

rally divides into *three* great parts. There are many lesser divisions,—divisions into systems, formations, deposits, beds, strata ; but the master divisions, in each of which we find a type of life so unlike that of the others, that even the unpractised eye can detect the difference, are simply three,—the Palæozoic or oldest fossiliferous division ; the Secondary or middle fossiliferous division ; and the Tertiary or latest fossiliferous division.

In the first or Palæozoic division we find corals, crustaceans, molluscs, fishes, and, in its later formations, a few reptiles. But none of these classes of organisms give its leading character to the Palæozoic ; they do not constitute its prominent feature, or render it more remarkable as a scene of life than any of the divisions which followed. That which chiefly distinguished the Palæozoic from the Secondary and Tertiary periods was its gorgeous flora. It was emphatically the period of plants,—“of herbs yielding seed after their kind.” In no other age did the world ever witness such a flora : the youth of the earth was peculiarly a green and umbrageous youth,—a youth of dusk and tangled forests,—of huge pines and stately araucarians, of the reed-like calamite, the tall tree-fern, the sculptured sigillaria, and the hirsute lepidodendron. Wherever dry land, or shallow lake, or running stream appeared, from where Melville Island now spreads out its ice wastes under the star of the pole, to where the arid plains of Australia lie solitary beneath the bright cross of the south, a rank and luxuriant herbage cumbered every footbreadth of the dank and steaming soil ; and even to distant planets our earth must have shone through the enveloping cloud with a green and delicate ray. Of this extraordinary age of plants we have our cheerful remembrancers and witnesses in the flames that roar in our chimneys when we pile up the winter fire,—in the brilliant gas that now casts its light on this great assemblage, and that lightens up the