

The "ancient city of Aztalan" has long been known, and often referred to, as one of the wonders of the western world. Many exaggerated statements respecting the "brick walls" supported by buttresses, the "stone arch," &c., have been made; for all of which there is little foundation in truth. The remains were discovered in October, 1836, and hastily surveyed in January, 1837, by N. F. Hyer, Esq., who soon afterwards published a brief description of them, with a rude wood-cut, in the *Milwaukee Advertiser*, the first, and then the only newspaper, in this part of the country. This survey was made before there were settlements in the neighborhood, and was done in a cursory manner. The brief account, however, as published, gave a very good general idea of the works; and has been the foundation of all subsequent plans and descriptions up to the present time.

Mr. Taylor's description¹ was furnished by a friend, who only made a brief visit to the works, accompanied by Mr. Hyer, and added but little to our knowledge of these ruins; though it was published in a more permanent and accessible form, and hence is more generally known and referred to. Messrs. Squier and Davis have condensed this description, and copied the plan in their work, in the first volume of the *Smithsonian Contributions* (page 131, Plate xlv, Fig. 1), with a number of judicious suggestions as to the nature of the walls, the object of the "bastions," &c. By comparing the plan and description thus given with what follows, the curious reader may trace the differences, and discover wherein the first fell short of presenting the whole truth.

The name Aztalan was given to this place by Mr. Hyer, because, according to Humboldt, the Aztecs, or ancient inhabitants of Mexico, had a tradition that their ancestors came from a country at the north, which they called Aztalan; and the possibility that these may have been remains of their occupancy, suggested the idea of restoring the name. It is made up of two Mexican words, *atl*, water, and *an*, near; and the country was probably so named from its proximity to large bodies of water.² Hence the natural inference that the country about these great lakes was the ancient residence of the Aztecs.³

Reference to Plate XXXIV will show that the main feature of these remains is the inclosure or ridge of *earth* (not *brick*, as has been erroneously stated), extending around three sides of an irregular parallelogram; the west branch of Rock river forming the fourth side on the east. The space thus inclosed is seventeen acres and two thirds. The corners are not rectangular; and the embankment or ridge is not straight. The earth of which the ridge is made was evidently taken from the nearest ground, where there are numerous excavations of very irregular form and depth; precisely such as may be seen along our modern railroad and canal embankments. These excavations are not to be confounded with the hiding-places (*caches*), of the Indians, being larger and more irregular in outline. Much of the material of the embankment was doubtless taken from the surface without penetrating a sufficient

¹ Silliman's *Am. Journal*, XLIV, 35.

² J. Delafield, Jr., *Antiquities, &c.*, p. 107.

³ Buschmann (*Ueber d. Aztek. Ortsnamen*, p. 6) says the name *Aztlan* is composed of the lost word *aztli* and the local termination *lan*.—*Secretary S. I.*

depth to leave a trace at the present time. If we allow for difference of exposure of earth thrown up into a ridge and that lying on the original flat surface, we can perceive no difference between the soil composing the ridge and that found along its sides. Both consist of a light yellowish sandy loam.

The ridge forming the inclosure is 631 feet long at the north end, 1,419 feet long on the west side, and 700 feet on the south side; making a total length of wall of 2,750 feet. The ridge or wall is about 22 feet wide, and from one foot to five in height.

The wall of earth is enlarged on the outside, at nearly regular distances, by mounds of the same material. They are called buttresses or bastions; but it is quite clear that they were never designed for either of the purposes indicated by these names. The distance from one to another varies from sixty-one to ninety-five feet, scarcely any two of them being alike. Their mean distance apart is eighty-two feet. They are about forty feet in diameter, and from two to five feet high. On the north wall, and on most of the west wall, they have the same height as the connecting ridge; but on the south wall, and the southern portion of the west wall, they are higher than the ridge, and at a little distance resemble a simple row of mounds.

On the inner side of the wall, opposite many of these mounds, is a slight depression or sinus; possibly the remains of a sloping way by which the wall was ascended from within the inclosure.

The two outworks, near the southwest angle of the great inclosure, are constructed in the same manner; but both these mounds and the connecting ridge are of smaller dimensions. The ridge or way connecting the mounds at *a* and *c*, has something of the same general character, though still more obscure. When viewed from the road, a short distance west, these outworks would be supposed to be nothing more than a few circular mounds. The connecting ridge, at least, is too insignificant to be mistaken for the walls of a fort, or other work of defence. Whether these walls are only a series of ordinary mounds, such as are found all over the western country, differing only in being united one to another, it may perhaps be difficult to decide. They may possibly have been designed for the same and for other purposes.

