http://www.geology.19thcenturyscience.org/books/1875-Dana-Coral/README.htm

between the new and the old arise in part from the fact that the coral reefs of the present era are made about small oceanic lands, or along the edges of the continents, while the limestones of ancient time were gradually formed over the broad surface of a continent as it lay slightly submerged.

The Abrolhos reefs of the Brazilian coast, described on page 111, illustrate one of the methods by which the coral banks extend and finally coalesce into beds of wide extent; but these are small compared with the great limestones of early time, and owe their slight approximation to them as regards extent to the wide range of shallow waters there afforded. These Abrolhos reefs differ from most limestone beds also in being formed largely of the corals in the position of growth.

The tendency of modern reefs to grow up to the surface in narrow banks, separated by channels, appears to be unlike anything we discover in the old rocks; and it seems to be an unavoidable result of growth in the sea, where the waves pile up barriers, and the currents make, and keep open, channels. The case of the Australian and Feejee reefs are good examples. It is possible that such barriers may often have existed in ancient time, and have disappeared through subsequent denudation of the surface. But may not the difference between the great even layers of the continental formations and those of a coral island have proceeded from the difference in the depth of the seas? Over the great shallow continental seas where the limestones were in progress, the waves may have generally been feeble, and therefore there may have been a less tendency to form narrow barriers and deep intervening channels.

The marsh condition of a drying-up lagoon with its forming limestones has been compared above with that under which ancient unfossiliferous limestones were made. The narrow limits of the former make the comparison unsatisfactory; for, in the coral island, coarsely fossiliferous beds are all the while forming about the exterior of the island, but a few miles at the most from the lagoon-marsh; while the ancient limestones retain their unfossiliferous character often through many thousands of square miles. Still, the above-mentioned difference