

DIAGRAMS.

Diagrams 1 to 22 show the vertical distribution of Temperature, the relief of the Bottom of the Sea, the nature of the Deposits, and the percentages of Carbonate of Lime. In these Diagrams horizontal lengths or distances from Station to Station are on a scale of 200 miles to the inch, and the depths are on a scale of 500 fathoms to the inch, so that depths or heights, as compared with horizontal distances, are exaggerated in the proportion of 400 to 1. In looking, therefore, at the Plan as one of the bed of the area, it must be remembered that the inclines as observed were 400 times less steep than they are represented. The Diagrams show the isotherms for every five degrees, which were obtained by plotting the temperature observations on paper of equal squares and drawing the curves (the observations and curves are published as Part III. of the Physics and Chemistry of the Expedition).

In the Diagrams the thick *Horizontal lines* represent lines of equal temperature in Fahrenheit

Scale. The figures above each *Vertical line*, thus, $\overset{87}{2650 \cdot 68}$, indicate, $\textcircled{87}$, the number of the Station, 68° , the Surface Temperature, and, 2650 , the Depth in fathoms. The figures below each *Vertical line* indicate the temperature at the Bottom, the type of Deposit being given with the percentage of Carbonate of Lime underneath.

Diagram

1. Longitudinal section from Tenerife to Sombrero.
2. Diagonal section from Bermuda towards New York; also Meridional section from Halifax to St. Thomas.
3. Longitudinal section from Bermuda to the Azores and Madeira.
4. Longitudinal section from a position in lat. $3^\circ 8' N.$, long. $14^\circ 39' W.$, to Pernambuco.
5. Diagonal section from Abrolhos Island to Tristan da Cunha Islands.
6. Longitudinal section from Rio de la Plata to Tristan da Cunha Islands and the Cape of Good Hope.
7. Meridional section from the Azores to Tristan da Cunha Islands.
8. Meridional section from the Cape of Good Hope to the parallel of $46^\circ S.$ lat.
9. Meridional section between the parallels of 50° and $65^\circ S.$ lat.
10. Diagonal section from a position in lat. $53^\circ 55' S.$, long. $108^\circ 35' E.$, to Cape Otway.
11. Longitudinal section from Sydney to Porirua, Cook Strait, New Zealand.
12. Meridional section from Kandavu Island to Cape Palliser, New Zealand.
13. Longitudinal section from the Fiji Islands to the Barrier Reef, Australia.
14. Enclosed seas of the Eastern Archipelago.
15. Longitudinal section from Meangis Island to the Admiralty Islands.
16. Meridional section from the Admiralty Islands to Japan.
17. Longitudinal section from Japan to a position in lat. $35^\circ 49' N.$, long. $180^\circ W.$
18. Longitudinal section from a position in lat. $35^\circ 49' N.$, long. $180^\circ W.$, to a position in lat. $38^\circ 9' N.$, long. $156^\circ 25' W.$
19. Meridional section from the parallel of $38^\circ N.$ to the parallel of $40^\circ S.$ lat.
20. Longitudinal section from a position in lat. $40^\circ 3' S.$, long. $132^\circ 58' W.$, towards Mocha Island.
21. Meridional section from the parallel of $33^\circ S.$ to the parallel of $46^\circ S.$ lat., off the west coast of South America.
22. Meridional section from the Falkland Islands to the parallel of $35^\circ 40' S.$