On opening the walls near the top, it is occasionally found that the earth has been burned. Irregular masses of hard reddish clay, full of cavities, bear distinct impressions of straw, or rather wild hay, with which they had been mixed before burning. These places are of no very considerable extent, nor are they more than six inches in depth. Fragments of the same kind are found scattered about; and they have been observed in other localities at a great distance from these ancient ruins.

This is the only foundation for calling these "*brick walls.*" The "*bricks*" were never made into any regular form, and it is even doubtful whether the burning did not take place in the wall after it was built. The impression of the grass is sometimes so distinct as to show its minute structure, and also that it was of the angular stems and leaves of the species of *carex* still growing abundantly along the margin of the river. As indicating the probable origin of this burned clay, it is important to state, that it is usually mixed with pieces of charcoal, partially burned

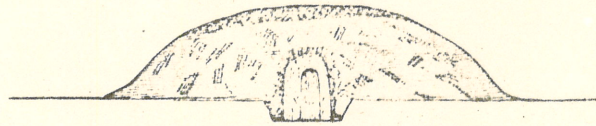
bones, &c. Fragments of pottery are also found in the same connection. The walls and mounds are composed of a light colored clay, which becomes red on being slightly burned.

From all the facts observed, it is likely that clay was mixed with the straw, and made into some coarse kind of envelope or covering, for sacrifices about to be consumed. The whole was probably then placed on the wall of earth, mixed with the requisite fuel, and burned. The promiscuous mixture of charcoal, burned clay, charred bones, blackened pottery, &c., can only in this way be satisfactorily accounted for. The pottery was broken before it was buried, for the fragments were scattered about in a manner that clearly shows that the vessels were not entire.

A shaft was sunk by us in the sixth mound from the northwest angle on the west wall. A fragment of galena (sulphuret of lead), and another of iron ore used as red paint, and worn smooth, perhaps by long use in adorning the faces of the red men, were near the surface, and were the only articles found. No burned clay was on this mound, and we soon discovered that it is only in a few places that this substance exists. The earth was here a yellowish sandy loam, entirely free from spots of black mould; thus showing that it was built exclusively from the *subsoil* of the adjacent grounds. The builders had carefully removed the black soil before they commenced the erection of this mound. Our shaft was sunk some distance below the original surface. Two of the smaller mounds in the interior were also opened, but without results of any interest.

The mound, or projection, or buttress (whichever it may be termed), at the northwest angle of the inclosure, proved to be one of some interest. (See Fig. 14.) After

FIG. 14.



Section of the northwest corner mound, Aztalan.

removing the sods with which it was covered, we came upon fragments of pottery, charcoal, half-burned human bones, and numerous amorphous masses of burned clay scattered loosely and promiscuously about in the earthy materials of the mound. This continued to the depth of one foot only; below, the earth was quite uniform in appearance, though still showing incontestable proofs of art. Occasional fragments of clay, charcoal, and fresh-water shells almost entirely decayed, were observed as we proceeded. Still deeper we found a cavity which was nearly filled with *loose* earth, in which were indications of bones very much decayed and charcoal. This was divided below into two other cylindrical cavities, extending beneath the original surface of the ground, and filled with the same loose materials.

Two bodies had doubtless been buried here in the sitting posture, near each other, enveloped and covered, perhaps, by some perishable substances, which had decayed and left the cavity above; and this shows that the mounds at Aztalan, though constituting an inclosure, were used for burial purposes, as were other ordinary circular mounds.

Within this inclosure the ground descends towards the river more abruptly near the western wall, forming a kind of second bank, and then with a smooth even surface. This slope is interrupted only by a natural swell or eminence, shown at *c*, Plate XXXIV. The highest point in the interior is at the southwest corner, and is occupied by a square truncated mound, that, when seen from the high ground at *c*, presents the appearance of a pyramid, rising by successive steps like the gigantic structures of Mexico. (See section on Plate XXXIV.) This was doubtless the most sacred spot, as well as the highest. It will be observed that the inclosing walls curve around this pyramid, as if constructed afterwards, and made to conform to the shape of the ground. It is also further guarded by the two outer walls before described.

The level area on the top was fifty-three feet wide on the west side, where, in consequence of the slope of the ground, it has the least elevation; and it was originally, in all probability, a square of this size. On other parts of the mound the sides are high and steep; and the abrading effects of time have acted most upon the summits. There appears to have been a sloping way leading from the top of this mound towards the east; but if so, it has now dwindled to a slight elevation or swell on that side. This road-way was connected with a ridge before alluded to, extending towards the prominent point *c*. From this last point there is a gradual and easy descent to the river. These level-topped mounds may have been the foundation only of some structure of more perishable materials. From the summit of the two high places, and especially from that at *a*, the whole works, and quite an extent of surrounding country, can be seen.

