

ancient or prehistoric. I have wondered often that this most feasible and certain evidence has never been sought by the believer in identity of the North American Indian with the lost tribes of Israel.

The prehistoric race of men in Europe and America belonging to the paleolithic age—the river drift man and the cave dweller—were of much greater antiquity than the mound-builders of the United States, and the savants of Europe seem now to be of the mind that he passed, whether by land or sea is immaterial, to America, and that the Western Hemisphere is peopled from this stock. They think they can trace similarities of implement, art and industry in the present race of Eskimos. How much it would add to the solution of the question to have the physical status of each and all these tribes settled by Anthropometry.

The scientific value of anthropometry is for comparison between different individuals, or tribes, or races of people. In order to accomplish this comparison the measurement must be accurate and done by the same system among all nations. If different systems be employed, the comparison cannot be made with certainty. The tendency of the American mind to invent new systems should be here repressed and we should adopt as universal the metric system of measurement.

ANCIENT MOUNDS AT FLOYD, IOWA.—On the west side of the Cedar River, one half mile east from Floyd, Iowa, are located a group of three ancient mounds. These mounds, instead of being located on the highest eminence in the region, as is most usually the case, are arranged in a slightly curved line, on a high but level space, fifty feet above, and two hundred and twenty yards back from the stream, and midway between two points (from fifty to sixty rods from each) which face the river, and rise from twenty-five to fifty feet above this level space. The ground, between the mounds and the Cedar, has a rather gently sloping surface. At this point the stream makes a bend to the east, and the mounds thus occupy a position on the south side. The north side of the stream is occupied by a steep, and somewhat broken, wooded bank, which affords a limited though beautiful bit of scenery to this place.

This area, as well as the surface of the mounds themselves, was originally possessed by a heavy growth of timber, but which was cleared away more than twenty years ago and the soil kept under the plow ever since. These mounds are low and circular, and twenty feet distant from each other. The

WEBSTER, CL. ANCIENT MOUNDS AT FLOYD, IOWA.
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east, or largest mound, is thirty feet in diameter, and was originally two feet high (so reported by Mr. Sharkey, who first cleared, and still owns the tract) although owing to degradation by the plow now rises only one and one half feet above the surface of the ground surrounding the mound. The two remaining mounds are smaller and lower than the first one. The third mound—there may be some slight doubt expressed regarding its origin, for the reason that in the south portion of it there is imbedded a drift boulder, weighing some seven or eight hundred pounds. This, however, may have been placed here by human hands in the long ago, or the mound may have been an intrusion upon the stone. A partial exploration of the two smaller mounds was made, but without discovering anything.

In making a thorough exploration of the larger mound, however, the remains of five human bodies were found, the bones, even those of the fingers, toes, etc., being, for the most part, in a good state of preservation. First, a saucer or bowl-shaped excavation had been made, extending down three and three-fourths feet below the surface of the ground around the mound, and the bottom of this macadamized with gravel and fragments of limestone. In the centre of this floor, five bodies were placed in a sitting posture, with the feet drawn under them, and apparently facing the north. First above the bodies was a thin layer of earth; next above this was nine inches of earth and ashes, among which was found two or three small pieces of fine-grained charcoal. Nearly all the remaining four feet of earth had been changed to a red color by the long continued action of fire.

All the material of the mound, above and around the bodies, had been made so hard that it was with great difficulty that an excavation could be made even with the best of tools. The soil around the bodies had been deeply stained by the decomposition of the flesh. The first (west) body was that of an averaged sized woman in middle life. Six inches to the east of this was the skeleton of a babe. To the north, and in close proximity to the babe, were the remains of a large, aged, individual, apparently that of a man. To the east and south of the babe were the bodies of two young, though adult persons. The bones of the woman, in their detail of structure, indicated a person of low grade, the evidence of unusual muscular development being strongly marked. The skull of this personage was a wonder to behold, it equaling, if not rivaling in some respects, in inferiority of grade, the famous "Neanderthal

PLATE VIII.

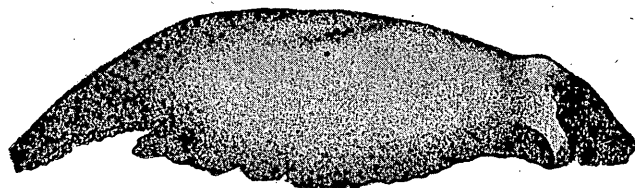


FIG. 1.

