therefore, the surface of the land can sink tranquilly under the sea, that fragments of that surface may be preserved under overlying marine accumulations. It is in such places that "submerged forests" occur (Fig. 79). These are stumps of trees still in their positions of growth in their native soil, often associated with beds of peat, full of tree-roots, hazelnuts, branches, leaves, and other indications of a terrestrial surface. There is sometimes, however, considerable risk of deception in regard to the nature and value of such evidence of depression. Where, for instance, shingle or sand is banked up against a shore or river-mouth, considerable spaces may be inclosed and filled with fresh-water, the bottom of which may be some way below high-water mark. In such lagoons terrestrial vegetation and debris from the land



Fig. 79.-Section of Submerged Forest (B.).

A platform of older rocks $(e \ e)$ has been covered with soil $(d \ d)$ on which trees $(a \ a \ a)$ have established themselves. In course of time, after some of the trees had fallen (b), and a quantity of vegetable soil had accumulated, inclosing here and there the bones of deer and oxen $(c \ c)$, the area sank, and the sea overflowing it threw down upon its surface sandy or muddy deposits $(f \ f)$.

may be deposited. Eventually, if the protecting barriers should be cut away the tides may flow over the layers of terrestrial peat, giving a false appearance of subsidence. Again, owing to removal of subterranean sandy deposits by springs, overlying peat-beds may sink below sea-level.

De la Beche has described, round the shores of Devon, Cornwall, and western Somerset, a vegetable accumulation, consisting of plants of the same species as those which now grow freely on the adjoining land, and occurring as a bed at the mouths of valleys, at the bottoms of sheltered bays, and in front of and under low tracts of land, of which the seaward side dips beneath the present level of the sea.²¹⁸ Over

⁹¹⁸ "Geology of Devon and Cornwall," Mem. Geol. Survey. For further accounts of British submerged forests, see Q. J. Geol. Soc. xxii. p. 1.; xxxiv.