

ments cemented together, as usually occurs in coral islands. The sand rock contains various fossils, most abundantly a land snail (*Helix*) now abundant in the islands, and a much larger one, now extinct, but closely resembling the present species in other respects than size. The bones of turtles and birds are also found in the rock, and all the common marine shells of the islands. The rock, when exposed, is honeycombed by the action of the rain and that of sea water, and on the coast its surface has a remarkable corroded appearance. It is eaten into cup-like hollows all over, separated from one another by extremely sharp projecting points and edges of thin laminæ, which break with a crackling noise under the feet. In some places on the coast the rock has been left by denudation projecting in isolated pinnacles and peaks of fantastic form.

The surface of the rock is not only honeycombed by the action of rain, but hardened by re-deposit of carbonate of lime; and a fresh surface exposed to the weather soon becomes covered with a hard film. Extensive caverns exist all over the islands, undermining the rock in all directions, and filled at the bottom with water, which, in caves near the sea, rises and falls with the tide and is salt. At Paynter's Vale Cave the water is only brackish, so that the communication underground with the sea must be slight. Such caves must necessarily result from the consolidation of masses of loose sands by means of the percolation of rain water. The carbonate of lime taken up must leave cavities unless the whole mass were to shrink gradually; but as the outer or upper layers receive the water first, they become consolidated, and hardened more thoroughly than the inner. Subsequently, these outer layers being hardened, the water ceases to take up so much lime from them, but passes through cracks and chinks, to dissolve away the softer interior, which sinks and falls in. A cave is the result, on the roof of which stalactites form at once.

The falling in of the roofs of ancient caves gives rise to many peculiar features in the landscape of Bermuda. The stalagmites at Walsingham Cave are far under water, proving a sinking of the floor of the cave which might possibly be supposed to be local, due to the giving way of some hollow beneath; but since the same condition is to be seen in nearly all the caves, and there is the further evidence of the sunken bed of lignite, there seems no doubt that there has been a general sinking of the island in comparatively recent times. In some places on the coast of Bermuda are reefs composed by *Serpulæ*, which were called by Nelson Serpuline reefs. These often form regular circles or tiny atolls, as it were, about 20 to 30 feet in diameter. The form evidently results from the fact