

Between these two great yet very distinct and distant Red Sandstone formations, there is, in many parts of Wales, England, and Scotland, the Mountain Limestone, usually 800 and more feet in thickness, and which consists of nothing else than the remains of coralline and testaceous animals, compressed into masses hundreds of feet in thick stone, and often many miles in length and breadth. Over that, and in many of the same localities, we have the coal-strata, consisting entirely of compressed plants, with their sandstones, shales, and ironstones, full of land vegetables and presenting some fresh-water shells and fishes.

Above these, we are in the New Red just mentioned; 2000 feet of marl, clay, sand-rock, conglomerates, sulphate of lime, rock-salt, and magnesian limestone; red of all hues, white, and variegated: much less, in our country, replenished with the vestiges of living creatures, than the preceding or the succeeding formations; yet not destitute of them. In the equivalent rocks of Germany and France, organic remains are more frequent.

In one of the members of this formation, the first known appearance of reptile life presents itself, in several species of lizard-like animals. But in the beds which come next in the ascending order, the Lias, we are met by other and very different species, of the same family, of appalling size, power, and armature,\* besides other orders; and through all the Oolitic strata, we find remains, in great variety and abundance; above fifty of plants; but of the animal classes a number of species and forms of organization, which may well fill us with astonishment, from the zoophytes upwards, but as yet (so far as is known) only, as it were, just touching upon the mammifers. Neither, amidst the crowds of other animals, till we have risen over all the sandy, clayey, and chalk formations, do we find any further appearances of that class. The thousands of species, through whose periods we have thus in idea been passing, are all different from any in the now existing creation, though possessing generic and family analogies: and yet (with the remarkable and contested† exception

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\* The reader should not fail, if he can, to inspect the specimens which are in the Long Gallery of the British Museum: the figures, by Mr. Hawkins, who collected the most of those specimens and chiseled them out of the rock, engraven upon a grand scale in his work, *Memoirs of the Ichthyosauri and Plesiosauri*, 1834: and those reduced in Dr. Buckland's *Bridgewater Treatise*, with his admirable enucleations of the structure and habits of the animals.

† Some eminent anatomists are of opinion that the few bones in question (only two or three broken jaws, upon which the greatest men in this