

Chas E. Brown

Lecture - Delivered January 16
1857 before Young Men's Association & Citizens at
Free Cong. Church - Milwaukee - By J. A. Lapham

The time was - and within the recollection of
most of us - when Wisconsin was a mere wilder-
ness. The wild Indian roamed at will, over her prairies,
her oak-openings and dense forests, - unrestrained by the
presence of the "pale faces". His savage, and wolf-
like dog, - his only companion; his gun, tomahawk,
and knife, - the only instruments with which he obtained
a scanty subsistence. The wigwam, consisting
of a few saplings, brought together at the top, and
covered with skins, - his only habitation. He was
without education - without civilization.

And the time was, ~~among~~ anterior to this, when these wandering tribes of men were in a different condition. No white man had yet visited them; the new world had not yet been discovered; and the fire-water had not destroyed their intellectual powers. The bow and arrow were then their only means of destroying the game upon which they were dependent for the necessities of life. Stone & wood, with a scanty supply of native copper from Lake Superior, were the only materials they had, for the construction of the instruments their simple wants required. Dependant entirely upon themselves, they were compelled to make use of such means as nature had provided; and as their slight knowledge of arts, enabled them to construct. They had, of course no firearms, no knife, no hatchet of steel. — ~~no were~~

~~there any~~ ~~to assist~~

in this "new world"

And again, the time was, long anterior perhaps, to the times just described, when a far different race of men inhabited this country. They are chiefly known to us by the ~~very~~ numerous mounds of earth they have constructed, and are hence designated the "mound builders." Very little, indeed, is known of them, except what is exhibited by the investigation of these monuments of their taste, skill, and labor.

Destitute of literature, these people have handed down to us, no account of their history; their manners and customs; their origin; their migrations;—nor have we any certain means of ascertaining what has become of them. These are questions for the antiquary to settle, as best he can, from the slight materials left for his examination.

Their works are very extensive, and widely

diffused, embracing almost the whole length and breadth of the United States, even with the recent additions. From the New England states to Oregon; and from the Great Lakes to the Gulf of Mexico, the "mound builders" have left traces of their existence: But it is chiefly in the great valley of the Mississippi, that the most extensive works are found.

These ^{monuments of ancient skill} ~~works~~ consist of ridges or embankments, forming square or circular enclosures, or others of irregular form, varied to suit the shape of the ground on which they are built. Besides the enclosures, are numerous mounds, of a conical form, usually places of burial. A few of these structures in Ohio are of stone — not laid into a regular wall, but forming a rick or pile of loose stone thrown up without art, and without mortar or other cement.

Messen Squier & Davis, in their recent work on this subject, constituting the first volume of the Smithsonian Contributions to Knowledge, have attempted a sort of classification of the ancient works ~~to wit~~. They consist of

- { Enclosures for defense
- { Sacred & Miscellaneous Enclosures
- { Mounds of Sacrifice
- { Temple mounds
- { Mounds of sepulchre &
- { Mounds of observation

Hamilton Ohio



Sm. Con. I. pl. VI

The works of defence are known by their secure and commanding position, by the form of the enclosure, and by the care taken to guard the entrance by a mound or overlapping wall as ^{I will} represented on the black board.

They occupy the highest grounds, and usually the walls run along the margin of a precipice or steep hill; thus taking advantage of the natural elevation. Frequently a position is selected secure, on three sides, and consequently it is only necessary to protect the fourth. This kind of fort is common in the north of Ohio, as described by my friend Mr. Charles Whittlesey. Great care appears to have been exercised in selecting a position not commanded by any neighboring eminence; and indeed much military skill and judgement is displayed in all these works.

The sacred enclosures, or those probably constructed for religious and superstitious purposes and ceremonies, are the most numerous, and most extensive.

They are also the most regular in form, being often a circle, or square, or a combination of these figures, laid out with the most mathematical exactness.

Those at Newark Ohio are said to occupy ^{an area of} no less than four square miles, or as we would say four sections. It would be idle to enter upon any speculations in regard to the precise objects and uses of these sacred structures. We must patiently await the results of further, and more minute & extended investigations and discoveries.

Some of the Mounds are of very great magnitude. That at Cahokia in Illinois is 90 feet high and 2,400 feet in circumference! It has an area of several acres, level, on the top. The Grave Creek Mound in Virginia rises to the height of 70 feet, and is 1000 feet in circumference at the base. In the vicinity of Miamisburg, Ohio, is a mound of very nearly the same dimensions, being 68 feet high & 852 feet around.

Upon opening these mounds, various implements, ornaments, and other remains of art are found. They consist of pottery, usually in fragments, made without the use of that most ancient of all machines — the potter's wheel — Axes, arrow points, &c of copper, and stone; and also numerous articles, of the use, ^{& purposes} of which we ~~know~~ but little.

Many of them must have been made at the expense of great labor - they manifest a considerable degree of taste and skill; but they also indicate very clearly the little progress these ancient people had made in the useful arts.

Without further preface or introduction I will now proceed to give some account of these works as they exist in our own state.

And first, we shall be surprised at the almost entire absence of enclosures, or forts as they are usually called. Only one has yet been discovered, the one at Aztalan, on the west branch of Rock river; originally discovered and made known to the public by Judge N. F. Hyer of St. Louis. He first visited these remarkable works in October 1836; and made a survey of them in January 1837, that was

published with a rude wood cut in February of the same year, in the "Milwaukee Advertiser", a paper then edited by Mr Daniel H. Richards, the first ^{then the} and only newspaper ~~then~~ published in this part of the state.

This account was substantially correct; but it was ~~copied~~ copied, with numerous exaggerations, into other papers; and so extravagant were the stories reported of the "ancient brick," - the "walled city," that it began to be even doubted whether any such ruins existed. He applied the name Aztalan, because, according to Humboldt the ~~Aztecs~~ Aztecs, or ancient inhabitants of Mexico had a tradition that their ancestors came from a country at the north, that they called Aztlan. The word

(according to Mr Delafield) ~~is~~ is a compound of atl
"water" and an "near"—thus indicating that
the place may have been near our Great Lakes.

