

A second glacial period in Europe, known as the "Reindeer Period," has long been recognized. It appears to have followed that in which the clays were deposited and the terraces formed, and may therefore correspond with the period of the Trenton gravel. If there have been two glacial epochs in this country, the Trenton gravel cannot be earlier than the close of the later one. If there has been but one, traces of the glacier must have continued into comparatively recent times, or long after the period of submergence. The Trenton gravel, whether made by long continued floods which followed a first or second glacial epoch,—whether separated from all true glacial action or the result of the glacier's final melting,—is truly a post-glacial deposit, but still a phenomenon of essentially glacial times—times more nearly related to the Great Ice Age than to the present.

THE ANTIQUITY OF MAN.

Interesting as is the solution of any geological problem, it is doubly so when it involves the question of the antiquity of the human race. Archaeology now joins with geology to make history. When we find that the Trenton gravel contains implements of human workmanship so placed with reference to it that it is evident that at or soon after the time of its deposition man had appeared on its borders, and when the question of the antiquity of man in America is thus before us, we are tempted to inquire still further into the age of the deposit under discussion.

It has been clearly shown by several competent archaeologists that the implements that have been found are a constituent part of the gravel, and not intrusive objects. It was of peculiar interest to find that it has been only within the limits of the Trenton gravel, previously traced out by the writer, that Dr. Abbott, Prof. F. W. Putnam, Mr. Lucien Carr, and others, have discovered these implements, *in situ*. The map accompanying this chapter, on which each place is marked where implements have been found beneath the surface, illustrates this point. At the localities on the Pennsylvania Rail-