

CHAPTER L.

IMBEDDING OF AQUATIC SPECIES IN SUBAQUEOUS STRATA.

Inhumation of freshwater plants and animals—Shell marl—Fossilized seed-vessels and stems of chara—Recent deposits in American lakes—Freshwater species drifted into seas and estuaries—Lewes levels—Alternations of marine and freshwater strata, how caused—Imbedding of marine plants and animals—Cetacea stranded on our shores—Liability of littoral and estuary testacea to be swept into the deep sea—Effects of a storm in the Frith of Forth—Burrowing shells secured from the ordinary action of waves and currents—Living testacea found at considerable depths—Extent of some recent shelly deposits - - Page 741

CHAPTER LI.

FORMATION OF CORAL REEFS.

Growth of coral chiefly confined to tropical regions—Principal genera of coral-building zoophytes—Their rate of growth—Seldom flourish at greater depths than twenty fathoms—Atolls or annular reefs with lagoons—Maldiva Isles—Origin of the circular form—Coral reefs not based on submerged volcanic craters—Mr. Darwin's theory of subsidence in explanation of atolls, encircling and barrier reefs—Why the windward side of atolls highest—Subsidence explains why all atolls are nearly on one level—Alternate areas of elevation and subsidence—Origin of openings into the lagoons—Size of atolls and barrier reefs—Objection to the theory of subsidence considered—Composition, structure, and stratified arrangement of rocks now forming in coral reefs—Lime whence derived—Supposed increase of calcareous matter in modern epochs controverted—Concluding remarks - - - - - 750

LIST OF PLATES.

DIRECTIONS TO THE BINDER.

FRONTISPIECE, View of the Temple of Serapis at Puzzuoli in 1836, *to face* titlepage.

PLATE 1. Map showing the present unequal Distribution of Land and Water - - - - -	<i>to face</i> p. 110
2. Map showing the Position of Land and Sea, to illustrate changes of Climate - - - - -	111
3. Map showing the Area in Europe which has been covered by Water since the beginning of the Eocene Period - - - - -	121
4. Boulders drifted by Ice on the Shores of the St. Lawrence - - - - -	223
5. Map of Coast from Ostend to Rugen - - - - -	313
6. Map of Volcanic Bands - - - - -	337
7. Map of Volcanic District of Naples - - - - -	345
8. View looking up the Val del Bove, Etna - - - - -	387
9. View of the Val del Bove, Etna, as seen from above - - - - -	389
10. Map of Cutch - - - - -	441
11. View of Sindree, on the Indus - - - - -	442