
REPORT
ON THE
MOUND EXPLORATIONS
OF THE
BUREAU OF ETHNOLOGY.
BY
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Mound No. 2 seems to have been purposely built upon the sunny slope of the cliff just below the summit, so as to be sheltered from the cold northwest winds and partly also from observation, while its occupants had a nearly unobstructed field for observation and signals. Unlike the other mounds near it which were opened, it was composed wholly of the rock and soil taken from around it. Possibly it may have been used as a sentry post or signal station. The charcoal, ashes, and split bones of animals were doubtless the remains of the feasts and fires of the watchmen; the burial of a child in the mound was intrusive and by modern Indians. Not a fragment of pottery was found at this locality, although within 10 miles of the pottery circle in Iowa, which will be noticed hereafter.

WISCONSIN.

The explorations in this State were confined chiefly to the southwestern counties, though brief visits were made to some other localities, where a few mounds were opened and some interesting groups sketched.

DANE COUNTY.

One group near Madison, which does not appear to have been noticed by other explorers, was examined. This is situated about 2 miles southeast of the capital and just beyond the mounds near Lake Wingra, described by Dr. Lapham. The works consist chiefly of earthen circles and ovals, which in some cases surround excavations, and are shown in the annexed Fig. 6. As will be observed, with the exception of No. 8, which is a low mound, situated a short distance southwest of No. 7, they are in a single straight line running northwest and southeast. No. 1 is a double excavation, one portion oval, the other in the form of a horseshoe and surrounded by a ring of earth 1 foot high; depth of excavation from 3 to 6 feet. Nos. 2, 6, and 7 are low mounds, but the others, which are rings of earth, are about 5 feet high on the outside and 4 feet on the inside, the surface of the inner area being raised about a foot above the surrounding level. The respective diameters are as follows: No. 2, 32 feet; No. 3, 34 feet; No. 4, 36 feet (greatest diameter); No. 5, 28 feet; No. 6, 26 feet; No. 7, 28 feet. No. 1 is 45 feet long. No. 4 is not a complete circle, having a wide opening toward the southwest.

These are certainly not the work of the white man, as they present nothing in common with his habits or customs. They appear now just as they did in 1844, except that some of those in the field at the northwest end of the row have since been nearly obliterated by the plow.

CRAWFORD COUNTY.

The first group of mounds of this county noticed here is found on the bluff just above the confluence of the Wisconsin and Mississippi rivers, and about 5 miles southeast of Prairie du Chien. The bluffs at this

point form a sharp promontory jutting out toward the west, with remarkably steep and partially precipitous sides on the south and west, rising about 150 feet above the general level. This is capped by a sharp sandy ridge, rising in the central portion another hundred feet. On the crest of this ridge are four mounds, which may be numbered 1, 2, 3, and 4. Between 1 and 3 is a somewhat broad and flattened depression, in which mound No. 2 is situated. The ridge beyond the point gradually descends toward the east, becoming broadened and flattened as it recedes. On this portion there are 10 small circular mounds in a single line.



FIG. 7.—Walled vault in mound, Prairie du Chien, Wisconsin.

Mound No. 1 (Fig. 7) was opened in 1876 by Judge Bronson, who found at the base of it some six or eight skeletons lying stretched out horizontally, and covered by a dry, light colored mortar, which had run between and incased the bones and even filled some of the crania. As only the southern portion had been opened, the remainder was carefully

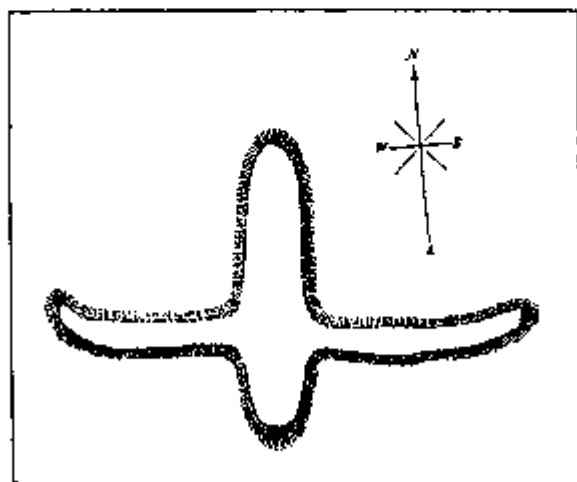


FIG. 8.—Bird mound, Prairie du Chien, Wisconsin.

explored. The dried mortar was very hard and difficult to dig through, but the pick soon struck some flat limestone rocks, which, when fully exposed, were found to be parts of a rough wall about 3 feet high, from the natural surface of the ground, and 8 feet long. In the opposite side of the mound, about 12 feet from this and parallel to it, was another similar wall.

