

## CHAPTER XVI.

*Succession of Strata on the Ohio between Pomeroy and Cincinnati.—Return up the Ohio to Rockville.—Waverley Sandstone.—Cliff Limestone.—Denudation.—Blue Limestone of Cincinnati.—Lower Silurian Fossils.—Limited Proportion of Silurian Species common to Europe and America.—Great Development of Brachiopoda.—Deep Sea Formations.—Rarity of Silurian Land Plants.—Silurian Fossil Fish.*

BETWEEN the western extremity of the Appalachian coal field and Cincinnati, as will be seen by referring to the section given at p. 92, Vol. I., the different formations, from the Devonian to the Lower Silurian inclusive, come up to the surface in succession, being well exposed in the cliffs or steep slopes of the hills which bound the Ohio valley. I have already mentioned a fine seam of coal at Pomeroy, beneath which, farther to the westward, the lower coal-measures are seen, and at length at Portsmouth, the inferior conglomerate or millstone grit, next to which, the formation, called by the Ohio geologists the Waverley sandstone, the equivalent of the Devonian formation (No. 9, in the large map, Pl. II.) makes its appearance. To this sandstone, the Upper Silurian slates and limestones (Nos. 10, 11, and 13 of the map) succeed in the descending order, and lastly, at Cincinnati, the Lower Silurian groups (Nos. 14 and 15 of the map) are exhibited in the hills, and in the bed of the Ohio at low water.

Having, when I came down the Ohio, made the