

SCIENCE:

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INDIAN OCCUPATION OF NEW YORK.

WE have not learned all that will some day be known of the aboriginal occupation of New York, but occasional contributions or systematic statements have a present value. We are thankful for much that has been written, and only wish that more had been done before so many works were obliterated and relics destroyed.

It is quite likely that erroneous estimates have been made in regard to some remains, for fewer occupied spots have been overlooked or forgotten than would be supposed. I have consulted all accessible authorities, certainly the most important, and find less than one hundred and ninety defensive earthworks described or even mentioned, while of stockades which have left traces there are between twenty and thirty. We know that more of the latter were in use, from history; but there are special reasons why the traces of these were fewer than of earthworks. A liberal allowance for undescribed or indefinitely mentioned defensive banks might bring this class of fortifications up to two hundred and fifty, which is probably a fair allowance for the State of New York. It is to be remembered, however, that some have been reported where none existed, and that others have been confused. It is not my purpose now to point these out. With a considerable outlay of field and home work during many years, I have collected notes and collated accounts, so that I have on the map before me a pretty fair view of the field of Indian occupation in New York. In the central part of the State very few sites have escaped my attention, even when small, and this long continued study presents some curious results.

My present intention, however, is merely to show the grouping and nature of the more important known works, although by far the finest articles of stone have come from open villages, hamlets, and camps occupied by early travellers, fishermen, or hunters. The fort builders here had in a measure left the stone age behind them, and stone gouges, gorgets, amulets, and kindred articles, are to be looked for

where camps or unenclosed villages stood. The fort builders preferred working in clay, bone, and horn, using no flint scrapers or drills, and even making stone arrows somewhat sparingly.

When known sites are placed on the map, especially when unimportant ones are eliminated, it will be found that there is a very distinct arrangement in groups, nor does the presence of even small camps change this materially. Hunters, of course, camped on most large streams and lakes, but the rivers had the larger number. Defensive works are oftener at some distance from navigable waters, though having a tendency to the sides of broad valleys. It will be found that some counties present scarcely a trace of settled occupation, while others have them in abundance.

One large group lies in the south-west part of the State, where Cattaraugus County has eleven defensive earthworks mentioned, with others undescribed, and also at least ten burial mounds. Chautauqua has even more abundant remains of this group, having forty-four earthworks and fifteen burial mounds of various kinds. There have been reported also seven ossuaries or bone pits, similar to those found in the Huron country, in Canada. A very few of these defensive works seem to belong to the historic period, containing European relics. With all the descriptions we have of these works, it is a pity that no systematic, and hardly general, report has been made of the articles found, such as has thrown so much light on works further east. In general, the indications seem Iroquoian, though presenting some features of a border land. It is doubtful whether all the works there are of a northern character.

Forming another group, slightly connected with this, Erie County has seventeen earthworks, seven mounds, and four ossuaries. Others have been obliterated before description, but probably not many have escaped mention. The forts are mostly smaller than in the last group. Niagara has three earthworks, six mounds, and four ossuaries. In a general way, the seven earthworks and three mounds of Genesee County may be placed in the same group, and Orleans lies on the border with one earthwork, one ossuary, and traces of works now obliterated. In this group are found many quite recent villages, especially of the Iroquois. Most of the remains, however, are prehistoric, the Eries and Neutrals barely coming in contact with the whites.

In the territory further east, acquired by the Senecas in the seventeenth century, recent villages predominate, but the broad valley of the Genesee has many prehistoric sites, mainly grouped towards the mouth of the river. Monroe County seems to afford twelve earthworks, one recent stockade, and twelve mounds; Livingston County, eight earthworks, one stockade, and twelve mounds, some of these being recent. Wyoming County has one small earthwork and one mound. Ontario County has two earthworks and three stockades, part of both these being recent, as are most of the village sites and burial places. Yates has two earthworks described and some indefinitely reported. One other, planned and described, is evidently erroneous. Tompkins has four earthworks, one in combination with a stockade, and all prehistoric. Allegany has three earthworks and some recent Seneca villages.

Between this and the Cayuga group there is a less distinct line. Seneca County belongs to this, but has but two earthworks described, though reference is made to others by DeWitt Clinton. Wayne has one very small work, in good preservation. Cayuga has five earthworks, part of them recent, and three early stockades. It abounds in recent vil-