

CHAPTER XII.

New York City.—Geology.—Distribution of Erratic Blocks in Long Island.—Residence in New York.—Effects on Society of increased Intercourse of distant States.—Separation of the Capital and Metropolis.—Climate.—Geology of the Taconic Mountains.—Stratum of Plumbago and Anthracite in the Mica Schist of Worcester.—Theory of its Origin.—Lectures for the Working Classes.—Fossil Foot-prints of Birds in Red Sandstone.—Mount Holyoke.—Visit to the Island of Martha's Vineyard.—Fossil Walrus.—Indians.

New York, March, 1842.—THE island on which New York stands is composed of gneiss, as are the cliffs on the left bank of the Hudson, for many miles above. At Hoboken, on the opposite side of the river, cliffs are seen of serpentine, a rock which appears to be subordinate to the gneiss, as in many parts of Norway and Sweden. All these formations, as well as the syenite of Staten Island, correspond very closely with European rocks of the same order.

Long Island is about 130 miles in length, and the town of Brooklyn, on its western extremity, may be considered as a suburb of New York. This low island is every where covered with an enormous mass of drift or diluvium, and is the most southern point in the United States, where I saw large erratic blocks in great numbers. Excavations recently made in the Navy Yard at Brooklyn have exposed the boulder formation to the depth of thirty feet; the lowest portion there seen consisting of red clay and loam, with boulders of trap and sandstone, is evidently the detritus of the New