

SHAWNEE MOUND, TIPPECANOE COUNTY, AS A GLACIAL ALLUVIAL CONE.

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There stands at the northwest corner of section twenty-three (23), town, twenty-one (21) north, range six (6) west, a locally well known hill, quite unusually large and prominent for that part of the country, which generally is a moderately undulating, and, over extensive areas, a quite monotonous plain.

The area of the hill is about thirty-five (35) acres. Its height at the apex is seventy-five (75) feet above the steps of the front door of the residence (facing the road) located near the southwest edge of the hill on the general level of the country. A creek channel at the northwest edge is eighty (80) feet or more below the summit. The long axis of the hill is east west, in which direction it is nearly one hundred (100) rods long, with varying cross-distances averaging a little more than half its length. The high part is near the east end, where the steepest slopes occur. A small basin lies at the foot of this east slope. The distance of the highest point is almost one-third ($\frac{1}{3}$) of the length of the pile from the east end, whence the slopes are much gentler to the western edge. The outline and form of this feature may be properly described as lobate, four leaves, including the west end, showing on the south side, and three on the north side not symmetrical with or opposite those on the south side.

In structure and material the hill is composed of sand, gravel, silt, clay lumps and a very few boulders. The rock fragments are igneous, or crystalline material in great variety, rounded and polished after the manner of stream-worn waste. It is very irregularly bedded with a generally abrupt pitch to the west, or in the direction of the long slope of the hill. The pebbles are not in many cases larger than apples or baseballs, very few exceeding four or five inches in any diameter. Beds of fine sand,



Shawnee Mound. Excavation in North Side showing Material and Arrangement.



Shawnee Mound. (From the South.)

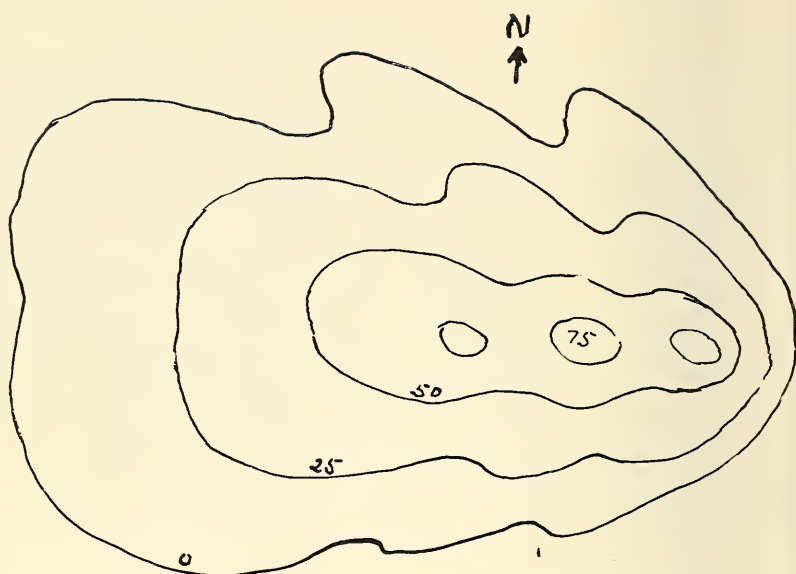
or even silt, are interstratified with layers containing the coarsest materials.

The best, probably the only, interpretation of the observed facts is, that this is a great alluvial cone built in or at the edge of the retreating ice sheet when its edge lay at the prominent Independence-Darlington Moraine, in the range of which this feature stands, although no other of its strong elevations appear in the immediately surrounding landscape, and not within two or three miles.

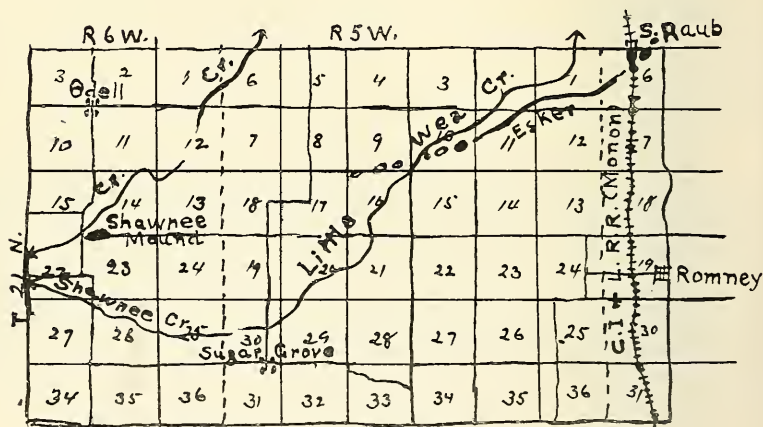
This great pile, for it is really quite impressive, represents the deposit of a stream of considerable volume flowing off or out of the ice at the time when the height or depth of the ice at this southwestern edge must have been not less than one hundred (100) and possibly several hundred feet. This stream flowed in a channel deep enough to confine it for a long time to this particular place. Possibly the channel was a deep canyon in the ice or a tunnel under it. As it heaped up the material at one point its course was diverted and a new direction of flow and construction was begun in true cone or delta building fashion.

An interesting question arises as to a possible relation between this hill and the gigantic South Raub Esker lying a few miles to the east northeast. The trend of this Esker is directly toward Shawnee Mound and the direction of the esker stream was southwest, but there is a gap of nearly five (5) miles, a distance as great as the length of the esker itself, between the west end of the esker and the Shawnee Mound cone, and no sufficient intermediate correlating features have as yet been found.

This discussion is presented to show the importance of detail work in interpreting the complex and little known phenomena of the great ice sheet.



Shawnee Mound.
Contours Generalized.



Shawnee Mound, S. Raub Esker & Drainage.

