

semblance to man. But this connection is not the consequence of a direct lineage between the faunas of different ages. There is nothing like parental descent connecting them. The fishes of the Palæozoic age are in no respect the ancestors of the reptiles of the Secondary age, nor does man descend from the mammals which preceded him in the Tertiary age. The link by which they are connected is of a higher and immaterial nature ; and their connection is to be sought in the view of the Creator himself, whose aim in forming the earth, in allowing it to undergo the successive changes which geology has pointed out, and in creating successively all the different types of animals which have passed away, *was to introduce man upon the surface of our globe.* MAN IS THE END TOWARDS WHICH ALL THE ANIMAL CREATION HAS TENDED FROM THE FIRST APPEARANCE OF THE FIRST PALÆOZOIC FISHES." These, surely, are extraordinary deductions. "In thy book," says the Psalmist, "all my members were written, which in continuance were fashioned when as yet there was none of them." And here is natural science, by the voice of two of its most distinguished professors, saying exactly the same thing.

Of the earliest known vertebrates,—the placoidal fishes of the Upper Silurian rocks,—we possess only fragments, which, however, sufficiently indicate, from their resemblance to the corresponding parts of an existing shark,—the cestracion,—that they belonged to fishes furnished with the two pairs of fins now so generally recognised as the homologues of the fore and hinder limbs in quadrupeds. With the second earliest vertebrates,—the ganoids of the Old Red Sandstone,—we are more directly acquainted, and know that they exhibited the true typical form,—a vertebral column terminating in a brain-protecting skull ; and that, in at least the acanth, celacanth, and dipterian families, they had the limb-like fins. In the upper parts of the system the earliest reptiles leave