heavenly bodies,—sun, moon, and stars. The moon, though absolutely one of the smallest lights of our system, is described as secondary and subordinate to only its greatest light, the sun. It is the apparent, then, not the actual, which we find in the passage, - what *seemed* to be, not what *was;* and as it was merely what appeared to be greatest that was described as greatest, on what grounds are we to hold that it may not also have been what *appeared* at the time to be made that has been described as made? The sun, moon, and stars may have been created long before, though it was not until this fourth period of creation that they became visible from the earth's surface."

"The geologist, in his attempts to collate the Divine with the geologic record, has, I repeat, only three of the six periods of creation to account for,—the period of plants, the period of great sea monsters and creeping things, and the period of cattle and beasts of the earth. He is called on to question his systems and formations regarding the remains of these three great periods, and of these only. And the question once fairly stated, what, I ask, is the reply? All geologists agree in holding that the vast geological scale naturally 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 fossiliterous 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, of 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 forest, of huge pines and stately araucarians, of the reed-like calamite, the tall tree-fern, the sculptured sagillaria, 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 streaming 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 lighters up the streets and lanes of this vast city,—in the glowing furnaces that smelt our metals, and give moving power to our ponderous engines,—in the long dusky trains that, with shriek and snort, speed dart-like athwart our landscapes,—and in the great cloud-enveloped vessels that darken the lower reaches of your noble river, and rush in foam over ocean and sea. The geologic evidence is so complete as to be patent to all, that the first great period of organized being was, as described in the Mosaic record, peculiarly a period of herbs and trees, 'yielding seed after their kind.'

"The middle great period of the geologist—that of the Secondary division—possessed, like the earlier one, its herbs and plants, but they were of a greatly less luxuriant and conspicuous character than their predecessors, and no longer formed the prominent trait or feature of the creation to which they belonged. The period had also its corals, its crustaceans, its molluscs, its fishes, and in some one or two exceptional instance its dwarf mammals. But the grand existences of the age,—the existence in which it excelled every other creation, earlier or later, were its huge creeping thing,—its enormous monsters of the deep,—and, as shown by the impressions of their footprints stamped upon the rocks, its gigantic birds. It was peculiarly the age of egg-bearing animals, winged and wingless. Its wonderful *whales*, not, however, as now, of the mammalian, but of the reptilian class,—ichthyosaurs, plesiosaurs, and cetiosaurs,—must have tempested the deep; its creeping lizards and crocodiles, such as the teliosaurus, megaiosaurus, and iguanodon,—creatures some of which more than rivalled the existing elephant in height, and greatly more than rivalled him in bulk,—must have crowded the plains or haunted by myriads the rivers of the period; and we know that the footprints of at least one of its many birds are fully twice the size of those made by the horse or camel. We are thus prepared to demonstrate, that the second period of the geologist was peculiarly and characteristically a period of whale-like reptiles of the sea, of enormous creeping reptiles of the land, and of numerous birds, some of them of gigantic size; and, in meet accordance with the fact, we find that the second Mosaic period with which the geologist is called on to deal was a period in which God created the fowl that flieth above the earth, with moving [or creeping] creatures, both in the waters and on the land, and what our translation renders great whales, but that I find rendered, in the margin, great sea monsters.

"The Tertiary period has also its prominent class of existences. Its flora seems to have been no more conspicuous than that of the present time; its reptiles occupy a very subordinate place; but its beasts of the field were by far the most wonderfully developed, both in size and numbers, that ever appear-