

orbit in the middle of the skull, the other is thrust out to its edge, — the irregular fishes generally (sun-fishes, frog-fishes, nippocamylæ, &c.) were not introduced into the ichthyic division until after the full development of the reptile dynasty; nor did the hand that makes no slips in its working “form the crooked serpent,” footless, grovelling, venom-bearing, — the authorized type of a fallen and degraded creature, — until after the introduction of the mammals. What can this fact of degradation mean? Species and genera seem to be greatly more numerous in the present age of the world than in any of the geologic ages. Is it not possible that the extension of the chain of being which has thus taken place — not only, as we find, through the addition of the higher divisions of animals to its upper end, but also through the interpolations of *lower links* into the previously existing divisions — may have borne reference to some predetermined scheme of well-proportioned gradation, or, according to the poet,

“Of general ORDER since the whole began?”

May not, in short, what we term degradation be merely one of the modes resorted to for filling up the voids in creation, and thereby perfecting a scale which must have been originally not merely a scale of narrow compass, but also of innumerable breaks and blanks, hiatuses and chasms? Such, certainly, would be the reading of the enigma which a Soame Jenyns or a Bolingbroke would suggest; but the geologist has learned from his science, that the completion of a chain of at least contemporary being, perfect in its gradations, cannot possibly have formed the design of Providence. Almost ever since God united vitality to matter, the links in this chain of animated nature, as if composed of a material too brittle to bear their own weight when stretched across the geologic