

# THE WISCONSIN MOUNDS

INTERESTING RELICS OF PRE-HISTORIC CIVILIZATION.

ELABORATE SYSTEMS OF DEFENSIVE WORKS—MADISON THE CENTRE OF AN ANCIENT RACE—THEIR BURIAL PLACES AND THEIR WEAPONS.

MADISON, Wis., Aug. 9.—The largest prehistoric work in this State heretofore described, and of which the Smithsonian Institution has published a complete report, is Fort Aztalan, near Lake Mills, so named from the pyramidal mounds found there, which greatly resemble those found in Mexico. But without doubt the most stupendous and elaborate system of defensive works in the State are found in the vicinity of this city. The celebrated mounds of Ohio and Indiana can bear no comparison either in size, design, or the skill displayed in their construction with these gigantic and mysterious monuments of earth—erected we know not by whom, and for what purpose we can only conjecture. That the unknown race was semi-civilized is certain, as art of a high type flourished among them. Carving in stone, especially, was brought to a high degree of perfection. The art of weaving and dying cloth was known and practiced, the color used being invariably red.

Madison was in ancient days the centre of a teeming population numbering not less than 200,000 souls. It is situated on the northern end of a chain of five lakes, between Lakes Mendota and Monona, and extending south to Lake Wingra. It is built on a chain of hills which slope gently down to the water's edge or end in high bluffs. This was the mound builders' paradise in bygone ages, and the region has lost none of its natural beauty.

On the land of George Catterson, seven miles south of Madison, is a prehistoric fort. It occupies the summit and southeast side of a huge hill overlooking Lake Kegonsa. It is bounded on the east by a marsh and the cliffs of the lake on the south. It is undoubtedly a strong position for defense. The fort is square in shape. Its four outer walls are each 400 feet in length, and from the centre of each side high walls, 300 feet long, stretch out. Inside the fort, about ten feet from the first line of breastworks, extends a second, parallel to the others. In this line gates were left in the corners, and these were protected by round mounds, the tops of which show evidences of fire, for a few inches below the surface are found quantities of charcoal. In the centre are three mounds in a direct line, connected with each other by a thin bank of earth. The tops of these mounds are sunken, showing that they served the purpose of "caches," being hollow, but in the lapse of ages the tops have caved in.

Scattered about inside the second line are six rows of earthworks about twenty feet long. A group of seventeen burial mounds occupied the northeast corner of the fort, arranged in the shape of a turtle. Two of these were opened and interesting finds made. In the first mound opened a layer of forest mold six inches in thickness was first removed; then seven feet of yellow clay was penetrated and a thick bed of ashes and charcoal, in which were scattered arrow heads of flint, and pottery prettily ornamented in various patterns was brought to light. Below this was a foot of clay so hardened by the fire as to turn the edge of a spade. Beneath this was a rudely made coffin of large flat stones probably brought from the lake.

Upon being opened this coffin was found to contain a large-sized skeleton in a sitting posture, the earth within the coffin having held it in shape. The hardened clay above prevented the least moisture from entering, thus preserving the bones in fairly good condition. At the side of the body was found a curiously-carved pipe, in shape resembling a human head with peculiar characters rudely cut on the sides. Near the right hand was an axe of banded slate in the form of an ancient double-edged battle axe, a number of arrow heads, and a gorget of slate. Near the feet was a jar of pottery, which was filled with a black mold. This jar was unfortunately broken by one of the workmen while handling a spade. Another mound a few feet away contained a number of arrow heads and two axes of the usual grooved form, but no bones. In a mound opened in the western corner of the fort was found a square implement of slate, very highly polished, with a hole drilled through the centre.

Altogether, the fort occupies about fifteen acres. It is now covered with a second growth of trees, but that there was once an older growth is shown by the stumps of former forest giants found here and there. Outside the fort the ground has been plowed, and it is shown that there stood the village under the shelter of its walls. Pottery, arrow heads, broken axes, and flint spades are found here in profusion, as well as great numbers of nodules of iron ore. Indeed, the whole vicinity shows the presence of iron ore in large quantities.

The burial place of the town was situated on the land now owned by William Colloday, where there are seventeen burial mounds within the defenses. A few feet below the surface of one of these mounds a round implement of stone, around which a slight groove was made, running completely around both ways, thus dividing it into quarters, was found. Upon it are rude characters resembling bird tracks. A highly-polished, pear-shaped instrument of iron ore, with a very small groove at the lesser end, was also uncovered.