These works consist mainly of a wall,
or ridge of earth and burnt clay, (not brick as
has been erroneously stated) extending around
three sides of an oblong square; the river
forming the fourth side on the east. The
space thus inclosed is (17.61) about eighteen
acres. The walls are enlarged on the out-
side, at nearly regular distances, by mounds
of the same materials as the walls. These
"buttresses" as they are called vary from 61 to 95
feet apart—having an average distance of
82 feet. In some places the wall appears
like a series of mounds, connected together by a
ridge of earth, the mounds or buttresses being
much higher than the connecting ridge.

Near the top of the wall, in many places the clay appears to have been ~~mixed with~~ first wetted and mixed with grass or straw and then burnt. The impressions ~~of the leaves~~ of the grass are quite distinct and so perfect as to enable one to identify them as having been made by the triangular, stiff ribbed leaves of the wild hay (^{species of} Carex) ^{still} so abundant in the margin of the river nearby. Mixed with this burnt clay is found charcoal, partially burnt bones &c, indicating that the walls may have been places of sacrifice — or places where "burnt offerings" were made to some "Unknown God". Fragments of ancient pottery are also found among the materials composing these portions of the wall.

Exterior to the main enclosure, at the south west angle, is another wall consisting

of six buttresses, as if intended to protect more completely, that portion of the works.

The ground has a gentle ascent from the bank of the river; and the slope continues beyond the wall forming an elevated ridge. This ridge begins at the south west corner of the enclosure, and runs off in the direction of the long row of mounds situated above.

A great many dug holes can be seen in the vicinity of the walls, - of very irregular form and depth, - from which it is quite probable the materials were taken. These shapelen holes or excavations, are precisely like those left in ^{the} construction of embankments for canals, rail-roads - and other similar works.

Beyond the walls are found numerous small mounds, scattered about, without a parent order;

and also a very extensive and remarkable row of ³⁰ large mounds (~~30 in number~~) occupying the summit of the ridge, extending into the present village of Astalan.

Within the enclosure we find very numerous and highly interesting remains of ancient industry. Two very large square, or pyramidal, truncated mounds occupy the north west and south west portions of the enclosure. The one at the south west is the most prominent & commands a fine view of the entire works and much of the adjacent country. It stands on a natural eminence, being the southern termination of the ridge before mentioned.

Many other mounds, of various shapes and dimensions; and also ridges of earth are found within the enclosure. At one

point is a deep circular pit, surrounded by a ridge of earth, probably the same that was thrown out in making the pit or well.

A remarkable series of circles extended along near the middle — supposed to be the remains of Mud houses.

For what purpose was this great enclosure made? — is a question more easily asked than answered. Judge Hyer called it a "citidal" and it is usually called "the fort" — and supposed to have been a work of defense; a place to which the mound-builders resorted for safety when hard-pressed by their enemies. It certainly has some resemblance to the works of this kind. Its connection with the river enabled the besieged to supply their wants in some degree; the walls, being secured by "buttresses," and protected by "out works," would seem to ^{convey} ~~carry~~ the idea of a military work — a fortification.

When describing these ancient enclosures the technical terms of the military, are found most convenient and applicable. We speak of the "citidal", the "fort" - the "out works" "breast works" - "ditch" &c. But we must not therefore too hastily suppose all such works are military works of defense. These terms are liable to lead us ~~lead us~~ to error; and that they have done so in the present instance, I will now proceed to show.

In the first place this "fort" is entirely commanded from the summit of a ridge running nearly parallel with the wall. The ridge is much higher than the walls, so that an enemy posted upon it, would have a decided advantage over those intended to be protected by the fort. This ridge is also an excellent breast work to

protect an enemy from the arrows or other weapons shot from the fort, until they are within a very short distance. If a modern military engineer should select such a site for a fort, his reputation for skill in his profession, would be less enviable than that of the General in our late war with Mexico, who ordered the ditch to be dug on the inside of the enclosure!

As if to ~~add~~ facilities to an approaching enemy, numerous mounds have been erected along ^{the summit of} this ridge, affording secure hiding places, and look-out stations, that must have been very convenient to them.

It is very clear, ~~that~~ from the skill and judgment exhibited elsewhere by the mound-builders, that if defense was the object of the works, the walls would have been extended so as to take advantage of this very important and commanding ridge. —

Again, the large mounds situated at the north-west, forming the remarkable series, before mentioned, are not in connection with the fort. They are excellent points from which to reconnoiter, and to annoy the occupants of this supposed fort.

Besides, the slope of the ground on which the ^{works are} ~~fort is~~ built is such that they are completely commanded from the opposite side of the river. And here, again, as if purposely to afford "aid and comfort" to the enemy, a breast work is erected, running along the margin of the river, from behind which arrows, and other weapons could be thrown into the fort, by persons lying in perfect security.

But these facts are sufficient to show that the works were not of a military character; and we can only suppose them to be a

place of worship — perhaps the Mecca to which an annual pilgrimage may have been prescribed by their religion. Here, thousands of persons may have engaged in mid-night ceremonies. The temple, lighted by fires kindled at every projection along the walls, must have presented an imposing spectacle, well calculated to impress their minds with awful solemnity. Here may have been held the great annual feasts and sacrifices of the nation. The pyramidal mounds at the two corners, resembling the great teocalli or temple mounds of the ancient Mexicans give some plausibility to this suggestion.

It is remarkable that there is no entrance to this great temple, except by water, or by clambering over the walls.

In this respect - as well as in the enlargement of the walls, or buttresses, it ~~differs~~ from all similar works heretofore discovered.

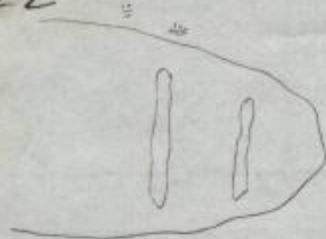
^{It is to be} regretted ~~to say~~ that the efforts formerly made, to preserve these works, are likely to fail. About one third of the enclosure is included within a cultivated field; and we made our survey amidst ^{growing} crops of corn, oats & potatoes, cultivated on these sacred grounds, and perhaps nourished by the blood of the sacrifices that have been there made.

Although no works of defense, properly so called have ~~yet~~ been discovered, at least none of any importance, yet we find that many of these ancient works are made in naturally secure places, which it would be

very easy to defend. In Pewaukee, for instance there is a very interesting group of earthworks, occupying a narrow ridge or neck of dry land between two large marshes - formerly, perhaps lakes. It could not be approached except in two directions; and on a neighboring eminence are a number of circular ^{and other} mounds commanding a view of the whole, and embracing a wide sweep of the country around.