The ends of these walls are shown in Fig. 8. Between them on the natural surface had been placed side by side a number of skeletons

lying flat and lengthwise, parallel with the walls. The heads of these are indicated by the row of little circles at the bottom. Immediately over these was the layer of mortar; next above this, between the walls and also over the vault forming the body of the mound, was a layer of very hard, light-colored clay mixed with ashes, but no charcoal. The top covering was of sand and soil to the depth of 18 inches. Before it was disturbed this mound was about 35 feet in diameter and 6 feet high. There was no evidence of fire, but much tending to show that the builders intended to incase the skeletons in a water-tight covering of mortar, which, when originally placed there, must have been sufficiently soft to run into all the interstices between the skeletons, these all being filled, as were also some of the crania.

On the depression of the ridge heretofore mentioned, between mounds 1 and 3, is mound No. 2. This is an effigy representing a bird (see Fig. 8), the dimensions of which are as follows: Length of body, 42 feet, or total length, including the head and neck, 60 feet; of each wing, 42 feet; greatest width of body, 18 feet, and greatest elevation 3 feet. Several pits dug in it proved it to have been constructed wholly of the yellow

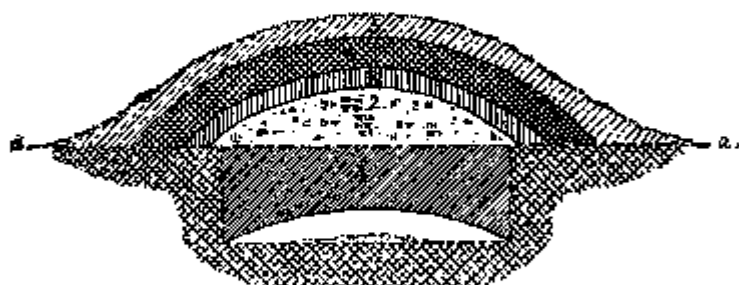


FIG. 9.—Section of mound and pit, Prairie du Chien, Wisconsin.

sand and soil of the ridge. No bones or relics of any kind were found in it. The indications lead to the belief that it was carved out of the ridge, rather than thrown up, the wings still forming the crest from which the head and body slope gradually in opposite directions.

Mound No. 3 (Fig. 9) is a few paces to the west of No. 2 and on slightly higher ground. This was also partially explored by Judge Bronson in 1876, and, with the further examination by the Bureau agent, gave the following results: First, a covering of soil and sand a foot or more in depth (No. 5), next a layer (No. 4) of calcined human bones nearly 2 feet in depth, without order, mingled with charcoal, ashes, and reddish brown mortar (clay and sand), burned as hard as a brick. Immediately below this was a layer (No. 3) 1 foot thick of mortar consisting largely of sand burned to a brick-red color. Below this in the layer marked 2 were found the skeletons of 15 or 16 individuals without any arrangement, mingled with which were charcoal, firebrands, and ashes. The bones were charred and portions of them glazed with melted sand. The mass appears to have been first covered with

soft mortar, which filled the spaces, and the burning done afterward. Scattered through the mass were lumps of clay apparently molded in the hands, which the fire had converted into rude bricks. The bottom of this layer corresponded with the original surface of the ground. Further excavation to the depth of 2 or 3 feet revealed a circular pit in the original soil (marked 1 in the figure) about 6 feet in diameter, the bottom of which was covered an inch deep with fine chocolate-colored dust. The strangest fact regarding this pit is that, although the intermediate filling between the 1-foot depth at the bottom and the layer above (the bottom of the mound proper) was similar in appearance to the ordinary soil of the ridge, yet the under portion of it remained arched over the 1-foot space beneath. It was probably hardened by the fierce fire above.