A short distance from the fort, to the northeast, on the farm of Erick Dierson, are found strange ovens or fireplaces. All over the field can be noticed stones laid in circles, about three feet in diameter. These, upon being opened, show a cavity about three feet deep, in the shape of an inverted cone, and the sides are carefully walled up with flat stones. Around the edge, on the top of the ground, a space of about six inches was left bare. This ran around the mouth, and outside of it the circle of stones mentioned was placed. Inside of these fireplaces were large quantities of charcoal. The owner of the land also found seventeen pounds of lead ore in one of these ovens, of which there are about fifty. On this piece of land, on the banks of the Yahara River, is a large mound in the shape of a war club. This mound was partly opened, and was found filled with particles of lead ore. The mud on the river banks was also covered with fine particles of lead ore, which shine like diamonds in the sunlight. All the works described are associated with the people of the fort, as all are undoubtedly the work of the mound builders.

Following the Yahara River northward to its outlet to Lake Monona the stream narrows down to a width of only a few yards. Breastworks were erected on each side of the banks, thus making it impossible for a party to gain an entrance into that lake even should they escape the fort further down. Signal stations were established on each hill of the range, so that word could be sent from Stoughton to Westport, a distance of over thirty miles, in twenty minutes. One of these stations was situated on the high hill overlooking and separating Lake Wingra and Lake Monona. The ground is baked hard from the watch fires. Chipped flints, a few arrow heads, and pieces of pottery were found lying a few inches beneath the surface.

In opening a new road through the hill a landslide occurred, exposing a hollow place about six feet square, which contained the skeleton of a person who must have been a giant in his day. Beneath the hand was an axe of syenite, finished with great skill and very nicely polished and grooved, which weighed five pounds. Further along the hill are six burial mounds. This ends the line of prehistoric works on this side of the city, leaving an open space of over two miles.

Crossing the Yahara on the northern limits of the city the line of fortifications again appears. The breastworks run parallel to the lake and are about two hundred feet in length. A large number of modern Indian graves are situated on the outside of the walls. Inside the fortification rises a sacrificial mound to the height of fifteen feet. Upon excavating this mound there was found an altar built of rough stones, on top of and around which were immense quantities of charcoal and ashes and a pipe-shaped object of slate. A short distance to the north, and seemingly guarding the works, is the chimney of an elk over one hundred feet in length, in front of which small round mounds of sand were placed, but when opened they were found to contain nothing of any interest. One hundred yards from this spot was a pottery manufactory, which, judging from the number of fragments lying around, must have supplied the greater part of the country. The lake at this point throws up great quantities of fresh-water clams. The shells were ground to powder and mixed with sand and clay found on the banks, and this, when baked hard, was formed into vases, jars, and other utensils, many of which are of beautiful patterns and exhibit a high artistic taste on the part of the designer. The soil in this vicinity is almost completely covered with fragments of pottery. The effigy of some animal bearing a very good resemblance to an elk is situated a few hundred yards northward, in front of which are two small mounds, a foot high and three feet across, made entirely of sand.

In an examination of the Wisconsin State Hospital grounds attention was first given to the so-called "Eagle Mound." This mound resembles an eagle with expanded wings, and is very perfectly formed. The body measures 100 feet in length and the expanded wings 300 on each side of the body. The tail is 40 feet wide, and the beak is 15 feet in length. Three similar bird mounds are situated in the immediate vicinity. Near the left wing of the "Eagle Mound" is a gracefully-formed mound in the shape of a deer with branching horns, and further to the north are bear, squirrel, and turtle mounds, and others in the shape of animals now extinct.

Works of defense crown the summit of the hill a hundred yards further on, and a large number of burial mounds are found there. There is evidence of its occupation by two different and entirely separate races. While the one erected mounds over the dead and placed them in a sitting posture facing the east, the other buried them a foot or two below the surface, where the

caving in of the lake bank every year exposes them to view.

In the open field, on Lake Mendota's shore, between the Yahara River and ex-Gov. Farwell's house, was once the battlefield in the olden time. To the north extended an almost impassable marsh, while on the southern side a steep hill rises up from the lake shore 150 feet in height. On the topmost point stands a lookout mound, from whose summit one can command a view of the country for miles around. Long lines of fortifications extend along the lake shore, rising tier above tier, almost to the summit, one being over fifteen hundred feet in length. Crowning the top are two altar mounds from which rose the smoke of sacrifices offered to the red men's god. The ground is baked as hard as a rock from these fires.