There is also near Fulton, a place where it is quite evident that the works on the high sloping banks of Rock river, are intended to protect the passage from the works on the top of the hill, to the water in the river.





Not far from Muskego Lake there is a point of land projecting into a marsh or swamp, forming a narrow cape, across which are two parallel breast works, as if intended to defend the occupants from an invading foe.

This scarcity of military works, would seem to indicate that the mound-builders were here secure - and that they lived in peace with the rest of mankind.

But the most astonishing ancient works in Wisconsin, and what most distinguish them from those found elsewhere, are the animal effigies. These are large mounds of earth made to resemble the general form of some animal, usually a quadruped, a reptile, a bird, or even the human form.

Such is the rude character of these resemblances, however, that it would be difficult for a naturalist to refer them to their proper genera and species. In many cases the resemblance may be only a fancied one; or the forms gradually vary, so that, — although in some, the shape of an animal may be readily recognised, yet others — in some respects similar — would not of themselves suggest the idea of an animal form.

The first mound of this character to which my attention was directed, was one situated where now is the flourishing village of Waukesha, with its 1500 inhabitants. It was known as the "Turtle Mound," a name by which I designate all mounds of the same general character. I examined & surveyed it in October 1836, assisted by the late Mr Wm T. Culley.

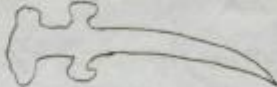
At that time Prairie Village, as the place was then called, consisted of but one small log house. The Indians had just left the vicinity, and frequent traces of their recent occupancy could be observed.

 The mound is of this form.

The mere outline of the base as represented on the black board fails to convey any adequate idea of its appearance on the ground. It immediately impressed all who saw it ~~with the~~ as a representation of a turtle. The projections at the sides, are supposed to represent the feet - and you see it has a long tail - 250 feet long. The body is 56 feet long. The back of the turtle was about 6 feet high, and the tail was so gradually tapered to a point that it was difficult to see precisely where it terminated.

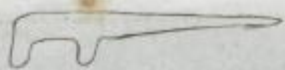
The Indians had recently buried one of their number in the body of this mound—probably a child. The grave was protected by stakes or pickets of wood, driven into the ground in such a manner as to cross above it. They often select the ancient mounds, as the resting places of the dead, as I have had occasion to observe at many other points. We are thus admonished, not to attribute to the ancient mound-builders; all the articles found deposited in the mounds.

A private dwelling, now stands upon the body of this great "turtle"—and the Catholic Church is built upon the tail.

There are many mounds of this general form, ^{or Turtle Mounds} in the eastern part of the state. They are not all so regular and symmetrical ~~as~~ the one just described. Some have the tails slightly curved  or even bent back 

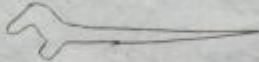
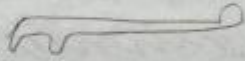
 or perhaps the tail does not correspond with the body in direction. They vary some in dimensions but are all about the same size. No two of them are precisely alike in size.

 If we take the body only, of one of these turtles, we have the figure of a mound found in Vernon. It may be considered as resembling a frog more than any other animal.

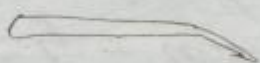


If we take off two of the feet of a turtle mound, we shall have a "Lizard Mound" a form & very often found in the eastern part of the state. It is much more common than any other animal form.

There are some varieties among the Lizards as well as among the turtles.

Occasionally they hold up their heads thus  Frequently they have an appendage  or enlargement at the extremity - that may however be accidental. They are usually about the same dimensions as the turtles - from 150 to 200 feet in length.

One objection to considering these actual representations of turtles & lizards occurs - it is, the greatly disproportionate size and length of the tail.

Now if we remove all the feet from a turtle mound, we shall have, what may have been intended for a serpent;  and as we proceed westward these simple structures become more numerous. They are usually straight but occasionally curved  or have an angular deflection 

These animal mounds - the Turtles, Lizards & Snakes, at least in our part of the state, all have their heads pointed in a southerly direction. This fact may have its significance in determining their uses. They may have been built by worshipers of the sun, in honor of that luminous deity!

Ascending in the Zoological scale we may next notice the mounds that are made to represent birds. The first one of this character found in my tour the past year was at Waukesha, lying on a steep side-hill with the head downwards.

The body is 33 feet long, - the head and neck 24. One wing is 100 feet long, and the other 90. - The general outline of the figure, and the shape of the head and beak, leave no doubt as to the nature of the animal intended to be represented. But if we attempt to decide whether it is an eagle, a hawk or what particular kind of bird, we shall be left entirely to conjecture.

If we strike the beak from this figure, and straighten out the wings we



shall have a representation of other figures found about Waukesha and many other places, that would hardly be called birds, except from their resemblance to others that are undoubtedly intended as such. Perhaps the head will be as large as the body, and the wings of very great extent - perfectly straight. Or perhaps the wings may be  much abbreviated as in some mounds figured by Mr S. Taylor in the Western part of the State.



Here is a bird that formerly existed on Chemut Street hill, in this city. It was graded down a few years since. My little daughters ~~Mary~~ ^{and Julia} assisted in making the survey by which ^{a knowledge of} this interesting mound is saved from

oblivion. An account of it is published in
Woodworth's Youths Cabinet for 1848



Here is another bird found
in Sauk County surveyed &
figured by Mr Wmth Canfield.

There are many more of this form in the
part of the state. Some are represented by
Mr Taylor in Lilliman's Journal and I
have surveyed several myself.



Very often the birds are represented
with a forked tail, like the
swallow - or the swallow
tailed hawk.

But there are many mounds intended, without doubt, to represent quadrupeds, as well as birds and reptiles.

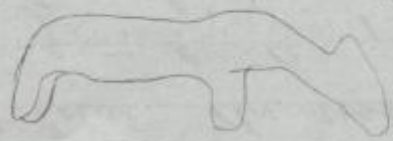


Here are some surveyed by Dr Locke

a few miles west of Madison. At a place 7 miles east of the Blue Mounds, near the great Indian trail, is a row of these quadrupeds as if drawn up in order of march. Within the row are included several oblong mounds, that may, originally have represented some animal or other object, not now recognised. The rear animal lies in a transverse position as if standing, and issuing orders to the troop in advance. Mounds of similar form are frequently found.

