

earliest exogenous lignite from the Lias to the Lower Devonian, will now venture to say that fossil wood may not yet be detected as low in the scale as any vegetable organism whatever, or fossil fish as low as the remains of any animal? But though the response of the earlier geologic systems be thus unfavorable to the development hypothesis, may not men such as the author of the "Vestiges" urge, that the geologic evidence, taken as a whole, and in its bearing on groupes and periods, establishes the general fact that the lower plants and animals preceded the higher,—that the conifera, for instance, preceded our true forest trees, such as the oak and elm,—that, in like manner, the fish preceded the reptile, that the reptile preceded the bird, that the bird preceded the mammiferous quadruped and the quadrumana, and that the mammiferous quadruped and the quadrumana preceded man? Assuredly yes! They may and do urge that Geology furnishes evidence of such a succession of existences; and the arrangement seems at once a very wonderful and very beautiful one. Of that great and imposing procession of being of which this world has been the scene, the programme has been admirably marshalled. But the order of the arrangement in no degree justifies the inference based upon it by the Lamarckian. The fact that fishes and reptiles were created on an earlier day than the beasts of the field and the human family, gives no ground whatever for the belief that "the peopling of the earth was one of a natural kind, requiring time," or that the reptiles and fishes have been not only the predecessors, but also the progenitors of the beasts and of man. The geological phenomena, even had the author of the "Vestiges" been consulted in their arrangement, and permitted to determine their sequence, would yet have failed to furnish, not merely an