

probably from the particles of calcareous matter suspended in the water whenever there is the slightest motion. Owing to the shallowness of the lagoon channels, the water becomes quite turbid when there is much wind, thus rendering the navigation of the narrows very difficult. The Æolian rocks are found below the level of low water at many points of the islands.

A satisfactory proof of at least a local subsidence was given a few years ago. In preparing a bed for the great floating dock it was necessary to make an excavation in the Camber, extending to a depth of 50 feet below low water. First there came in the cutting, at a depth of 25 feet below the surface, a bed of calcareous mud, 5 feet thick, forming the floor of the basin; next, loose beds, 20 feet thick, of what has been called "coral crust"—coral sand mixed with detached masses of *Diploria* and isolated examples of smaller corals and of many shells,—passing into "freestone,"—the coral sand cemented together but somewhat loosely coherent. Beneath this, at a depth of about 45 feet, there was a bed of a kind of peat, and vegetable soil containing stumps of cedar in a vertical position, and the remnants of other land vegetation, with the remains of *Helix bermudensis*, and of several birds; the bed of peat was ascertained by boring to lie upon the ordinary hard "base-rock."

A microscopical examination of the deeper rocks of this section showed that a deposition of crystals of calcite had taken place between the calcareous fragments forming the rock. There are no freshwater lakes or ponds on the island, indeed, the wells contain brackish water, except on the surface immediately after rain. The whole atoll is filled with sea water like a sponge; large quantities of carbonate of lime are dissolved and precipitated again in crystals of calcite. It is not improbable that this action may be a cause of subsidence of the land without any subsidence of the primary atoll or sea floor having taken place.

The fine chalky mud which fills the lagoon channels and basins consists of 90 to 95 per cent. of carbonate of lime, which is made up of the comminuted fragments of Corals, calcareous Algæ, Foraminifera, Echinoderms, *Serpulæ*, and Molluscs. The residue, after the removal of the lime, consists of organic matter, Diatoms, and siliceous spicules, and some very fine mineral particles. This coral mud is called a "clay" by navigators, and is so tenacious that ships seldom, if ever, drag their anchors, even in exposed positions, such as Murray's Anchorage, where it is said one vessel, the sloop "Driver," rode out a gale although she carried away her bowsprit by pitching it under her cable.

Large parts of the Bermuda reefs are formed of *Serpula*-tubes, and along the south coast there are numerous miniature atolls, from 2 to 20 feet in diameter, entirely formed by *Serpulæ*. The outer rim is the highest part of these atolls, and at low tide one can see that it is composed of living *Serpulæ*, whereas in the inner part, dead tubes only are found. The lagoons are filled with water at low tide, and in the larger ones the