The animal intended to be represented,

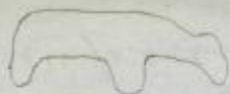
is most probably the Buffalo: though Mr R.C. Taylor objects to this, for the reason that the Mound builders would not be likely to omit so prominent a feature as the hump over the shoulders of the buffalo. Here is



the figure of an animal = mound discovered by me the past season, in which

this defect is remedied, for you see it has the hump well developed. It is quite a spirited representation of an animal, probably in the act of feeding. It is on the north side of the Wisconsin, below Honey creek, in Sauk Co. and was carefully surveyed and measured ~~by me~~ in July last assisted by my young relative, Master John W. Hubbard.

Various other quadrupeds are represented in the mounds:



Here is probably a bear: several of which are found North of the Wisconsin.



This is probably the raccoon.



This was doubtless intended to represent the otter.



This the Wolf or Fox.

There are also mounds of regular form ~~but~~ that do not appear to represent any thing - or any animal known to modern naturalists.

End here.

And besides these representations of the lower animals, we find those of the human form also. The figure will



give the most correct idea of these extraordinary mounds. The whole length is 125 feet - and the arms spread out 140 feet! These mounds

are also quite numerous, and present some variations, in the western counties of the state.

Although most of these man-shaped mounds are true representations of men, yet there are others respecting which there is much uncertainty. Here is one ^{about which} ~~is~~ singular



as it may appear, - ~~about~~ ^{which} there is doubt whether it is intended to represent a man or a swallow-tailed hawk! It is found with the buffalo in Goshute county, below Honey creek. It stretches 270 feet and is 90 feet long.

The animal-shaped mounds are everywhere associated with those of round or conical form; and generally also with oblongs and other simple forms.

They do not extend along the shore of Lake Michigan south of Milwaukee. The southern boundary of this kind of mound extends from this city in a south-westerly direction so as to embrace Geneva Lake in Walworth County, and to cross Rock river some-where in Illinois.

All The ancient works I have been describing consist of elevations or mounds of earth; or as an artist would say, they are bass-reliefs. They represent the animal as if lying down and half buried in the ground. But my investigations in the summer of 1850 ~~has~~ brought to light another kind of ancient

work consisting of excavations in the ground.



They are all of the same general shape — a shape that has a striking analogy to ^{that of} the "Lizard mounds." The elongated portion that may be called the tail, is gradually deepened and enlarged from the extremity towards the body, where it opens into the main excavation. There are three other slopes or entrance into the excavation, as represented by the figure; they may be considered as graded ways or passages. Except at the place of these passages the excavation is surrounded by a ridge or mound of earth, probably the same that was thrown out in their construction.

At one point on the Milwaukee river not many miles above the city, is a series

of these excavations, all with the elongated entrances pointing directly towards a large circular mound - the principal or central mound of the group there found.

For what purposes these animal-formed mounds were erected, must, at least for the present, remain a mystery. It is highly probable that when originally built and fresh, they had a much closer resemblance to the animal intended to be represented. It is quite evident that all the minute and elaborate representations of the eyes, ears, claws, mouth, horns &c would be entirely effaced by the lapse of time. The abrading effects of rain, the upheaving by frost, the disturbance occasioned by the roots of trees and other plants, must all have

tended to modify the original form and finish of these remarkable mounds; and to destroy all the more delicate portions. These causes have also, without doubt, materially diminished the elevation of these mounds.

The round, conical mounds, in this state, ~~appear~~ ^{probably} were ^{all} places of burial. The body of the deceased, ~~was~~ ~~usually~~ usually placed on the ground, with his pipe and other articles of value, and a mound of earth heaped up over it. Most frequently a number of skeletons will be found in the same structure, arranged around in a circle, or thrown down without apparent order.

Very numerous fragments of a kind of earthen ware, or pottery, is found throughout the state. It is always in fragments — no entire vessels having been ^{found} to my knowledge. 50

Since the above was written I have received a note from Dr P. R. Hoy of Racine announcing the discovery of two vases near that place,



They are of this shape — ornamented at the top — The largest is 7 inches diameter at the top and $11\frac{1}{2}$ inches high, and would hold about five quarts. The other is about half the size.

Letter Jan, 11-1837

We are therefore ignorant of their ^{original} form and dimensions. One we found in a mound at Waukesha had probably contained the provisions ~~provided~~ ^{intended} for us on the journey from this world to the spirit land.

Arrow points in great numbers are found, made of flint of various kinds and in a variety of forms. At Kenosha we had the good fortune to discover the place where they were manufactured. To be convinced of this, one has only to examine the fragments or chips, of flint - half formed arrow points - and the broken & irregular pieces of flint profusely scattered about, ~~to become convinced of this~~ for the sandy grounds at that place. We could find no indications of the tools or instruments by which these regular, symmetrical forms were produced.

Axes and chisels of stone are very often found in Wisconsin, as elsewhere in the West. The axes usually have a depression near the middle around which a handle was undoubtedly fastened in the manner of a wythe. They are made of the hardest and toughest stone, and are usually worn quite smooth about the edge or cutting end, indicating that they were much used.

The occurrence of these axes or hammers & chisels of stone, and the remains of ancient diggings, among the copper mines of Lake Superior, has recently been announced by Dr. Jackson the U.S. Geologist; and proves that the mound-builders there obtained the supply of copper, so often found connected with their mounds. ^{Ancient} excavations along some of the veins, are found, 6 feet deep - and at one place it is stated a cart load of

these rude mining instruments has been found.

But time will not allow me to go into further details on this highly interesting subject.

Should any of my hearers catch the spirit and enthusiasm of the antiquary, and undertake to examine these works for themselves, I must caution them against mistakes. At the

commencement of my labors this season I waded through the deep mud & mire of the "Big Marsh" in Brookfield, to examine and survey some ridges representing snakes, or massasagas as they were supposed to be.

Their ^{Serpentine}~~serpentine~~ form and attenuated extremities, gave much probability to the suggestion. The arrangement in a uniform direction; with the spaces between

these, often protected by another, behind, as in the works of defence, gave additional evidence of their artificial origin. But further observation & reflection convinced me that these manasagas were formed by the expansion & contraction of ice.