In bygone ages a terrific combat took place upon this open field. The place is strewn with the debris of the battle, a person living near by having picked up hundreds of arrow heads and many axes. Every axe picked up is broken. After the fight an excavation was made near the shore about ten feet square, which, after being lined with a peculiar substance, served the purposes of a huge coffin. In this mortuary chamber were deposited the dead. The ground near the pit is covered with flint chips, showing that weapons were manufactured on the spot to deposit with the fallen, who until this year reposed in peace. Many skeletons were found in the bank, and wherever a cave-in occurred from the encroachment of the waves more were exposed to view. This Spring the chamber was reached and exposed, but the wind in a week's time has almost wholly choked it with sand. A high mound 600 feet long was erected over the dead. A similar one, horseshoe shaped, measures 1,100 feet in length. It is close beside the one described and probably contains other victims of the fight. Nearly every skull in good enough preservation to be examined shows marks of violence, the cleft of the tomahawk or the fracture caused by an arrow, which in one or two instances was found imbedded in the skull.

In the construction of the mounds in this vicinity great care was taken to remove even the smallest stone from the material used except when placed there for a purpose. A tumulus opened on the Wisconsin Hospital grounds showed stones placed in position to form a neat pattern running from the top to the bottom, and beneath this was placed the body. This vicinity gives evidence of a long occupation and a very large population. The fireplaces showed different strata of cinders and ashes, and the lower the excavations are pushed the ruder the forms of the pottery disclosed. Calcined bones split to extract the marrow are scattered through the mass.

In the construction of the mounds, the earth was brought from long distances, and differs entirely in character from the native soil. Stratification was universally practiced in building. Two forms of burial were employed. Some were buried with their weapons in the ordinary manner, while others were cremated. In no case were any weapons found with a cremated body, but only ornaments and pottery were placed within the tomb. Some were provided with rude coffins, while others were buried without them, and the clay firmly placed about the body and burned into a mass nearly as hard as brick. A number of the peculiar flintlike bones found in the head of *Haplodonotus grunhius*, a fish extinct as far as these lakes are concerned, are frequently found in the mounds here.

Many implements of copper, consisting of beads, disks, spears, arrows, and axes, are found. Some of these appear to have been cast, others are hammered into shape and contain nuggets of silver imbedded in the sides. All are tempered by some unknown process. Ornaments of shell are also common, but when dug out they invariably crumble away. They have the appearance of having been ground, and small holes were drilled through them. Many rare and wonderful articles of chipped flints are excavated, needles of stone one-half an inch in length, with the base a quarter of an inch long, from which a point of chipped flint as fine as a needle extends. They are very fragile. Articles for drilling holes in pipes and soft stone are found occasionally. There are flints worked as round as a lead pencil, some straight and others with a variety of bases. A few double-borers were discovered, these having a place for the hand in the centre, while each end was worked into a sharp point.

Fifteen different types of arrow heads were found, among the most important being those used in war. They are made triangular in form and with serrated edges, and were fitted loosely into a reed. When these projectiles entered the body the first effort would naturally be to attempt to draw them out, but the loosely-fitted head of flint would remain in the wound, the toothed edges working it further and further inward, and would eventually cause death. Another form has the edges beveled, which would give a rotary movement, and was an instrument designed to give a terrible wound. Instruments are found for skinning animals. They are in the same form as arrow heads, but they have wide blunt tips. The bases are notched for inserting into a handle. All knives discovered are of fine workmanship. Some are made of jasper and other fine material. Some of these knives are over nine inches in length.

Axes are in two styles; some long and polished without grooves, and others shorter and thicker with grooves. Occasionally a unique and beautiful form is met with, some of them so delicate as to be unfit for service. Pipes are discovered having two bowls, and are made of baked clay and stone. More rarely are found specimens in which Catianite (sacred pipe-stone) is the material used. These are often worked into weird and fantastic shapes.

These mounds all belong to a continuous system extending for over fifty miles through the State, and two distinct lines cross each other, forming a huge Saint Andrew's cross, guarded by forts at each corner. While scientific men have long been aware of the existence of these wonderful works, nothing has been done in the way of obtaining an accurate description or of obtaining a better knowledge of them. Every year the plow is laying them low, and persons ignorant of their value in the eyes of science are destroying not only the mounds themselves, but also the relics contained in them, and in a few years they will have disappeared entirely.