Eleven paces west of this mound, situate 1 on the brow of the bluff, is No. 4, only 12 feet in diameter and 4 feet high. This mound, like the others, was built up chiefly of very hard material resembling mortar. In it was a single skeleton lying on its right side; placed in the form of a circle on the left hip were 140 shell beads. The left arm lay extended along the upper side; the knees were drawn up at right angles to the body. Although now so dry and hard, the mortar at some former time had made its way into and filled the skull and fitted neatly around the bones which were all well preserved and had not been disturbed since they were first placed there. Around the neck were 12 shell beads and 5 small perforated sea shells.

On the lower, broadened portion of the ridge, in its eastern extension, as before remarked, is a row of ten small circular mounds, which vary in height from 2 to 4 feet and in diameter from 19 to 32 feet. In addition to these there are also here two elongate mounds or embankments in a line with each other, their nearer ends being about 3 paces apart. The longest of these is 192 feet in length, the other 45 feet. Two of the circular ones were opened, in both of which were found some indications of their having been used for burial purposes, but in one only were any bones obtained. No relics of any kind were discovered. From the larger ones which had been previously opened a number of stone and copper implements were obtained.

A short distance to the northwest of the foregoing group are traces of many circular mounds, some long earthworks, and effigy mounds. In fact nearly the whole area of the valley of Prairie du Chien township appears to have been once literally dotted over with ancient works. Many of these are effigy mounds representing deer, bears, rabbits, etc., apparently in droves, sometimes with and sometimes without other works intermingled. But in all cases the effigies are heading southwest, trending with the general course of the river in this section.

At the upper end of the prairie are a number of effigy mounds and long works as yet but little injured, while others in the fields are

nearly obliterated. Some of these have been opened and various relics obtained, mostly those accompanying intrusive burials.

The greater number of a row of large circular mounds, situated on a high bottom between the old bayou and the river, have been removed to make way for buildings, railroad tracks, etc., this being the only part of the immediate area which is not overflowed when the water is very high. Many articles of stone, copper, iron, and silver were found, but mainly from intrusive burials, though obtained at or beneath the base.

One large mound, 70 feet in diameter and 10 feet high, was still unexplored. This was opened. It had been considerably defaced, especially on the western side. According to tradition it was a noted burial place of the Indians, which was certainly confirmed by the result. The surface or top layer was composed mainly of sand and alluvial earth to the depth of some 3 or 4 feet. Scattered through this in almost every part of the mound were found human skeletons in various stages of decay and in different positions, but mostly stretched horizontally on the back. Mixed with these remains were fragments of blankets, clothing, and human hair; one copper kettle, three copper bracelets, one silver locket, shown in Fig. 10; ten silver bracelets similar to the one shown in Fig. 11, one having the word "Montreal" stamped on it; and another the letters "A. B.," two silver ear-rings; six silver brooches similar to Fig. 12; one copper finger ring; one double silver cross (Fig. 13); one knife handle; one battered bullet, and one carved wooden pipe similar to those at present in use. In fact, the top layer to the depth of 3 or 4 feet seemed to be packed as full of skeletons as possible without doubling them, and even that had been resorted to in some cases.



FIG. 10.—Silver locket from mound, Prairie du Chien, Wisconsin.



FIG. 11.—Bracelet of silver from mound, Prairie du Chien, Wisconsin.



FIG. 12.—Silver brooch from mound, Prairie du Chien, Wisconsin.

Carrying the trench down to the original surface of the ground there was found, near the center, at the bottom, a single skeleton of an adult,

in the last stages of decay, and with it a stone skinner, stone drill, scraper, fragments of river shells, and fragments of a mammoth's tooth.

The earth below the thick upper layer was mixed with clay and ashes or some other substance evidently different from the surrounding soil, but not so hard as the mortar-like material found in the mounds on the bluff.

The main road from Prairie du Chien to Eastman follows chiefly the old trail along the crest of the divide between the drainage of the Kickapoo and Mississippi rivers. Along this are a number of effigy mounds; some of them in cultivated fields, but the larger number in the forest, the trees upon them being of the same size as those on the surrounding ground. Most of these, which are in part referred to in Mr. Strong's notes and figures,¹ were surveyed and platted. A plat of the southwest part of Crawford county showing the location of the groups mentioned is given in Fig. 14.