At another time I examined very carefully a mound or ridge, that was traced across a small run at the outlet of a marsh or pond, and proved to be — a beaver dam.

And especially I must caution you (in conclusion) when opening mounds, not to commit the error of a certain down-easter who penetrated the far west in search of adventure — as far even as Buffalo! He was industriously and eagerly engaged in opening an artificial mound when he was hailed by a farmer who resides near by to know "What he was doing there, on his potatoe hill!"

DAILY FREE DEMOCRAT.

Daily, Tri-Weekly, and Weekly.

S. M. BOOTH, : : : : : EDITOR.

MILWAUKEE:

1857

WEDNESDAY AFTERNOON, JAN. 15.

THE WEATHER.—This prolific subject of comment is again up for remark. About a dozen changes have happened within the last forty-eight hours. First it froze, then it thawed, then it blew, then it rained, then it snowed. The streets are afloat with that kind of splash classically designated by "Miss Betsey" as "*pudding-mud*." Through New-York, Ohio and Michigan, they are covered with snow, and the cold is intense.

63 I. A. LAPHAM, Esq., lectures before the Young Men's Association to-morrow evening. Subject—*The Antiquities of Wisconsin*. Mr. Lapham has made the Geology, Mineralogy and Botany of this State his study for years, and no man is better able to give a more faithful, interesting and instructive lecture on the subject. He has done much to enlighten our citizens on the various formations and developments that are witnessed on and under our soil, and we look for new stores of information to be delivered to-morrow evening. Mr. L. is the author of the well-known "*History of Wisconsin*"

 The Lecture, this evening, by L. A. Lapham, Esq., will not be forgotten. It will be through in time to allow all who wish to attend the Odd Fellows Festival. The subject is one richly interesting and worthy of study, and the lecturer is master of it. Go and hear him.

Delivered January 16, 1851, before the Young Men's Association and Citizens at Free Congregational Church, Milwaukee, by I. A. Lapham.

The time was, and within the recollection of most of us, when Wisconsin was a mere wilderness. The wild Indian reigned at will, over her prairies, her Oak openings and dense forests, unrestrained by the presence of the "pale faces." His savage and wolf-like dog his only companion; his gun, tomahawk and knife, the only instruments with which he obtained a scanty subsistence. The wigwam, consisting of a few saplings, brought together at the top and covered with skins, his only habitation. He was without education, without civilization.

And the time was, anterior to this, when these wandering tribes of men were in a different condition. No white man had yet visited them; the new world had not yet been discovered; and the firewater had not destroyed their intellectual powers. The bow and arrow were then their only means of destroying the game upon which they were dependent for the necessities of life. Stone and wood, with a scanty supply of native copper from Lake Superior, were the only materials they had for the construction of the instruments their simple wants required. Dependent entirely upon themselves, they were compelled to make use of such means as nature had provided; and as their slight knowledge of arts enabled them to construct. They had of course no firearms, no knife, no hatchet or steel.

And again, the time was, long anterior perhaps, to the times just described, when a far different race inhabited this

country. They are chiefly known to us by the numerous mounds of earth they have constructed and are hence designated the "mound builders." Very little indeed, is known of them, except what is exhibited by the investigation of these monuments of their taste, skill and labor.

Destitute of literature, these people have handed down to us, no account of their history, their manners and customs; their origin; their migrations; nor have we any certain means of ascertaining what has become of them. These are questions for the antiquary to settle, as best he can, from the slight materials left for his examination.

Their works are very extensive and widely diffused, embracing almost the whole length and breadth of the United States, even with the recent additions. From the New England states to Oregon; and from the Great Lakes to the Gulf of Mexico, the mound builders have left traces of their existence; but it is chiefly in the great valley of the Mississippi that the most extensive works are found.

These monuments of ancient skill and labor consist of ridges or embankments, forming square or circular enclosures; or others of irregular form, varied to suit the shape of the ground on which they are built. Besides the enclosures, are numerous mounds of conical form, usually places of burial. A few of these structures in Ohio are of stone, not laid in a regular wall, but forming arick or pile of loose stones thrown up without art and without mortar or other cement.

Messrs. Squier and Davis, in their recent work on this subject, constituting the first volume of the Smithsonian contributions to knowledge, have attempted a sort of classification of

the ancient works. They consist of

Enclosures for defense.

Sacred and miscellaneous enclosures.

Mounds of Sacrifice.

Temple mounds.

Mounds of Sepulture.

Mounds of observation.

The works of defense are known by their secure and commanding position, by the form of the enclosure and by the care taken to defend the entrance by a mound or overhanging wall, as I will represent on the blackboard (see map in case for illustration)

(Sketch)
p. 37

They occupy the highest grounds and usually the walls run along the margin of a precipice or steep hill; thus taking advantage of the natural elevation.

Frequently a position is selected secure on three sides, consequently only necessary to protect the fourth. This kind of fort is common in the north of Ohio, as described by my friend, Mr. Charles Whittlesey. Great care appears to have been exercised in selecting a position not commanded by any neighboring eminence; and indeed much military skill and judgment is displayed in all these works.

The sacred enclosures, or those probably constructed for religious and superstitious purposes and ceremonies, are the most numerous and most extensive. They are also the most regular in form, being often a circle or square or a combination of these

figures, laid out with the most mathematical exactness. Those at Newark, Ohio, are said to occupy an area no less than four square miles, or as we would say four sections. It would be idle to enter upon any speculations in regard to the precise objects and uses of these structures. We must patiently await the results of further and more minute and extended investigation and discoveries.

Some of the mounds are of very great magnitude. That of Cahokia in Illinois is 90 ft. high and 2,400 ft. in circumference; it has an area of several acres, level on the top. The Grave Creek mound in Virginia rises to the height of 70 ft. and is 1,000 ft. in circumference at the base. In the vicinity of Miamisburgh, Ohio, is a mound of very nearly the same dimensions, being 68 ft. high and 853 ft. around.

Upon opening these mounds various implements, ornaments and other remains of art are found. They consist of pottery, usually in fragments, made without the use of that most ancient of all machines, the potter's wheel; axes, arrow points, &c., of copper and stone; and also numerous articles, of the use and purposes of which we know but little.

