to believe that it belongs to the same age of the world. But the "Old Red Sandstone" of Miller is generally partitioned off with Devonian strata, while the western beds of the American formation abound in relics which recall the life and times of Carboniferous populations. Indeed, though some excellent authorities persist in pronouncing the Marshall and Waverly rocks as belonging to the Devonian age, there is not a Western geologist who does not believe them Carboniferous. I have myself had the good fortune to study the fossil remains of this age, gathered from all the Western States by my own hands, and to compare them with fossils gathered from the Carboniferous rocks of Europe, and also with fossils from the Catskill sandstone of New York and Pennsylvania, and I have but little hesitation in asserting that the rocks called Marshall and Catskill were both deposited during the period of the "Mountain Limestone" of Europe, which lies at or near the base of the great Carboniferous system.

If, then, the Catskill sandstone be the base of the Carboniferous system in America, the Old Red Sandstone of Scotland, which has been identified in age, must be, contrary to the prevailing opinion, the base of the Carboniferous system in that country. In North America, the sediments of this period were derived from the wear of ocean shores lying toward the northeast of the United States. The coarser materials were deposited near their source, while the finer were distributed over the centre of the continent. Thus the formation, which is a conglomerate or coarse sandstone in New York and on the shore of Lake Huron, is a fine sandstone in Southern Michigan, in Ohio, and Iowa, and an arenaceous or argillaceous limestone in Southern Indiana, Illinois, and Missouri. In the Old World during the same period, the coarse sediments gave rise to the sandstone of Scotland, while in Yorkshire, Belgium, and