

of an *Osteolepis*, the thorn-like spine of a *Cheiracanthus*, and a *Cocosteus* well nigh entire. I had at length, after a search of nearly ten years, found the true place of the ichthyolite bed. The reader may smile, but I hope the smile will be a good-natured one; a simple pleasure may be not the less sincere on account of its simplicity; and "little things are great to little men." I passed over and over the strata, and found there could be no mistake. The place of the fossil fish in the scale is little more than a hundred feet above the top, and not much more than a hundred yards above the base of the great conglomerate; and there lie over it in this section about five hundred feet of soft, arenaceous stone, with here and there alternating bands of limestone and beds of clay studded with nodules—all belonging to the inferior Old Red Sandstone.

The enormous depth of the Old Red Sandstone of England has been divided by Mr. Murchison into three members, or formations—the division adopted in his *Elements* by Mr. Lyell, as quoted in an early chapter. These are, the lowest, or Tilestone formation, the middle, or Cornstone formation, and the uppermost, or Quartzose conglomerate formation. The terms are derived from mineralogical characters, and inadequate as designations, therefore, like that of the Old Red Sandstone itself, which, in many of its deposits, is not *sandstone*, and is not *red*. But they serve to express great natural divisions. Now the Tilestone member of England represents, as I have already stated, this Lower Old Red Sandstone formation of Scotland; but its extent of vertical development, compared with that of the other two members of the system, is strikingly different in the two countries. The Tilestones compose the least of the three divisions in England; their representative in Scotland forms by much the