bottom temperature of 1°·8 C. As we were now approaching the southern border of the Gulf-stream, two sets of serial temperatures were taken at intervals of 25 fathoms from the surface:

First Series.		Second Series.	
Surface	18°·3 C.	Surface	——
25 fathoms	17 ·4	25 fathoms	18°·5 C.
50 "	17 ·9	50 "	18 ·9
75 "	——	75 "	18 ·6
100 "	17 ·6	100 "	18 ·3
125 "	——	125 "	17 ·9
150 "	17 ·6	150 "	18 ·2