

fresh-water crustacea (*cypris*, see p. 380), shells (*cyclas*, *planorbis*, and *unio*, p. 350), and fishes. But the most important and productive carboniferous tract in Shropshire is *Coalbrook dale*, which is situated on the east side of the range of rocks forming the Wrekin and Wenlock Edge, the coal strata being superposed on carboniferous limestone. Beds of ironstone occur, abounding in nodules, with organic remains, of which I shall speak hereafter. This coal-field is remarkable for the dislocated and shattered state of the strata, and the intrusion of volcanic rocks, which do not appear as dikes, or in the fissures of the beds, but rise up in mounds or protuberances. The walls of the fissures are in some instances several yards apart, the intervals being filled with debris. Beds containing marine shells, alternate with others abounding in fresh-water shells and land plants, as in Derbyshire. These alternations prove that these coal measures were deposited in an estuary, into which flowed a considerable river, subject to occasional freshes; the frequent alternations of coarse sandstone and conglomerates, with beds of clay or shale containing the remains of the plants brought down by the river, support this opinion.* The series of strata forming this carboniferous accumulation, consists of quartzose sandstone, indurated clay, slate-clay, and coal. A pit sunk in Madely colliery,

* See a highly interesting memoir on this coal-field, by Mr. Prestwich; and Mr. Murchison's *Silurian System*, chap. vii.