FIG. 12.—Silver cross from mound, Prairie du Chien, Wis.

The first group measured is situated about a quarter of a mile north of Eastman, on Sec. 18, T. 8 N., E. 6 W. These mounds lie west of the road, partly in the woods and

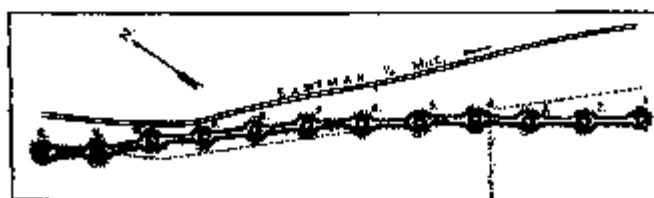


FIG. 15.—Earthworks near Eastman, Crawford county, Wisconsin.

partly in the field. The group is in fact a series or chain of low, small circular tumuli extending in a nearly straight line northwest and southeast, connected together by embankments as shown in Fig. 15. They are on the top of the ridge.

¹ Smithsonian Report of 1877, pp. 229-246.

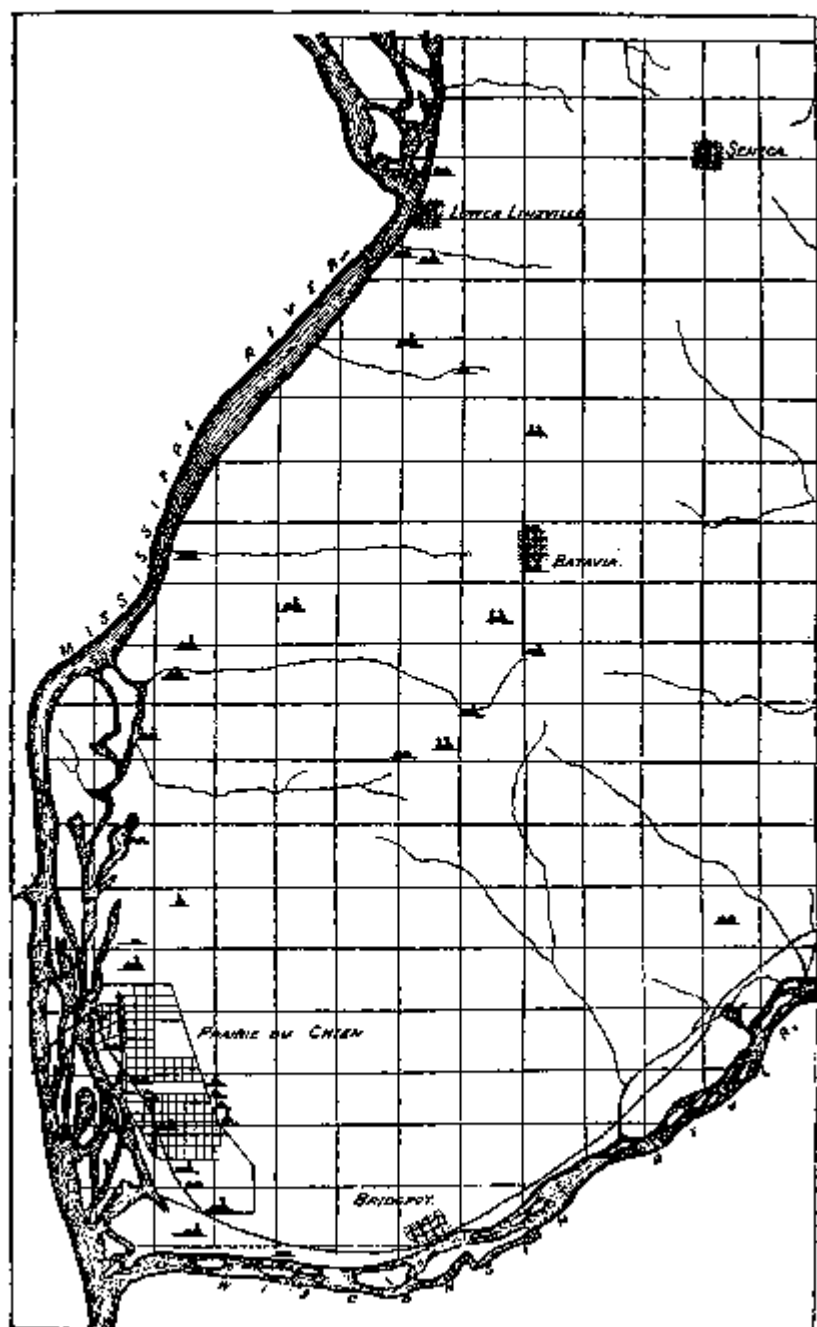


FIG. 14.—Plat of southwest part of Crawford county, Wisconsin.