At the northwest angle of the inclosure (*b*) is another rectangular, truncated, pyramidal elevation, of sixty by sixty-five feet level area on the top, with remains of its graded way, or sloping ascent, at the southeast corner, leading also towards a ridge that extends in the direction of the river. This mound occupies the summit of the ridge or bank before spoken of, though it rises but little, if any, above the top of the adjacent walls. It has been partially destroyed by persons curious in antiquarian research, and by one who, it is said, had been *supernaturally* convinced that a large amount of money was deposited in it!

There is another square structure (at *d*), which is level on the top; but as it stands on sloping ground, and has but little elevation, it runs to a grade even with the surface on the upper side. Just at this point a small mound has been erected, perhaps at a subsequent time, and by a different tribe or nation of people.

The analogy between these elevations and the "temple-mounds" of Ohio and the Southern States, will at once strike the reader who has seen the plans and descriptions. They have the same square or regular form, sloping or graded ascent, the terraced or step-like structure, and the same position in the interior of the inclosure. This kind of formation is known to increase in numbers and importance as we proceed to the south and southwest, until they are represented by the great structures of the same general character on the plains of Mexico.

In this inclosure are ridges usually about two feet high, as represented on the plan. The rings or circles connected with them constitute a very peculiar feature, and are supposed to be the remains of mud houses; the materials of the walls having fallen, leaving only a circular mound of earth to mark their original

site.¹ No ridge exists along the river bank, as represented on Mr. Hyer's plan; the steepness of the bank probably rendering artificial works unnecessary for the purposes of the builders. Some of the interior ridges, it will be observed, are enlarged at intervals; thus showing an analogy with the main walls and outworks.

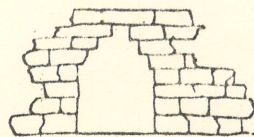
There are two excavations (*e* and *f*), the first triangular, and the last circular, which, from their greater depth and regular shape, as well as distance from the walls, were probably not made in the process of obtaining materials for the structures. The excavation at *e* is so deep, and the soil so tenacious, that water stands in the bottom much of the time, affording a place for the growth of flags² and other aquatic plants. Perhaps the bottom may have been rendered water-tight by artificial means. Undoubtedly it was once much deeper than at present; the tendency of rains and the accumulation of vegetable matter being to fill it up. The circular excavation (at *f*) is surrounded by a ridge consisting, doubtless, of the materials thrown out in the digging.

Near this point are some springs in a small ravine cut into the bank by the passage of water to the river. This ravine serves also as the outlet of the surface water from within this part of the inclosure. A few stones left along the sides and bottom of this ravine (the force of the water not being sufficient to remove them with the lighter particles of the earth), is all the evidence that could be found of an ancient sewer "arched with stone." It is quite clear that no such arch existed; nor is there any indication that the aboriginal inhabitants of the American continent were acquainted with the nature of the arch.³ If they were, they certainly did not apply such knowledge in the construction of any works at Aztalan.

¹ We are told by Catlin that "the village of the Mandans has a most novel appearance to the eye of a stranger; their lodges are closely grouped together, leaving just room enough for walking and riding between them, and appear from without to be built entirely of dirt. They all have a circular form, and are from forty to sixty feet in diameter. Their foundations are prepared by digging some two feet in the ground, and forming the floor of earth by levelling the requisite space for the lodge. The superstructure is then produced by arranging inside of this circular excavation, firmly fixed in the ground and resting against the bank, a barrier, or wall of timbers, about six feet high, placed on end, and resting against each other, and supported by a formidable embankment of earth raised against them outside. Resting on the tops of these timbers are others of equal size, rising, at an angle of 45°, to the apex or sky-light, which is about three or four feet in diameter, answering also as a chimney. On the top of or over these poles or timbers, is placed a complete mat of willow boughs, of half a foot or more in thickness, that protects the timbers from the dampness of the earth with which the lodge is covered from bottom to top, to the depth of two or three feet, having above all a hard or tough clay which is impervious to water."—N. Am. Indians, I, 81.

² *Iris versicolor*.

FIG. 15.



Arched Door, Uxmal (Stephens).

³ Even in Yucatan and Central America, where the aboriginal buildings display the greatest advance in architecture, the arch was not used; its substitute being stones laid horizontally, and made to overlap, as represented in Fig. 15.—Stephens's Yucatan, I, 429.

Nearly the whole interior of the inclosure appears to have been either excavated or thrown up into mounds and ridges; the pits and irregular excavations being quite numerous over much of the space not occupied by mounds. This want of regularity is opposed to the opinion that these excavations were for the *cellars* of buildings, as suggested by some.

In a letter from Mr. J. C. Brayton, of Aztalan, he says: "Several feet below the surface of the large square mound near the northwest corner of the inclosure was found, a number of years ago, what appeared to be the remains of cloth, apparently enveloping a portion of a human skeleton. Its texture was open, like the coarsest linen fabric; but the threads were so entirely rotten, as to make it quite uncertain of what material they were made.¹

"Numerous fragments of earthenware have been taken from the mounds at different times: portions of broken vessels, varying in size (judging by the curve of the fragments), from a few inches to three feet across the rim.