Many of these must have been made at the expense of great labor, they manifest a considerable degree of taste and skill; but they also indicate very clearly the little progress these ancient people had made in the useful arts.

Without further preface or introduction, I will now proceed to give some account of these works as they exist in our own state.

And first we shall be surprised at the almost entire ab-

sence of enclosures or forts, as they are usually called. Only one has yet been discovered; the one at Aztalan, on the west branch of Rock river; originally discovered and made known to the public by Judge M. P. Myer of St. Louis. He first visited these remarkable works in October, 1836; and made a survey in January, 1837, that was published with a rude woodcut in February of the same year, in the Milwaukee Advertiser, a paper then edited by Mr. Daniel M. Richards, the first, and then the only newspaper published in this part of the state.

The account was substantially correct; and it was copied with numerous exaggerations, into other papers; and so extravagant were the stories reported of the "ancient brick" and the "walled city" that it began to be doubted whether any such ruins existed. Judge Myer applied the name of Aztalan, because, according to Humboldt, the Aztecs or ancient inhabitants of Mexico, had a tradition that their ancestors came from a country at the north, th they called Aztalan. The word (according to Mr. De-la-field) is a compound of atl "Water", and an "near," thus indicating that the place may have been near our Great Lakes.

These works consist of a wall or ridge of burnt clay (not brick as has been erroneously stated) extending around three sides of an oblong square; the river forming the fourth side on the east. The space thus enclosed is about eighteen acres. The walls are enlarged on the outside at nearly regular distances, by mounds of the same materials as the walls. These buttresses as they are called vary from 61 to 95 ft. apart, having an average distance of 32 ft. In some places the wall appears like a series of

mounds connected together by a ridge of earth, the mounds or buttresses being each higher than the connecting ridge.

Near the top of the wall, in many places, the clay appears to have been first watted and mixed with grass or straw and then burnt. The impressions of the grass are quite distinct and so perfect as to enable me to identify them as having been made by the triangular stiff-ribbed leaves of the wild hay (species of *cerox*) still so abundant in the margin of the river near by. Mixed with this burnt clay is found charcoal, partially burnt bones &c., indicating that the walls may have been places of sacrifice or places where "burnt offerings" were made to "some unknown God." Fragments of ancient pottery are also found among the materials composing these portions of the wall.

Exterior to the main enclosure, at the southwest angle, is another wall consisting of six buttresses, as if intended to protect more completely that portion of the works. The ground has a gentle ascent from the bank of the river; and the slope continues beyond the wall, forming an elevated ridge. This ridge begins at the southwest corner of the enclosure and runs off in the direction of the long row of mounds situated above. A great many dug holes can be seen in the vicinity of the walls, of very irregular form and depth, from which it is quite probable the materials were taken. These shapeless holes, or excavations are precisely like those left in the construction of embankments for canals, railroads and other similar works.

Beyond the walls are found numerous small mounds, scattered about, without apparent order; and also a very extensive and

remarkable row of thirty large mounds occupying the summit of the ridge, extending into the present village of Aztalan.

Within the enclosure we find very numerous and highly interesting remains of ancient industry. Two very large square or pyramidal, truncated mounds occupy the northwest and southwest portions of the enclosure. The one at the southwest is the most prominent and commands a fine view of the entire works and much of the surrounding country. It stands on a natural eminence, being the southern termination of the ridge before mentioned.

Many other mounds of various shapes and dimensions and also ridges of earth are found within the enclosure. At one point is a deep circular pit, surrounded by a ridge of earth, probably the same that was thrown out in making the pit or wall.

A remarkable series of circles extended along near the middle, supposed to be the remains of mud houses.

For what purpose was this great enclosure made is a question more easily asked than answered. Judge Myer called it a "citadel," and it is usually called the "fort," and supposed to have been a work of defense; a place to which the mound-builders resorted for safety when hard pressed by their enemies. It certainly has some resemblance to the works of this kind. Its connection with the river enabled the besieged to supply their wants in some degree; the walls, being secured by "buttresses" and protected by "outworks," would seem to convey the idea of a military work, a fortification.

When describing these ancient enclosures the technical terms of the military are found most convenient and applicable. We

speak of the "citadel" the "fort" the "out works" "breastworks" "Ditch" &c. But we must not therefore too hastily suppose all such works are military works of defense. These terms are likely to lead us to error, and that they have done so in the present instance I will now proceed to show.

In the first place this "fort" is entirely commanded from the summit of a ridge running nearly parallel with the wall. The ridge is much higher than the walls, so that an enemy posted upon it, would have a decided advantage over those intended to be protected by the fort. This ridge is also an excellent breast work to protect an enemy from the arrows or other weapons shot from the fort, until they are within a very short distance.

If a modern military engineer should select such a site for a fort, his reputation, for skill in his profession, would be less enviable than that of the general in our late war with Mexico, who ordered the ditch to be dug on the inside of the enclosure!

As if to add facilities to an approaching enemy numerous mounds have been erected along the summit of this ridge, affording secure hiding places and look-out stations, that must have been very convenient for them.

It is very clear, from the skill and judgment exhibited elsewhere by the mound-builders, that if defense was the object of the works the walls would have been extended so as to take advantage of this very important and commanding ridge.

Again the large mounds situated at the northwest, forming the remarkable series before mentioned, are not in connection with the fort. They are excellent points from which to reconnoiter and annoy the occupants of this supposed fort.

Besides, the slope of the ground on which the works are built is such that they are completely commanded from the opposite side of the river. And here, again, as if purposely to afford "aid and comfort" to the enemy, a breastwork is erected, running along the margin of the river, from behind which arrows and other weapons could be thrown into the fort by persons lying in perfect security.

But these facts are sufficient to show that the works are not of a military character, and we can only suppose them to be a place of worship, perhaps the Mecca to which an annual pilgrimage may have been prescribed by their religion. More thousands of persons may have been engaged in midnight ceremonies. The temple lighted by fires kindled at every projection along the walls, must have presented an imposing spectacle, well calculated to impress their minds with awful solemnity. Here may have been held the great annual feasts and sacrifices of the nation. The pyramidal mounds at the two corners, resembling the great teocalli, or temple mounds of the ancient Mexicans give some plausibility to this suggestion.

It is remarkable that there is no entrance to this great temple except by water, or clambering over the walls.

