Clay

Throughout the limestone regions of Northampton County there is a surface cover of residual clay composed of insoluble material derived from a great thickness of limestone which has been removed by solution. In portions of the area several thousand feet of limestone has been carried away. The amount of insoluble matter in these calcareous sediments varies but an average of 10 percent may be assumed as a fair figure. If all the residue still remained, we should have a surficial clay deposit about 300 feet deep. However, this is not the case. Seldom is the residual clay more than 20 feet deep, although in places it exceeds 100 feet; probably there is an average depth of only 10 to 12 feet. This means that most of the insoluble matter has been carried to the streams by surface erosion and transported beyond the confines of the county. Along the steeper valley slopes the limestones generally are exposed and the clay cover is present only over the flat divides.

The Pleistocene ice sheet extended through the county and probably passed over all the limestones with the exception of the two small areas bordering the Delaware River in Williams Township. The ice removed much of the surface clay, and mixed clays, sands, and cobbles from the regions to the northeast with that which remained. Therefore, the surficial clays of the county are in part residual clays formed in situ but generally with enough modification to justify their classification as glacial clays.

The upper one to three feet of these clays has been modified by the addition of vegetable humus so that it cannot well be used for brick. However, in some brickyards the top soil has not been removed and discarded even though it is recognized that the mixture of soil and clay affects the quality of the brick. The clay rests upon an irregular limestone surface characteristic of limestone weathering. Knobs or pinnacles of limestone may rise almost or quite to the surface in clay pits averaging ten or more feet in depth. This situation has made the use of power shovels difficult or impossible in the operation of some pits. Steam shovels have been used in some places. Of course, most of the clay pits of an earlier day were worked exclusively by hand.

In the early settlement of the region small brick yards were opened near the principal villages. In the absence of railroads, canals and good roads the product was seldom transported any considerable distance. As transportation facilities improved, most of the small plants were closed and brick were obtained from larger operations within the county or in adjoining regions.

Now there is little indication of the former manufacture of brick in several places where, according to historical records, clay pits and