"A number of rusty gun-locks, in scattered fragments, have been discovered at or near the surface of the ground; and pieces of iron, copper, and brass, have been found in the neighborhood. But all these, being relics of the recent Indian population, fail to throw any light upon the great questions of who made these works, and for what purpose were they constructed. The Winnebagos, the last occupants of this interesting locality, always answer in the negative by a significant shake of the head, when asked if they can tell who erected the mounds."

Mr. Brayton, who has resided in the vicinity of these works since their discovery, is of the opinion that none of the mounds have sensibly changed from natural causes since the first settlement of the country in 1836.

Our examination of the tumuli exterior to the inclosure led to no very important results. The third from the north end of the long row, seen on the plate (about four feet high and thirty feet in diameter), was penetrated to the bottom, and the opening enlarged below in every direction. A post (apparently tamarack) had been inserted, and was now all decayed, except a portion near the bottom.² This may have been set in since the building of the mound, which was composed of black and yellow soil intermixed, having beneath gravel composed mostly of limestone pebbles. If these smaller tumuli ever covered any deposits, they are now so completely decayed that not the least trace of them can be discovered.

While at Aztalan we were informed that upon opening one of the larger mounds some years ago, the remains of a skeleton were found, inclosed by a rude stone

¹ This is probably the same that was forwarded by Dr. King to the National Institute of Washington.—See Silliman's Journal, XLIV, 38.

² This post may have been the remains of a medicine pole, such as was erected by the Mandans. According to Mr. Catlin, the Mandans were in the habit of erecting mounds of earth near their villages about three feet high, around which were arranged in circles the skulls of the dead, after their bodies had decayed on the scaffolds. On each mound was erected a pole, hung with articles of mysterious and superstitious import. Something of this kind may be the origin of the numerous smaller mounds in Wisconsin, in which no traces of artificial or human deposits could be found.—See N. Am. Indians, I, 190.

wall, plastered with clay, and covered with a sort of inverted vase of the same materials.

A number of these mounds have been opened at different times, and their contents, having been carried away to various parts of the world, cannot now be recovered.

With the view of ascertaining the contents of the larger elevations for ourselves, we selected one in Mound Street, ten feet in height, and sixty feet in diameter at the base, into which a trench four feet wide was dug, extending from the south side to beyond the centre, and down to the subsoil or stratum of gravel that underlies the superficial covering of vegetable mould.

The earth was quite uniform throughout; consisting of dark-colored mould and yellowish sandy loam, mixed in small quantities. Ashes, mingled with charcoal, were observed as we went down, and occasionally fragments of human bones. No skeleton was found; no stonework or earthenware—no stone or metallic implements of any kind could be discovered. Bones of some burrowing animals, and the remains of a fish were taken out. Fragments of rotten wood, apparently oak, were found at all depths. They were not charred, nor did they appear to have had any definite arrangement, but were confusedly placed, as if carelessly thrown upon the mound during the progress of its construction.

From the oft-repeated indications of fire at various depths, we could draw no other conclusion than that this was a "mound of sacrifice," and that at each repetition of the ceremony an addition was made to the height of the mound.

The gopher¹ often burrows in the artificial tumuli to find a dry place for its nest; and roots of trees penetrate to their lowest depths.

The question naturally arises in the mind of the observer, For what purpose was this great inclosure made? Mr. Hyer called it a citadel, and it is usually termed "the fort," and supposed to be a work of defence—a place to which the mound-builders resorted for safety when hard pressed by an enemy. Various reasons have been assigned for this supposition. Its connection with the river, affording a means of supply to the besieged—its buttresses or bastions—its out-works—its watch-towers—might all seem to convey the idea of a military work or a fortification.

Although when we attempt to describe these remains, the technical terms of military men are found convenient, and sometimes applicable; yet the "fort," the "buttresses," the "bastions," &c., have but remote resemblance to such constructions. Expressions like these often lead the superficial observer and reader astray, and may have done so in this case.

Messrs. Squier and Davis show very conclusively that the circular projections on the exterior of the walls could not have been intended for bastions.² It is equally clear that a ridge of earth twenty-two feet wide and five feet high, does not need the support of buttresses.

¹ The name here universally applied to the thirteen-lined marmot (*Spermophilus tridecemlineatus*).
² Smithsonian Contributions, I, 132.