In this respect, as well as in the enlargement of the walls or buttresses, it differs from all similar works hitherto discovered.

It is to be regretted that the efforts formerly made to preserve these works are likely to fail. About one third of the enclosure is included within a cultivated field, and we made our survey amidst growing crops of corn, oats and potatoes, cultivated on these sacred grounds and perhaps nourished by the blood of the sacrifices that have been thus made.

Although no works of defense, properly so called, have been discovered, at least none of any importance, yet we find that

many of these ancient mounds are made in naturally secure places, which it would be very easy to defend. In Pewaukee, for instance, there is a very interesting group of earthworks occupying a narrow ridge or neck of dry land between two large marshes, formerly perhaps, lakes. It could not be approached except in two directions and on a neighboring eminence are a number of circular or other mounds, commanding a view of the whole and embracing a wide sweep of the country around.

There is also near Fulton, a place where it is quite evident that the works, on the high sloping banks of Rock river, are intended to protect the passage from the works on top of the hill, to the water in the river. (Sketch).

Not far from Muskego lake (Sketch) there is a point of land projecting into a marsh or swamp forming a narrow cape, across which are two parallel breast works, as if intended to defend the occupants from an invading foe.

This scarcity of military works, would seem to indicate that the mound-builders were here secure and that they lived in peace with the rest of mankind.

But the most astonishing ancient works in Wisconsin and what most distinguishes them from those found elsewhere, are the animal effigies. These are large mounds of earth made to resemble the general form of some animal, usually a quadruped, a reptile, a bird, or even the human form.

Such is the rude character of these resemblances, however, that it would be difficult for a naturalist to refer them to their proper genera and species. In many cases the resemblance may be only a fancied one, ^{or this} other forms gradually vary, so that although in some, the shapes of an animal may be readily recognized, yet others in some respect similar would not of themselves suggest the idea

of an animal form

The first mound of this character to which my attention was directed was one situated here now is the flourishing village of Waukesha, with its 1500 inhabitants. It was known as the "Turtle Mound," a name by which I designate all mounds of the same general character. I examined and surveyed it in October 1836 assisted by the late Wm. T. Culluy

At that time prairie village, as the place was then called consisted of but one small log house. The Indians had just left the vicinity and frequent traces of their recent occupancy could be observed.

[Sketch] The mound is of this form. The mere outline of the base as represented on the black board fails to convey any adequate idea of its appearance on the ground.

It immediately impressed all who saw it as a representation of a turtle. The projections at the sides, are supposed to represent the legs and you see it has a long tail 250 feet long. The body is 56 ft. long. The back of the turtle was about 6 ft. high and the tail was so gradually tapered to a point that it was difficult to see precisely where it terminated.

The Indians had recently buried one of their number in the body of this mound, probably a child. The grave was protected by stakes or pickets of wood, driven into the ground in such a manner as to cross above it. They often select an ancient mound as the resting places of the dead, as I have had occasion to observe at many other points. We are thus admonished not to attribute to the ancient mound builders, all the articles deposited in the mounds.

A private dwelling now stands upon the body of the great turtle and the Catholic church is built upon the tail.

There are many mounds of this general form or Turtle Mounds in the eastern part of the state. They are not all so regular and symmetrical as the one just described. Some have the tail slightly curved (Sketch) or even bent back, or perhaps the tail does not correspond with the body in direction. They vary some in dimensions, but are all about the same size. No two of them are precisely alike in size.

If we take the body only, of one of these turtles, we have the figure of a mound found in Vernon. It may be considered as resembling a frog more than any other animal. (Sketch).

If we take off two of the feet of a turtle mound (Sketch) we shall have a "Lizard mound", a form very often found in the eastern part of the state. It is much more common than any other form. There are some varieties among the lizards as well as among the turtles. Occasionally they hold up their heads thus (Sketch) Frequently they have an appendage or enlargement at the extremity that may, however, be accidental. They are usually about the same dimensions as the turtles, from 150 to 200 ft. in length.

One objection to considering these actual representations of turtles and lizards occurs, it is, the greatly disproportionate size and length of the tail.

Now if we remove all the feet from a turtle mound, we shall have what may have been intended for a serpent. (Sketch) and as we proceed westward these simple structures become more numerous. They are usually straight but occasionally curved or have an angular deflection. (Sketch.)

These animal mounds, the Turtles, Lizards and Snakes, at least in our part of the state, all have their heads pointed in a southerly direction. This fact may have its significance in determining their uses. They may have been built by worshippers of

the sun, in honor of that luminous deity!

Ascending in the Zoological scale we may next notice the mounds that are made to represent birds. The first one of this character, found in my tour the past year, was at Waukesha on a steep hillside, with the head downwards. (sketch) The body is 33 ft. long the head and neck 24 ft. One wing is 100 ft. long and the other 90 ft. The general outline of the figure and the shape of the figure's head and beak, leave no doubts as to the nature of the animal intended to be represented. But if we attempt to decide whether it is an eagle, a hawk or what particular kind of bird we shall be left entirely to conjecture.

If we strike the beak from this figure and straighten out the wings (Sketch) we shall have a representation of other figures found about Waukesha and many other places, that would hardly be called birds, except from their resemblance to others that are undoubtedly intended as such. Perhaps the head will be as large as the body and the wings of very great extent, perfectly straight. Or perhaps the wings may be (Sketch) much abbreviated as in some mounds, figured by Mr. S. Taylor, in the western part of the state.

(Sketch) Here is a bird that formerly existed on Chestnut street Hill in this city. It was graded down a few years since. My little daughters assisted in making the survey by which a knowledge of this interesting mound is saved from oblivion. An account of it is published in Woodward's Youths' Cabinet for 1846.

(Sketch) Here is another bird found in Sauk county surveyed and figured by Mr. Wm. H. Canfield. There are many more of this form in that part of the state. Some are represented by Mr. Taylor in Silliman's Journal and I have surveyed several myself.

(Sketch) Very often the birds are represented with a forked tail like the swallows or the swallow tailed hawk.

But there are many mounds intended without any doubt, to represent quadrupeds as well as birds and reptiles.

(Sketch) here are some surveyed by Br. Locke a few miles west of Madison.