Commencing with mound No. 1, at the southern end of the line, the direction and distances from center to center and the diameters and heights are as follows:

Number of mound.	Course.	Distance.	Diameter, north and south.	Diameter, east and west.	Height.
		<i>Feet.</i>	<i>Feet.</i>	<i>Feet.</i>	<i>Feet.</i>
1.			22	25	3
1 to 2.	N. 37° W.	53	18	22	3
2 to 3.	N. 33° W.	55	19	23	3
3 to 4.	N. 25° W.	58	18	22	2½
4 to 5.	N. 38° W.	58	23	24	3
5 to 6.	N. 31° W.	58	22	25	3
6 to 7.	N. 34° W.	64	20	21	2½
7 to 8.	N. 43° W.	43	23	27	2½
8 to 9.	N. 36° W.	56	20	18	1½
9 to 10.	N. 36° W.	57	23	25	2
10 to 11.	N. 36° W.	58	27	25	2
11 to 12.	N. 30° W.	57	22	18	1

In the same section, at the village of Eastman (or Batavia), are the remains of two bird-shaped mounds, both on top of the watershed and both heading southward.

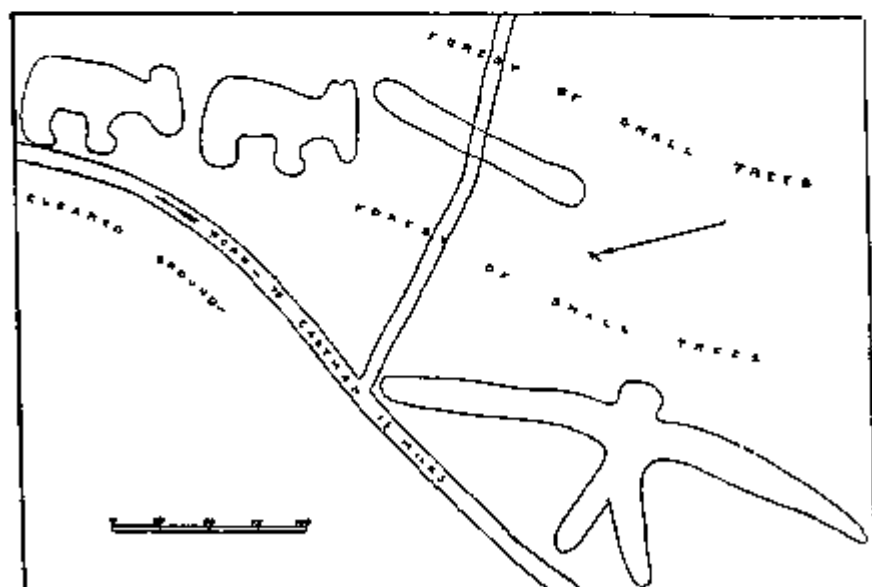


FIG. 16.—Mounds on northeast quarter of Sec. 24, T. 8 N., R. 6 W., Wisconsin.

About 2 miles from Eastman, in the direction of Prairie du Chien, just east of the Black River road, on Sec. 24, T. 8 N., R. 6 W., are three effigy mounds and one long mound, shown in Fig. 16. They are situ-

ated in a little strip of woods near the crest, but on the western slope of the watershed and near the head of a coulee or ravine.