But this fort is entirely commanded from the summit of a ridge extending along the west side, nearly parallel with (see Plate XXXIV), and much higher than the west walls themselves, and within a fair arrow-shot; so that an enemy posted on it would have a decided advantage over those within the defences. This ridge would also constitute an excellent breastwork to protect an enemy from the arrows or other weapons shot from the supposed fort. As if purposely to assist an approaching enemy, a number of mounds have been erected along the ridge, affording secure hiding-places and look-out stations, very convenient to the attacking party. These may, however, have been erected at a more recent date.

Again, the large mounds of the remarkable row northwest of the inclosure are not in connection with it, but are excellent points from which to reconnoitre and annoy the occupants of the supposed fortress.

From the summit of the ridge before alluded to, as will be seen by the sections on Plate XXXV, the ground descends towards the river; so that the inclosure is on a declivity, and is thus commanded from the opposite side of the river. Here, again, as if purposely to render aid and comfort to an enemy, a breastwork is erected, extending along the margin of the stream, from behind which arrows or other weapons could be thrown directly into the fort by persons lying in perfect security.

From the skill exhibited by the mound-builders in their works of defence in other portions of the West, we cannot imagine that they would construct such a fort as this; we might at least expect that the walls would be extended so as to include the ridge parallel to it. There is no guarded opening, or gateway, into the inclosure. It can only be entered by water, or by climbing over the walls.

The only ancient work resembling this in its general features heretofore described, is that of Tuloom, in Yucatan, of which an account is given by Mr. Stephens, and quoted by Mr. Squier.¹ This is an inclosure of about the same dimensions, and bounded on the east by the sea; it consists of a loose stone wall, with watch-towers at the two west corners, corresponding with the two large pyramidal mounds at Aztalan, except that they are placed on the walls.

Mr. Stephens represents this as a walled city; but it must be admitted that only a very small city can be included in a space fifteen hundred by six hundred and fifty feet, or twenty-two and a half acres. Mr. Squier thinks that this structure was erected for some sacred object, though used, probably, as a place of defence in a last resort; and, in view of all the facts before stated, it may be inferred that the inclosure at Aztalan was intended for similar purposes, and not primarily occupied as a place of defence.

We may suppose it to have been a place of worship; the pyramidal mounds being the places of sacrifice, like the teocalli of Mexico. From its isolated situation—there being no other similar structure for a great distance in any direction—we may conjecture that this was a kind of Mecca, to which a periodical pilgrimage was

¹ Yucatan, II, 396; *Aboriginal Monuments of New York*, p. 98, in *Smithsonian Contributions*, Vol. II. In the accompanying figure the arrow, indicating the cardinal points, is reversed.

prescribed by their religion. Here may have been the great annual feasts and sacrifices of a whole nation. Thousands of persons from remote locations may have engaged in midnight ceremonies conducted by the priests. The temple, lighted by fires kindled on the great pyramids and at every projection on the walls, on such occasions would have presented an imposing spectacle, well calculated to impress the minds of the people with awe and solemnity. That these works were designed for some such uses, seems quite probable.

Plate XXXV represents the same structures on a smaller scale, and shows their relation to the neighboring country. It will be seen that, excepting a few mounds, no other artificial works are connected with the great inclosure; nor do these present that variety of imitative forms so common in other localities. Half a mile off, in a southwesterly direction, is a square pyramidal mound, similar to those within the inclosure.

Do not these facts warrant the suggestion that the people of Aztalan, in Wisconsin, were a different people, in many respects, from those who erected the animal-shaped mounds? This location may possibly have been occupied by a colony of Mexicans; since we know that colonies were sometimes sent out by that singular people.¹

It is much to be regretted that the efforts heretofore made to preserve these very interesting remains of the labors of an extinct race are likely to fail. At the time of our survey, a crop of wheat was growing on the south part of the great inclosure; and, in a few years, but slight traces of this part of the works will be left. The north part is still in its original condition, except where excavations have been made by persons curious in such matters, or by the *money-diggers*!

Would it not be well to select some of the more important monuments, and, by purchase of the ground, or other means, secure their permanent preservation? Unless something of this kind is done, and speedily, all knowledge of them will be confined to the scanty records of those who have attempted to describe them.

SECTION III.

ANCIENT WORKS OF THE VALLEY OF ROCK RIVER, ABOVE THOSE AT AZTALAN.

In the valley of Rock river we find no traces of ancient works for some distance above Aztalan; the first being in the town of Ixonia (section nineteen, township eight, range sixteen). Here are seven or eight mounds along the right bank of the river, on an elevated position, as usual, commanding a fine view of the river above and below. There are said to be others in the vicinity.

One of them has been opened for the purpose of making a place in which to bury potatoes, to secure them from the frosts of winter. Numbers of human bones are said to have been thrown out from near the bottom, where the earth had been hardened by some artificial process. No implements or ornaments were noticed.

¹ Squier's Nicaragua, Vol. II.

