

buckler of one of the hugest ganoids of the Old Red Sandstone,—the *Asterolepis*. And there it lay, as it had been deposited, far back in the bypast eternity, at the bottom of a muddy sea. But the mud existed now as a dense grey rock, hard as iron; and what had been the bottom of a Palæozoic sea had become the edge of a dizzy precipice, elevated more than a hundred yards over the surf. The world must have been a very different world, I said, when that creature lived, from what it is now. There could have been no such precipices then; a few flat islands comprised, in all probability, the whole dry land of the globe; and that emotion of which I have just been conscious, is it not something new in creation also? The deep gloom of these perilous gulfs,—these incessant roarings,—these dizzy precipices,—the sublime roll of these huge waves,—are they not associated in my mind with a certain dim idea of danger,—a feeling of incipient terror, which, in all God's creation, man, and man only, is organized to experience? Is it not an emotion which neither the inferior animals on the one hand, nor the higher spiritual existences on the other, can in the least feel,—an emotion dependent on the union of a living soul with a fragile body of clay, easily broken?

The Old Red Sandstone consists, as I have said, of three great formations, furnished each, in Scotland at least, with its peculiar group of fossils. In the *upper* division,—that which rests immediately under the Carboniferous system,—a few straggling plants of the Coal Measures have been occasionally found; but, so far as I know, no plant peculiar to itself. In the middle (*lower*) division we find traces of a peculiar but very meagre flora. I detected about ten years ago, among the grey micaceous sandstones of Forfarshire, a fucoid furnished with a thick, squat stem, that branches into numerous divergent leaflets or fronds of a slim, grass-like form, and which, as a whole, somewhat resembles the scourge of cords attached to a handle with which a boy whips his