

shore of Lake Michigan to Chicago, and even to Joliet, when it bends westward and northwestward, and loses itself beneath the accumulations of a later period. The quarries at Lockport, New York, and many others in that vicinity, are located in this important limestone. In the same formation are those at Milwaukee, Waukesha, Chicago, Lamont, and Joliet. The so-called "Athens Marble," so extensively employed in Chicago, is quarried from this formation. It much resembles the famous "Kentucky Marble," from which the beautiful monument and statue to Henry Clay, at Lexington, is built—though the latter comes from the Trenton group, in the Lower Silurian.

The second period was that of the Salina group, which has become famous for the production of salt and gypsum, in the vicinity of Syracuse, New York. Its outcropping belt runs in a line parallel with that of the Niagara limestone throughout its whole course, as far as Milwaukee. I shall hereafter offer some explanation of the circumstances under which salt and gypsum have accumulated to such an enormous extent in certain formations.

The third period was that of the Lower Helderberg group, which is not found to be generally spread out over the country like the other two. In New York it is especially developed in the Helderberg Mountains, where Professor Hall has obtained a rich harvest of organic remains. It was here that he found the type of that magnificent crinoid, which he so beautifully named *Mariacrinus*, in commemoration of the assistance and sympathy of his accomplished wife in his life-long scientific labors. It thins out and disappears in Western New York. This group is known again in Southern Illinois, where it has been brought to light by the indefatigable and well-directed labors of Professor Worthen; and in Missouri, where it has been illustrated by Swallow and Shumard; and, finally, in Maine,