

was bounded throughout all Cænozoic and Mesozoic time. There was an epoch when the excavation of this gorge began. The great tide swept along at the high level of the land. But the stream has also scored deeper than at present. The rocky bottom of its channel is everywhere many feet below the present bed of sediment. The country stood higher once than now; the descent to the sea was sharper, and the erosion more profound.

Of course, during the melting epoch, of the great glacier, all the streams were flooded. Not only did the dissolving ice supply enormous quantities of water; evaporation must have been increased by the extension of evaporating surface, and condensation must have been promoted by the large amount of ice-cold surface. It was an epoch of rains and floods. All the rivers have left records of their ancient altitudes. These are the terraces. On the Connecticut we find them from one hundred and eighty to two hundred feet above present flood level; on the Hudson and Mohawk, three hundred and thirty feet; on the Genesee, two hundred and thirty-five feet; on the lower Ohio, fifty to one hundred and eighty feet; on the Missouri, two hundred and fifty feet; and so throughout North America, all the rivers at this epoch were flooded.

The Niagara river had been at work on a vast gorge ever since the Devonian Age. Probably none of the great lakes except Superior, then existed. From Lake Superior sprang a river which flowed along a valley in which the basins of Lake Huron and Lake Erie have since been excavated. At a point west of the present mouth of the Niagara, it made a fall, and flowed as a river along the Ontario valley, and thus to the sea. In the course of ages, the stream excavated a gorge as far as the whirlpool—perhaps even farther. On the re-establishment of the river, it did not find its ancient gorge, but precipitated itself over the escarpment at Lewiston. Here it began a new gorge, and dug back four miles, when it struck the old gorge. Of course the falls now continued their recession rapidly as far back as the head of the old gorge. Since that was reached, the work has been contin-