

erate, some of the quartz pebbles being two or three inches in diameter. Small fragments of fossil wood and a ripple-marked surface were observed in some of the strata near the fossil-fish. This sandstone is newer than the coal, but we have not yet sufficient data to pronounce very decidedly on its true age. The footsteps of numerous species of birds afford no indication, because in Europe we have as yet no traces of birds in rocks of such high antiquity, and consequently no corresponding term of comparison. As to the fish, they have most of them been referred to the genus *Paleoniscus*, and have been supposed, therefore, by analogy, to imply that the Connecticut deposit is of the age of the Magnesian limestone (Lower New Red or Permian Group of Europe). But Mr. Redfield has expressed some doubt whether these American fossils might not constitute a new, though allied genus, having the scales, and apparently the vertebræ, prolonged to a more limited extent into the upper lobe of the tail than in the European species. In the language of M. Agassiz, they are less heterocercal than the European *Paleoniscus*, and, therefore, less closely related to that type which is universal in the more ancient or paleozoic formations. Sir P. Egerton, who confirms these remarks of Mr. Redfield, and adds other distinctions, such as the strong and conical teeth, and the smallness of the oral aperture, informs me that in the five or six distinct species obtained by me from Durham, Connecticut, he finds the scales to be smoother than in the *Paleonisci* of the Magnesian limestone; for the latter have their scales more or less striated and serrated on the posterior margins. The American fossils approximate in the character above alluded to, or in having