

depths with the density of the surface water at each Station. They are reduced to their value at 60° F. (15°·56 C.)—distilled water at 39°·2 F. (4° C.) being unity.

Density of Water at 60° F. (Distilled Water at 39°·2 F. = 1).

Depth from which water was taken.	A Station 143	B Station 144	C Station 147	D Station 154	E Station 150	F Station 157	H Station 158	K Station 160	L Station 162	M Station 153	N Station 169
Surface, . . .	1·02653	1·02508	1·02506	1·02452	1·02501	1·02501	1·02514	1·02560	1·02505	1·02409	1·02554
50 fathoms, .	623	...	...	527	...	499	511	563	...	...	...
100 ,, .	611	515	504	} 140 fths. } 1·02542	552	529	533	554	...	...	...
200 ,, .	587	524	528		557	...	538	563	...	...	...
300 ,, .	566	524	526	553	556	...	534	550	...	...	...
400 ,, .	572	530	528	555	556	...	...	546	...	...	...
Bottom, . . .	601	514	542	520	507	550	545	559	552	560	553
Depth (fathoms),	1900	1570	1600	1800	1975	1950	1800	2600	1260	1675	2150
Latitude S., .	36° 48'	45° 57'	46° 16'	64° 37'	62° 26'	53° 55'	50° 1'	42° 42'	60° 52'	65° 42'	47° 25'
Longitude E., .	19° 24'	34° 39'	48° 27'	85° 49'	95° 44'	108° 35'	123° 4'	134° 10'	80° 20'	79° 49'	130° 32'

Immediately on leaving the Cape, the course of the ship passed through the well-known Agulhas Current, the water of which is warm and dense. The first deep sounding was in 1900 fathoms, rather to the westward, or on the Atlantic side of the Agulhas Bank. Here the current coming from the Indian Ocean bends round the Cape, and its waters enter the Atlantic. The sounding was taken in a position where great changes of surface temperature are frequently observed (see p. 290), which indicate the meeting and imperfect mixture of waters brought from sources remote from each other. The densities observed at this Station are given in column A of the Table. It will be seen that they are all higher than those in any of the other columns. The temperatures also observed at the different depths are higher than at the other Stations. The water from the surface to the bottom bears evidence of having been warmed and concentrated in tropical regions. Between this Station and B the temperature and the density of the surface water fall at first gradually then rapidly, the great fall taking place while the ship was passing through a strong current, setting to the north and east between the 40th and 45th parallels. At Station B, which is already within the zone where icebergs may be met with at any season of the year, the surface density has fallen to 1·02508. During the whole sojourn of the ship in Antarctic waters, the surface density varied between 1·0250 and 1·0248, except where pack ice was met with, and then both the temperature and the density of the surface water were lower, the temperature being from 29° to 30°,