

oolite; they contain ferns and other terrestrial plants, and marine shells.

9. ORGANIC REMAINS OF THE STONESFIELD SLATE.—The fossils of Stonesfield, although of so highly interesting a character, have hitherto been very imperfectly investigated. The vegetable remains consist of several species of fucus; of palms, tree-ferns, and many species of sphenopteris; plants allied to the zamia and cycas; and a genus of liliaceæ, named *Bucklandia*; seed-vessels, leaves, and stems, of several genera of coniferæ; and of reeds and grasses. I am not aware that the shells differ from those of the other oolitic strata; a small trigonia (*trigonia impressa*) is abundant. The bones and teeth of the gigantic reptile related to the monitor (the *megalosaurus*), which I have mentioned as occurring in the Tilgate grit; teeth and bones of crocodiles, bones and plates of turtles, bones of pterodactyles, or flying lizards, and other osseous remains, apparently of saurians, present a remarkable correspondence with the fossils of the wealden. The teeth, scales, fin-bones and rays of fishes, belong to the same genera and species as those contained in other beds of the oolite; the round hemispherical teeth of fish allied to the *lepidotus* of Tilgate Forest, are every where in profusion.

10. FOSSIL DIDELPHIS, OR OPOSSUM OF STONESFIELD.—But in addition to the extraordinary remains I have enumerated, the Stonesfield slate has