

consists of green salt, with nodules of gypsum in marl. The salt contains in some places lignite, bituminous wood, and shells. In the lower division are beds of arenaceous marls, with lignite, impressions of plants, and veins of salt; coarse sandstone, with vegetable remains; aluminous and gypseous shale, and indurated calcareous marl, with sulphur, salt, and gypsum.

52. RETROSPECT.—So numerous and varied have been the phenomena presented to our notice, that a comprehensive retrospect is necessary, in order that we may obtain a correct idea of the important and highly interesting deductions resulting from this general survey of the tertiary formations.

In the pliocene, or newer tertiary, which also embraces the mammalian epoch of the last lecture, the fossil remains in the alluvial deposits afford incontestible proof that the mammoth, mastodon, hippopotamus, dinotherium, and other colossal animals of extinct species and genera, together with birds, reptiles, and enormous carnivora, inhabited such districts of our continents as were then dry land; while the older tertiary, or eocene, incloses the bones of land animals, principally of a lacustrine character, which approximate to certain races that now exist in the torrid zone, but belong to extinct genera, that preceded the mammoth and the mastodon. The seas and lakes of that remote epoch occupied areas which are now above the waters; and rocks and mountains, hills and valleys, streams and rivers,