CHAP. IV.]

ture, there being no further diminution to the bottom. This serial sounding and all the subsequent temperature observations taken during the Mediterranean cruise showed that the trough of the Mediterranean from the depth of 100 fathoms downwards is filled with a mass of water at almost exactly the same temperature throughout, a temperature a little above or below 12°.75 °C.

The following instances have been cited by Dr. Carpenter from the earlier observations in the Mediterranean basin, to show the great uniformity of the bottom temperature for all depths:—

Number of Station.	Depth in Fathoms.	Bottom Tempera- ture.	Surface Tempera- ture.	Position.				
41	730	13° 4C.	23° · 6 C.	Lat. 35° 57′ N.	Long. 4° 12'W.			
$\begin{array}{c} 41 \\ 42 \end{array}$	790	$13 \cdot 2$	$23 \cdot 2$	$35 \ 45$	3 57			
43	162	$13 \cdot 4$	$23 \cdot 8$	35 24	3 1.30			
44	455	$13 \cdot 0$	$21 \cdot 0$	35 42 20"	3 00 30"			
45	207	$12 \cdot 4$	$22 \cdot 6$	35 36 10"	2 29 30"			
46	493	$13 \cdot 0$	$23 \cdot 0$	35 29	1 56			
47	845	$12 \cdot 6$	$21 \cdot 0$	37 25 30"	1 10 30'			

At this last Station (No. 47) a serial sounding was taken, which entirely confirmed the results of the first (No. 40):—

Surface	e . .		•		٠.					20° · 9 C.
10 fat	thoms									$15 \cdot 2$
20	,,							•		$14 \cdot 4$
30	,,		•	•			•			$13 \cdot 8$
40	,,									$13 \cdot 3$
50	,,	•	•			•	•	•	•	13 · 1
100	,,						•	٠	•	12 · 6
845	,,									12 · 6