

ash, as it were, is left behind. One per cent. seems a very small proportion, but we must remember that it represents one ton in every hundred tons of material removed by the action of water and of the atmosphere; and the evidences of denudation on a large scale are everywhere so marked, that even were some portion of this one per cent. residue further altered and washed away, enough might still be left to account fully for the whole of the red earth. The vegetable soils containing a large proportion of red earth are accumulated, usually to no very great depth, in hollows, the fine ultimate sediment naturally finding its way down to the lowest point. Fig. 74 gives an excellent illustration of the formation of one of the intercalated beds. The soil of the garden, which consists of red earth mixed with decayed vegetable matter, rests upon limestone. The sand-glacier creeps over it, and it is covered by a series of beds, twenty to thirty feet thick, dipping at an angle of 30° . The water percolating through the sandstone gradually removes the organic matter, and the inorganic residue is left.

Wandering about among the pretty hill-and-dale scenery of Bermudas, one is not at first conscious of a singular omission, until all at once it bursts upon him that there is not a drop of water to be seen anywhere—no river, stream, or lake, not even a ditch or a duck-pond. The heavy rain falls upon the porous sand-heap, and runs through it as if it were a sieve. After a heavy shower, it may remain for a little collected in pools along the beaten road, or it may rush down a steep incline; but an hour after the rain is over every trace of it has disappeared. From the whole of the islands about low-water mark being composed of the same porous rock, the sea-water passes through it horizontally as freely as the rain-water passes through it vertically; so that up to high-water mark, and probably considerably above it, on account of capillarity, the rock is completely saturated. There are some marshes and ponds on the main island, the marshes covered with a luxuriant vegetation; but in