

CHAPTER VII.

DEEP-SEA TEMPERATURES.

Ocean Currents and their general Effects on Climate.—Determination of Surface Temperatures.—Deep-sea Thermometers.—The ordinary Self-registering Thermometer on Six's principle.—The Miller-Casella modification.—The Temperature Observations taken during the Three Cruises of H.M.S. 'Porcupine' in the year 1869, etc.

APPENDIX A.—Surface Temperatures observed on board H.M.S. 'Porcupine' during the Summers of 1869 and 1870.

APPENDIX B.—Temperature of the Sea at different Depths near the Eastern Margin of the North Atlantic Basin, as ascertained by Serial and by Bottom Soundings.

APPENDIX C.—Comparative Rates of Reduction of Temperature with Increase of Depth at Three Stations in different Latitudes, all of them on the Eastern Margin of the Atlantic Basin.

APPENDIX D.—Temperature of the Sea at different Depths in the Warm and Cold Areas lying between the North of Scotland, the Shetland Islands, and the Færoe Islands; as ascertained by Serial and by Bottom Soundings.

APPENDIX E.—Intermediate Bottom Temperatures showing the Intermixture of Warm and Cold Currents on the Borders of the Warm and Cold Areas.

If the surface of this world of ours were one uniform shell of dry land, other circumstances of its central heat, its relation in position to the sun, and to its investing atmospheric envelope, remaining the same, some zones would present certain pecu-