time. The famous bone-bed of the Upper Silurian system, with its well-marked ichthyolitic remains, occurs in the Upper Ludlow Rock, — the deposit immediately over head. We find it shelved high, if I may so speak, in the first story of the system, reckoning from the roof downwards; the calcareous deposit in which this hill-side quarry has been hollowed forms a second story; the Lower Ludlow Rock a third; and in yet a fourth, the Wenlock Limestone: just one remove over the Lower Silurians, — for the Wenlock Shale constitutes the base story of the upper division, — there have been found the remains of a fish, or rather minute portions of the remains of a fish, the most ancient yet known to the geologist. "Take the Lower Silurians all over the globe," says Sir Roderick Murchison, in a note to the writer of these chapters, which bears date no further back than last July, "and they have never yet offered the trace of a fish." It is to be regretted that the ichthyolite of the Wenlock Limestone — the first-born of the vertebrata whose birth and death seem entered in the geologic register — has not been made the subject of a careful memoir, illustrated by a good engraving. One is naturally desirous to know all that can be known regarding the first entrance in the drama of existence of a new class in creation, and to have the place and date which the entry bears in the record fairly established. The evidence, however, though not yet made patent to the geological brotherhood, seems to be solid. It has at least satisfied a writer in the *Edinburgh Review* of last year, generally recognized as one of the master-geologists of the age. "We have seen," says Mr. Sedgwick, the understood author of the article, "characteristic portions of a fish derived from the shales alternating with the Wenlock Limestone. This ichthyolite, to speak in the technical language of Agassiz, undoubtedly belongs to the Cestraciont family, of the Placoid order, —