

the constitution of the earth?—was its surface more covered with lakes and marshes than now?—and did animal life more abound in those types, which are suitable to a lacustrine condition?—or have such conclusions been drawn from a partial view of the phenomena, and do the facts only warrant the inference that certain regions which are now dry land were in ancient times occupied by vast lakes, and that there may have existed contemporaneously as great an extent of dry land as at present, in areas now buried beneath the ocean? In the fossilized remains of the tertiary population of the land and waters, we find all the grand types of the existing animal creation—terrestrial, lacustrine, and marine mammalia—herbivora, carnivora, birds of every order, and of numerous species and genera—reptiles, fishes, crustacea, insects, zoophytes, and even those living atoms, the infusoria*—in short, all the leading divisions, and even sub-divisions of animal existence. In the vegetable world, as I have already remarked, the same general analogy is maintained. And as all these varied forms of being required physical conditions suitable to their respective organizations, we have at once conclusive evidence that the general constitution of the earth, during the tertiary epoch, could not have essentially differed from the present. Dry land and water, continents

* In tertiary strata the remains of beings of which thousands of millions would occupy but a cubic inch have been discovered. They will be described hereafter.