At Wolf Point (section twenty-seven, township ten, range sixteen), in the lower part of the town of Hustisford, we observed traces of a recently abandoned Indian village, but no ancient works. Here, it is said, a great Indian battle was fought, in times long gone by; and here Black Hawk made a stand against his white pursuers in 1832.

At Hustisford a stone was shown us, which, by the aid of a little imagination, may be supposed to represent the head of a bird; and which was held in great veneration by the Winnebago Indians, who have but very recently been removed from this part of the State. It is a boulder of gneissoid granite, of accidental form, caused by the unequal decay and disintegration of the different layers of which it is composed. (See Fig. 16.)



FIG. 16.

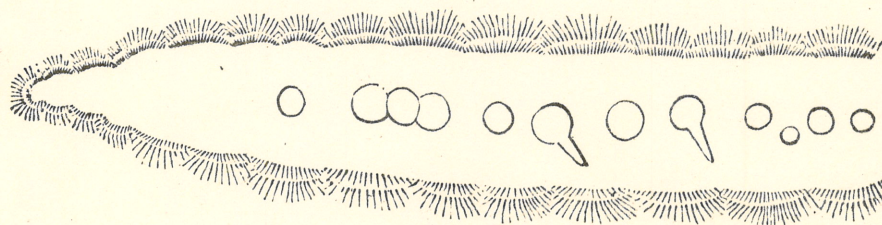
The Stone Bird.

At this place (Hustisford), there are the remains of a number of lizard mounds by the mill race, and also on the point opposite, on the east side of the river. There is a mound only two feet high, but having a considerable level area on the top, near the mill, which is said to be the place where prisoners of war were tortured and sacrificed by the Indian inhabitants. An examination disclosed partially calcined stones, ashes, charcoal, &c., in the centre.

The river here has a rapid current, caused by a ledge of limestone of the same kind as that in the lead districts of the western part of the State; the whole fall being about seven feet.

The country around is made up of a series of ridges like those before referred to, with intervening valleys, having a general direction nearly north and south. They are usually from twenty to fifty feet, and occasionally even one hundred feet in height, and frequently several miles in length. One of these ridges of great height, on the east side of the river, seems to have been selected as the principal cemetery, as we find it occupied by a series of round mounds, forming a nearly straight row along the summit. (Fig. 17.) They are so situated, that if the forest-trees were

FIG. 17.

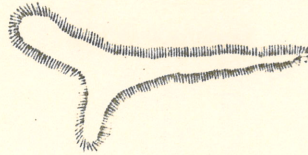


removed, a very extended prospect could be obtained, embracing the site of the village below, and the course of the river in either direction. Three of these are partially blended at the base, and two had a slight ridge extending towards the north-east, or in a direction from the village; or the tadpole (the significant name of this variety of mound) was headed towards the principal works and probably main residence of the ancient population.

The lizards are here, as in most localities of a similar kind, placed with the

head or largest part towards the water. Among them are a number with only one projection or leg, as shown in Fig. 18.

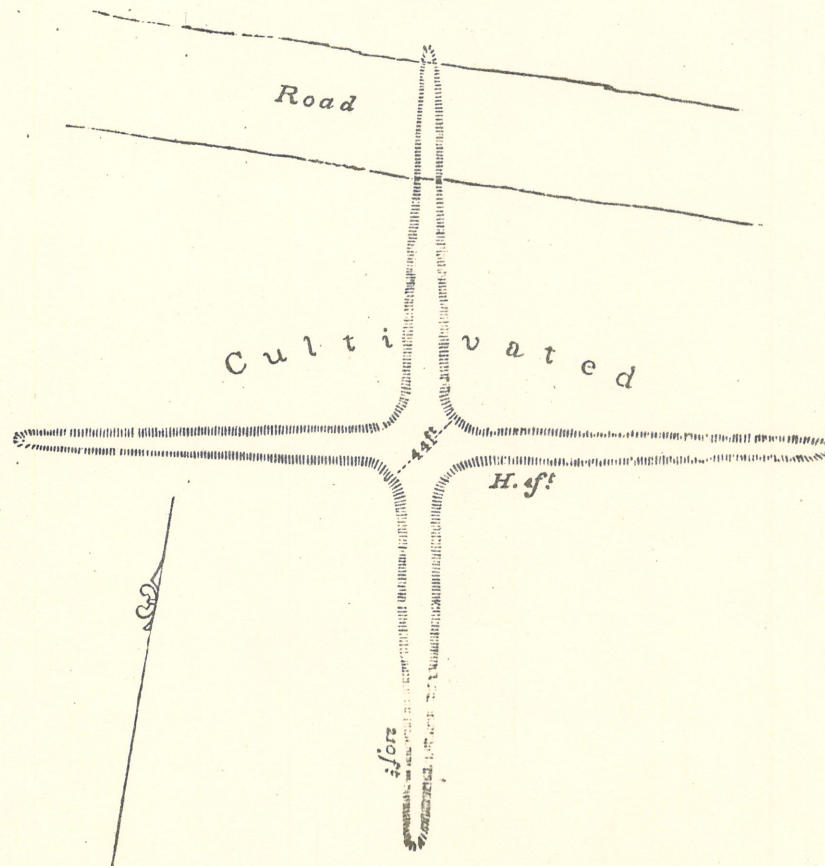
FIG. 18.



