

## CHAPTER VI.

## GEOLOGICAL CONCLUSIONS.

THE geological bearing of the facts that have been detailed in the preceding pages may have been already perceived by our readers. A brief review of the points of more special interest may serve as a convenient recapitulation of the subject.

## I. FORMATION OF LIMESTONES.

Coral reefs are beds of limestone made of corals, with the help of shells. The mode of formation is essentially the same, whichever of the two kinds of organic products, corals or shells, predominate; although in one case the bed would be called coral limestone, and in the other, shell limestone.

The reefs illustrate two different modes of origin of such beds: (1), by undisturbed growth, with only additions of fine material to fill up the intervals; (2), by the grinding of the corals, &c., to fragments, sand, or mud, through the agency of the waves.

Beds made by the former method have many open spaces between the grouped masses or branches, and could not be turned into a solid layer of limestone if situated too deep in the ocean to feel sensibly the movement of the waves,—unless Rhizopods, or minute shells of some kinds, multiplied so rapidly over the same sea-bottom as to fill up the interstices.