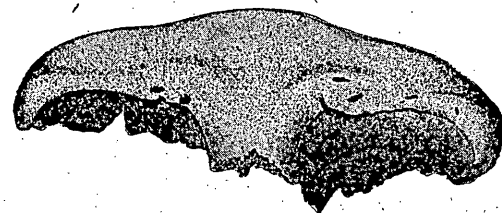


FIG. 2.

Fig. 1. A Lateral View of Skull of Mound Builder. Fig. 2. Front View of the Same. Both much reduced.

Skull." The forehead (if forehead it could be called) is very low, lower and more animal like than in the "Neanderthal" specimen. The two following cuts will illustrate this description.

This skull is quite small for an adult individual. The inner portions of the brow ridges are slightly prominent.

The distance from the lower portion of the nasal bone to the upper margin of the eye cavities is only four centimeters. A slight portion of this bone has, however, apparently been broken away.

The distance between the eye sockets at a point midway between the upper margin of the eye cavities and the lower portion of the nasal bone is two and three-fourths centimeters. Only that portion of the skull figured was found intact, the other portions being too much crushed by the weight of the earth from above to allow of a reconstruction of its parts. One of the jaws, containing well preserved teeth, was found. This was rather strong, but the teeth only moderately so. We were at first inclined to consider the strange form of this skull as due to artificial pressure while living, but a critical examination of it revealed the fact that it was normal, *i.e.*, not having been artificially deformed. The teeth of the babe were very small, and the skull thick, even for an adult person.

The next skeleton was that of a man nearly six feet in height. The crowns of all the teeth had been very much worn down, some of them even down to the bone of the jaw.

As before stated, the remaining bodies were those of young adult persons, the skull of one of which was small for a full-grown individual. No relics of any description were found with the human remains in this mound. This burial appeared to be a very ancient one, the limestone fragments in the floor of the excavation being nearly if not all decomposed.

In other mounds opened¹ on the same stream, at Charles City, six miles below, fragments of the same limestone was not infrequently found, but in no case was decomposition visible, except as a thin outer crust, although the human bones, which were usually more or less abundant, were in no case very well preserved, but on the contrary, often nearly or entirely decomposed. The fine preservation of the remains in the

¹ These mounds are thirty-one in number, an exploration of nearly all of which has been made by the writer and the results embodied in a paper soon to be published. A comparison of the method of burial practiced by the Mound Builders near Floyd, and by those of Johnson County, Iowa, (a description of which has been given by us in a paper on "Ancient Mounds in Johnson County, Iowa," and which has been in the hands of the printer for some time) will be of interest.

mound at Floyd was due to the method of burial. This being evidenced by the fact that over a small portion of one of the bodies the earth had not been so thoroughly packed, and as a consequence the bones were almost entirely decomposed away, while the other portion of the body over which the soil had been very firmly packed was well preserved. Judging from all facts gathered, it seems not improbable to suppose that this represented a family burial.

The question has been raised, "How was it that these five persons were all buried here at the same time, their bodies being still in the flesh?" As we have no reason to suppose that these ancient people possessed any means for preserving, for any length of time, in the flesh, the bodies of their dead; it seems plausible to suppose that these individuals were all swept off at about the same time by some pestilence, or else, upon the death of some dignitary of the tribe or people (perhaps represented by the remains of the old man) the other members of the family were sacrificed, similar to the custom which has prevailed among some ancient tribes or races of historic times.

On the same stream, a short distance below this mound, several other mounds occur which promise to yield interesting results, and which we purpose to explore as opportunity offers.
—CLEMENT L. WEBSTER, *Charles City, Iowa.*

MICROSCOPY.¹

THE EGGS OF PETROMYZON.²—1. Artificially fertilized eggs were treated with Flemming's fluid, containing a larger admixture of osmic acid than is prescribed in the original formula.

2. After 30 minutes the eggs were washed in distilled water, passed through 30% and 70% alcohol (3 hours in each), and preserved in 90%.

3. The eggs were cut in paraffine, the sections fixed to the slide with albumen, stained with safranin, and mounted in xylol balsam.

¹ Edited by C. O. Whitman, Director of the Lake Laboratory, Milwaukee.

² A. A. Böhm, *Arch. f. Mikr. Anat.*, xxxii. pp. 634-5.