

later geological agencies. Probably large portions of Greenland and other arctic lands had emerged, besides the principal portion of the West India Islands.

The climate of the period was much warmer than that of the same localities in the present age. Coral-builders, and other marine animals now restricted to tropical regions, then flourished throughout the whole length of the continent, from latitude 60° north to the Straits of Magellan on the south. The superior warmth of former ages of the world is probably due, in some measure, to the more highly heated condition of the globe—a source which, through all ages, has been undergoing a gradual diminution. It has also been suggested that the connection which existed between the Gulf of Mexico and the Arctic Ocean permitted the Gulf Stream to flow through the centre of the continent, and thus, while it carried a tropical temperature far toward the north, ameliorated the climate of the regions to the east of it, as the same ocean stream now moderates the cold of high latitudes upon European shores. Thus, while the Northern States were *terra firma*, the rich cotton-fields of Alabama and Texas were gathering their calcareous sediments beneath the Gulf of Mexico. Fleets might have sailed over the rolling prairies of Kansas and Dacotah, and the anchor of the mariner might have fastened in the summit of Pike's Peak. But fleets of *Nautili*, and their cousins the *Ammonites*, were the only keels that plowed that Mediterranean sea, and the polyp and the oyster were the only mariners that cast their anchor on the sunken ridges. Eastward, the broad rolling plains of Illinois and Ohio were adorned with a growth of sub-tropical vegetation, and the west wind of even a winter sky breathed softly over its never-fading foliage. But the shining cities of the West were not there. The kingly alligator alone disturbed the waters of the Ohio. The railroad car, the church spire, the