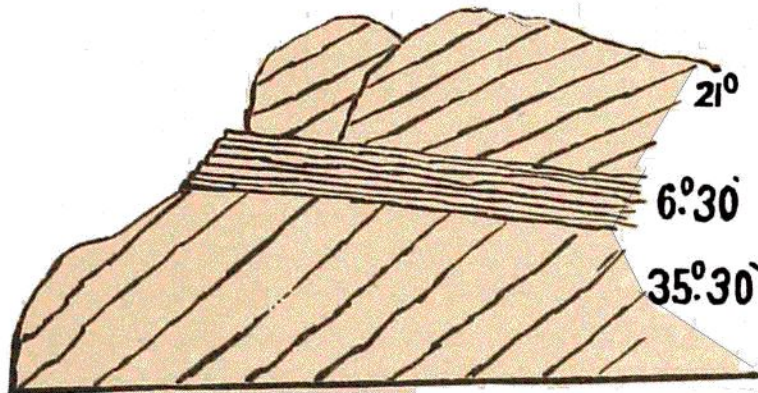


action of various eddies of wind, or the burying of a small dune in the edge of a larger one. In some cases, an already hardened dune, after having suffered denudation by the action of the waves, has become buried in a more recent sand mound, and this process may have been repeated several times, as the accompanying diagram, showing the arrangement of bedding in some rocks at Castle Harbour, will show. I saw no rock in Bermuda with an inclination in its bedding of more than $35^{\circ} 30'$, which is not much more than the slope of some of the sand-hills.

Dana terms this calcareous sand-rock, "Drift sand-rock."* Nelson terms it "Æolian formation" in his account of the geology of the Bermudas.† Jukes observed that in Heron



STRATA OF SAND ROCK, CASTLE HARBOUR, BERMUDA.

Island the main strata of calcareous rock composing the island dipped outwards from the longitudinal axis of the island towards the shore, north and south, with an inclination of from 8° to 10° , and Nelson observed similar dispositions of the strata at Bermuda.

The rock of Bermuda presents all degrees of consolidation, from beds of mere unagglutinated friable sand to extremely hard and compact stone. The main component rock is a good deal softer than Bath stone. A much harder rock occurs at two places in the islands only, and is quarried for the construction of forts. The red fragments of *Spondylus* shell are especially well preserved in it. A bed of lignite was found at a depth of 40 feet below sea level in excavating for dockyard purposes, being evidently an ancient peat bed, such as those which now occur in the islands, overwhelmed by the sand. Besides these primary sand rocks, a conglomerate is being formed on the shore in some places, composed of beach frag-

* Dana, "Corals and Coral Islands." Sampson Low & Co. London, 1875, p. 182.

† Major-Gen. Nelson, R.E., "On the Geology of the Bermudas." Trans. Geol. Soc. London, Vol. V. 1840.