About five miles northwest of Hustisford, on the road to Juneau, the county seat (section twenty-six, township eleven, range fifteen), is an animal-formed mound, headed southward, and a ridge about one thousand feet in length, being much longer than any heretofore noticed. The direction is a little north of east. They do not appear to be connected with other works in the vicinity.

In the northwest part of this town are a number of mounds, but presenting no varieties different from those before described; excepting one cross, which, from the uniformity and great length of the arms, appears to differ from others. (See Fig. 19.)

FIG. 19.



The Cross on section six, township eleven, range fifteen. Surveyed, 1851, by I. A. Lapham.

It is situated near the road, on the north line of section six, township eleven, range fifteen, one of the arms being crossed by it. The middle is on a gentle eminence,

so that the arms descend in each direction. Being on an open prairie, there is an extended view from this point. Each arm appears to be of about the same size and length. The plough having already commenced its work of destruction, we could not determine the proportions exactly. The compass indicated that the arms were constructed almost precisely at right angles.

These remains are on the borders of a prairie, which, from the unevenness of its surface, is denominated "Rolling Prairie." One prominent elevation has been supposed to be artificial (Fig. 20); but a little examination satisfied us that it was natural.

FIG. 20.



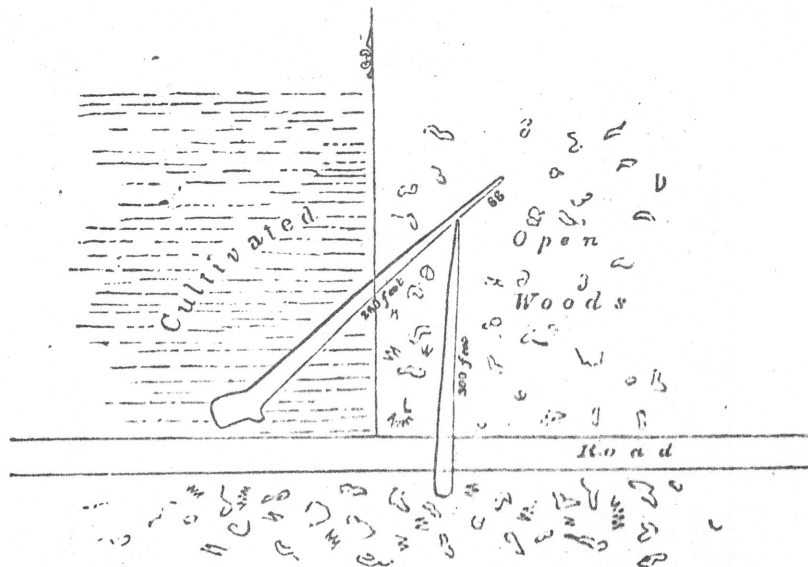
Natural Mound on Rolling Prairie.

Towards the source of the Beaver Dam river, we found numerous mounds; especially near the northwest corner of the town of Juneau (township eleven, range fifteen). On section seven are some "oblongs," one which was probably a "cross," and two others, broad and flat, with tails. These are much injured by cultivation. They occupy a broad, gently undulating plain, the margin of the Rolling Prairie.

At the village of Beaver Dam, the stream is interrupted by a dam, so as to form a pond ten miles in length, similar, in many respects, to the one at Horicon, on Rock river. On the border of this pond, a little west of the village, was a series of mounds, now quite destroyed by the road that runs directly over them. Their forms could not be made out with any degree of accuracy.

Fig. 21 represents two mounds, with a connection probably accidental, situated

FIG. 21.



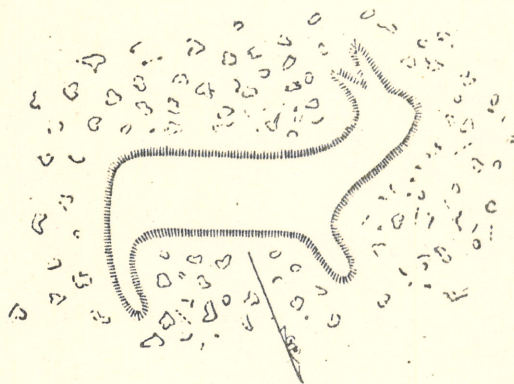
on section one, township eleven, range fourteen. The effigy could not be made out in the cultivated field; but it was, apparently, of the kind called the lizard.