At a place seven miles east of the Blue Mounds, near the great Indian trail, is a row of quadrupeds as if drawn up in order of march. Within the row are included several oblong mounds that may originally have represented some animal or other object, not now recognized. The rear animal (Sketch) has a transverse position as if standing and issuing orders to the troops on advance. Mounds of similar form are frequently found.

The animal, intended to be represented, is most probably the Buffalo, though Mr. Taylor objects to this, for the reason that the moundbuilders would not be likely to omit so prominent a feature as the hump over the shoulders of the buffalo. Here is the figure (Sketch) of an animal mound discovered by me the past season, in which the defect is remedied, for you see it has the hump well developed. It is quite a spirited representation of an animal, probably in the act of feeding. It is on the north side of the Wisconsin, below Honey Creek in Sauk county and was carefully surveyed in July last.

Various other quadrupeds are represented in the mounds. Here is probably a bear. (Sketch) several of which are found north of the Wisconsin.

(Sketch) This is probably the raccoon.

(Sketch) This was doubtless intended to represent the otter.

(Sketch) This the wolf or fox.

There are also mounds of regular form that do not appear to represent anything or any animal known to modern naturalists. Besides these representations of the lower animals we find those of the human form also. The figure will give you the most correct (Sketch) idea of these extraordinary mounds. The whole length is 125 feet, and the arms spread out 140 feet! These mounds are also quite numerous and present some variations in the western counties of the state.

Although most of these man-shaped mounds are true representations of men, yet there are others respecting which there is much uncertainty. Here is one, about which (Sketch) singular as it may appear, there is doubt whether it is to represent a man or a swallow-tailed hawk! It is found with the buffalo in Sauk county below Honey creek. It stretches 270 feet and is 90 feet long.

The animal shaped mounds are every where associated with those of round or conical form. And generally also with oblong and other simple forms. They do not extend along the shore of Lake Michigan south of Milwaukee. The southern boundary of this kind of mound extends from this city in a south-westerly direction so as to embrace Geneva Lake in Walworth county and to cross Rock river somewhere in Illinois.

All the ancient works I have been describing consist of elevations or mounds, of earth or as an artist would say bas-relief. They represent the animal as if lying down and half buried in the ground. But my investigations in the summer of 1850 brought to light another kind of ancient work consisting of excavations in the ground. (Sketch) They are all of the same general shape, a shape that has a striking analogy to that of the "lizard mound." The elongated portion, that may be called the tail, is gradually deepened and enlarged from the extremity towards the body, where it

opens into the main excavation. There are three other slopes or entrances into the excavations, as represented by the figure. They may be considered as graded ways or passages. Except at the place of these passages, the excavation is surrounded by a ridge or mound of earth probably the same that was thrown out in their construction.

At one point on the Milwaukee river, not many miles above the city, is a series of these excavations all with the elongated entrances pointing directly towards a large circular mound, the principal or central mound of the group there found.

For what purpose these animal-formed mounds were erected must, at least for the present, remain a mystery. It is highly probable that when originally built and fresh, they had a much closer resemblance to the animal intended to be represented. It is quite evident that all the minute and elaborate representations of the eyes, ears, claws, horns &c. would be entirely effaced by the lapse of time. The abrading effects of rain, the upheaving by frost, the disturbance occasioned by the roots of trees and other plants, must all have tended to modify the original form and finish of these remarkable mounds and to destroy all the more delicate portions. These causes have also, without doubt, materially diminished the elevation of these mounds.

The round conical mounds in this state were probably all places of burial. The body of the deceased was usually placed on the ground, with his pipe and other articles of value and a mound of earth heaped over it. Most frequently a number of skeletons will be found in the same structure, arranged around in a circle, or thrown down without apparent order.

Very numerous fragments of a kind of earthen ware, or

pottery is found throughout the state. It is always in fragments no entire vessels having been found to my knowledge. We are therefore ignorant of their original form and dimensions. One, we found in a mound at Waukesha, had probably contained the provisions intended for use on the journey from the Spirit land."

Arrow points in great numbers are found, made of flint of various kinds and in a variety of forms.

At penosha we had the good fortune to discover the place where they were manufactured. To be convinced of this, one has only to examine the fragments or chips of flint, half formed arrowpoints and the broken and irregular pieces of flint profusely scattered about the sandy grounds at that place. We could find no indications of the tools or instruments by which these regular, symmetrical forms were produced.

Axes and chisels of stone are very often found in Wisconsin as elsewhere in the west. The axes usually have a depression near the middle around which a handle was undoubtedly fastened in the manner of a scythe. They are made of the hardest and toughest stone and are usually worn quite smooth about the edge or cutting end, indicating that they were much used.

The occurrence of these axes or hammers and chisels of stone and the remains of ancient diggings, among the copper mines of Lake Superior has recently been announced by Dr. Chas. T. Jackson

* Since the above was written I have received a note from Dr. P. R. Hoy of Racine, announcing the discovery of two vases near to that place. They are of this shape (Sketch) ornamented at the top. The largest is seven inches in diameter at the top and eleven and a half inches high, it would hold about five quarts. The other is about half the size.

Letter Jan'y 10th, 1851.

the U.S.Geologist, and proves that the mound-builders there obtained the supply of copper so often found connected with their mounds. Ancient excavations along some of the veins are found 6 feet deep and at one place it is stated a cart load of these rude mining instruments has been found. But time will not allow me to go into further details on this highly interesting subject/

Should any of my hearers catch the spirit and enthusiasm of the antiquarian and undertake to examine these works for themselves, I must caution them against mistakes. At the commencement of my labors this season I waded through the deep mud and mire of the "Big Marsh" in Brookfield, to examine and survey some ridges representing snakes or massasaugas as they were supposed to be. Their serpentine form and attenuated extremities gave much probability to the suggestion. The arrangement in a uniform direction with the spaces between them often protected by another, behind, as in the works of defence, gave additional evidence of their artificial origin. (Sketch) But further observation and reflection convinced me that these massasaugas were formed by the expansion and contraction of ice.

At another time I examined very carefully a mound or ridge, that was traced across a small run at the outlet of a marsh or pond and proved to be a beaver dam.

And especially I must caution you (in conclusion) while opening mounds, not to commit the error of a certain down-easter who penetrated the far west in search of adventure as far even as Buffalo! He was industriously and eagerly engaged in opening an artificial mound when he was hailed by a farmer, who resided near by, to know "What he was doing there, on his potato hill":