

one been, created, which is not microscopic. Whatever is larger has not been created, but developed. Man has not been created, but developed." Such, in a few brief dogmatic sentences, is the development theory. What, in order to establish its truth, or even to render it in some degree probable, ought to be the geological evidence regarding it? The reply seems obvious. In the first place, the earlier fossils ought to be very *small* in size; in the second, very *low* in organization. In cutting into the stony womb of nature, in order to determine what it contained mayhap millions of ages ago, we must expect, if the development theory be true, to look upon mere embryos and fœtuses. And if we find, instead, the full grown and the mature, then must we hold that the testimony of Geology is not only *not in accordance* with the theory, but in positive opposition to it. Such, palpably, is the *principle* on which, in this matter, we ought to decide. What are the *facts*?

The oldest organism yet discovered in the most ancient geological system of Scotland in which vertebrate remains occur, *seems* to be the *Asterolepis* of Stromness. After the explorations of many years over a wide area, I have detected none other equally low in the system; nor have I ascertained that any brother-explorer in the same field has been more fortunate. It is, up to the present time, the most ancient Scotch witness of the great class of fishes that can in this case be brought into court; nay, it is in all probability the oldest *ganoid* witness the world has yet produced; for there appears no certain trace of this order of fishes in the great Silurian system which lies underneath, and in which, so far as geologists yet know, organic existence first began. How, then, on the two relevant points — bulk and organization — does it answer to the demands of the development hypothesis? Was