

supposed that they then sank, as many parts of the earth are known to have done within the memory of man, and as some are doing at the present day—a portion of this continent for instance. The effect of this submergence would be to throw down most of the trees, and allow the ocean to cover the delta, and to deposit upon the prostrate mass of vegetation its sand bottom, and around the few trees left standing. This theory will account for all the features presented by most coal fields. The shale below the coal veins containing roots (stigmæria) is the ancient soil of the delta. The coal above it is the submerged forest. The shale above the coal containing salt and fresh water remains, is the deposit of the ocean on the top of the vegetable mass, mixed with the shells brought down by the rivers, and the sandstone above it the ocean bottom. While the great fossil trees which are found in the sandstone, their bases terminating in the coal, and their roots in the shale below, are those few trees which were left standing when the delta sank. It is quite evident that, so soon as one delta was submerged, the river would in course of time, by depositing its mud at its mouth, gain upon the sea and form another delta, on which forests would grow, and by imagining it submerged also, and so on, the reader will easily understand why in coal fields are found a number of veins of coal, with sandstone of various thicknesses, or limestone (which is often composed altogether of shells) intervening, and why the shells contained in them belong to both salt and fresh water. We may remark that the correctness of this theory, so evident in the coal measures themselves, is further proved by the appearance presented by the deltas of the Nile, Ganges, Mississippi, and the deposit of vegetable matter in the lakes of the McKenzie River; and all lead to the opinion that coal fields may still be slowly forming in various parts of the world.

In considering this subject, it has been impressed upon us, that nothing more clearly or indubitably shews the hand of design in Nature, than the formation of the carboniferous series. They present a barrier over which the Deist cannot pass, for they expose the absurd Chance-God of his imagination. They are a standing argument against the Infidels who deny the special providence of Jehovah; for to the reflective mind they are the most undoubted evidence that God anticipated such an increase of mankind, such a development of civilization as would rob the earth of its forests; and, in the wisdom and beneficence of his providence, stored in the bowels of the earth, thousands and thousands of years before man was created, an enormous mass of fuel, which even now has become a necessity, the want of which nothing could supply; for it is more than anything else the motive power of that progress so characteristic of our age. To it we owe most of the comforts and luxuries we possess. By it we are enabled to speed over the ocean in spite of wind and tide, and to fly over the land with the rapidity of the whirlwind; and by thus enabling us to accomplish more in