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 instances its dwarf mammals. But the grand existences of the age,—the existences in which it excelled every other creation, earlier or later,—were its huge creeping things,—its enormous monsters of the deep,—and, as shown by the impressions of their foot-prints 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, megalosaurus, 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 foot-prints of at least one of its many birds are of fully twice the size of those made by the horse or camel. We are thus prepared to demonstrate,