

stone, excepting in its whiter colour; but generally its sand origin is very apparent. On the northern atolls of the Maldives the beach sand-rock is said to be quarried out in square blocks and used for building.

In borings by Lieutenant Johnson, of the Wilkes Exploring Expedition, on Aratica or Carlshoff's Island, in the Paumotus, ten or eleven feet were passed through easily, and then there was a sudden transition from this softer rock (probably the beach sand-rock) to the solid reef-rock.

The *drift sand-rock* was not met with by the author on any of the coral islands visited. The time for exploration on these islands allowed by the Expedition was too short for thorough work. It has been stated that the more exposed points toward the trades, especially the north-eastern and south-western, are commonly a little higher than other parts; and it is altogether probable that some of the sand-heaps there formed will prove on examination to afford examples of this variety of coral-rock. Such situations are exactly identical with those on Oahu, where they occur on so remarkable a scale. Mr. R. H. Schomburgh, in an article in the Journal of the Royal Geographical Society, vol. ii. p. 152, states that on the island of Anegada, in the West Indies, the drift-banks on the windward shores are forty feet in height, and that behind the first range there is a second, and even a third.

Although in these descriptions of atolls, some points have been dwelt upon more at length than in the description of barrier reefs, still it will be observed that the former have no essential peculiarities of structure apart from such as necessarily arise from the absence of high rocky lands. The incircling atoll reef corresponds with the outer reefs that inclose high islands; and the green islands and the beach formations, in the two cases, originate in the same manner.

The lagoons, moreover, are similar in character and position to the inner channels within barrier reefs; they receive coral material only from the action of degrading agents, because no other source of detritus but the reefs is at hand. The