A few miles N. W. of this locality, on section twenty-seven, township twelve, range fourteen, is a group of various forms, mostly injured or destroyed. Their original number is estimated to have been between thirty and fifty. They were mostly of the turtle form, though some are said to have resembled the lizard, the buffalo, &c.

The works at Waushara, near the outlet of Fox lake, were on both sides of the river; but those on the east side were destroyed by the growth of the village. One circular tumulus was beautifully decorated with flowers, and will be preserved as an ornament in the flower garden of one of the citizens; a commendable instance of good taste.

On the west side of the stream is an extensive group containing a cross, oblongs, circular mounds, one of the bird form, and two that were perhaps intended to represent the elk (see Fig. 22). These are on the ridge, and along the slopes of the ridge, running parallel with the river, and but a short distance from it. Among the figures was a cross, the arms of which were oblique (Fig. 23), and one

FIG. 22.



At Waushara.

FIG. 23.

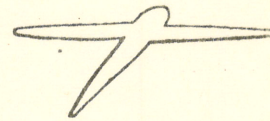
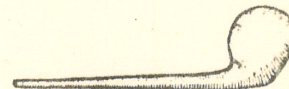


FIG. 24.



with the tail forming a tangent to the mound (Fig. 24), its outline resembling some forms of the war-club, or the modern tobacco-pipe.

The next point visited was a high bank at the northeast angle of the lake (sections eleven and fourteen, township thirteen, range thirteen), and near the mouth of a small stream. At this place are several crosses, one structure of the bird form, and numerous ridges, but not arranged with any apparent order or system. In the same locality are numerous corn-hills and "caches" of the present tribes, who still make their annual visits to the spot. We saw a flattish boulder which had been used as a sort of anvil for pounding or pulverizing corn and perhaps other substances.

Near the source of a small branch of Rock river, called the Rubicon, is a fine little sheet of water called Pike lake. The banks are low, except on the east side; and on the north side there is a group of works as sketched on Plate XXXVI, presenting some characteristics not before observed. Here is another mound with a level area on the top, being the frustrum of a cone, similar to the temple mounds, supposed to be places of sacrifice. There are three others of the ordinary form, two of the imitative forms, and a semicircular ridge embracing a circular

excavation at one extremity, and partially inclosing another. The figure at the east has but one projection or leg, and a forked tail; the other figure differs from most of the lizard-mounds in the fact that the body and tail are not in the same straight line.

The bank of the lake is more elevated at this point than on either side, where are some low grounds with springs and marshy places. A little east of this lake is a high peak or hill, which we ascended, but found no traces of ancient works on its summit.

But the most extended and varied groups of ancient works, and the most complicated and intricate, are at Horicon. Plate XXXVII represents the principal groups immediately below the town, but does not include all in this vicinity. They occupy the high bank of the river on both sides.

It will be seen that most of the forms heretofore described are represented at this place, and some are combined in a very curious manner. There are about two hundred ordinary round mounds in this neighborhood, and all, with two exceptions, quite small. The two large ones, on the west side of the river, have an elevation of twelve feet, and are sixty-five feet in diameter at the base. The others are from one to four or five feet high. In several of them we noticed very recent Indian graves, covered with slabs or stakes, in the usual method of modern Indian burial. They belong to the Potawattomies. One is protected by slabs driven in a sloping manner, so as to meet at the top like the roof of a house. Another has a kind of pen made of sticks about six inches in diameter. These graves show the peculiarity of having but one kind of wood on one grave; the slabs being made of oak, and the pen made of elm. The larger and more conspicuous mounds are generally selected by the Indians for the burial of their dead.

There are sixteen mounds of the cruciform variety. (See Plate XXXVI, Nos. 1 and 2.) They are not placed in any uniform direction—some having the head towards the north, some towards the south; nor do they appear to be turned towards the river. The form seen, Plate XXXVI, No. 1, is exactly like that of the mounds on the Milwaukee river; but that represented on No. 2 of the same plate was first observed at this place.

There is one mound, of which only a small portion appears on the plate, regularly tapering for a length of five hundred and seventy feet. At the smaller extremity it is slightly curved to the east. At its larger extremity is a large cross, and one of the largest mounds.

The animal form, Plate XXXVI, No. 3, is repeated, with slight modifications, seven times. It may be supposed to represent the otter.

If the two composite figures, one on each side of the river, near the centre of the group, are animals, performing some action, it is quite difficult to decide what the animal or the action may be that is intended to be represented. Yet it can hardly be supposed that these works were erected without design. They doubtless have some meaning which it is now impossible to ascertain.

Several of the mounds had been opened; but we could not learn of any results, excepting the discovery of human bones, and, in one case, the bones of a quadruped. We opened one of the smaller ones, and, after a careful search, could trace no indi-