This is the group which Mr. Strong represents in his Figs. 12, 13, and 14.¹ The two effigies representing quadrupeds (bears) are headed toward the south, while the other (probably representing some swallow-tailed bird) is headed eastward; the long mound runs northeast and

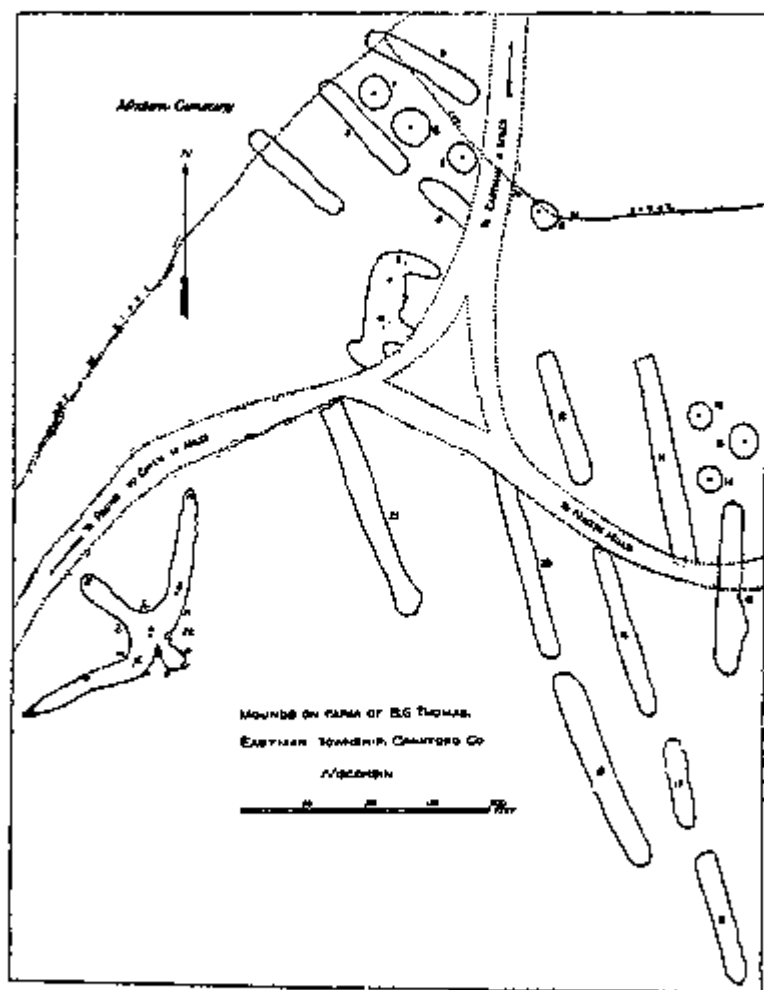


FIG. 17.—Mound group at Hazen Corners, Crawford county, Wisconsin.

southwest. The dimensions of these are as follows: The total length of each of the quadruped figures is about 80 feet, greatest height about 2 feet. The expansion of the wings of the bird from tip to tip is 267 feet; length of the body from top of the head to the tip of the longer branch of the tail, 110 feet; height of the center of the body, 3 feet.

¹ Smithsonian Report, 1877, p. 244.

As will be seen by reference to Mr. Strong's figures, these measurements differ considerably from his. This is due in part, but to no great extent, to the wearing down and consequent expansion since the date of his examination.

The length of the long mound is 120 feet, average width 15 feet, and height from 12 to 15 inches.

HAZEN CORNERS GROUP.

The next group surveyed is situated on Mr. B. G. Thomas's farm, Sec. 36, T. 8 N., R. 6 W., at what is known as Hazen Corners. The

mounds are on the crest of the ridge heretofore mentioned and on both sides of the Black River road, 9 miles from Prairie du Chien.

This is the group represented in Mr. Strong's Fig. 4. It is mostly covered with a growth of small trees, which confirms Mrs. Thomas's statement that when her family first came to this place the ridge here was almost bare of trees.

The main ridge runs a little east of north before reaching this point, but here it curves and branches, one branch running north, the other eastward. A few of the mounds are on the crest, the rest on the southern slope of the ridge that runs eastward and on the eastern slope of the main ridge close to the junction of the branches.

The group consists of 24 mounds, 1 quadruped, 3 birds, 13 long and 7 round mounds, all of which, except two of the birds, are shown in the diagram (Fig. 17); the latter are shown in Fig. 18.

The dimensions of mound No. 1 (quadruped) are as follows: Total length, 98 feet; width over the shoulder to the fore foot, 41 feet; width of body between the legs, 27 feet; width of fore leg near the body, 23 feet; width of the hind leg

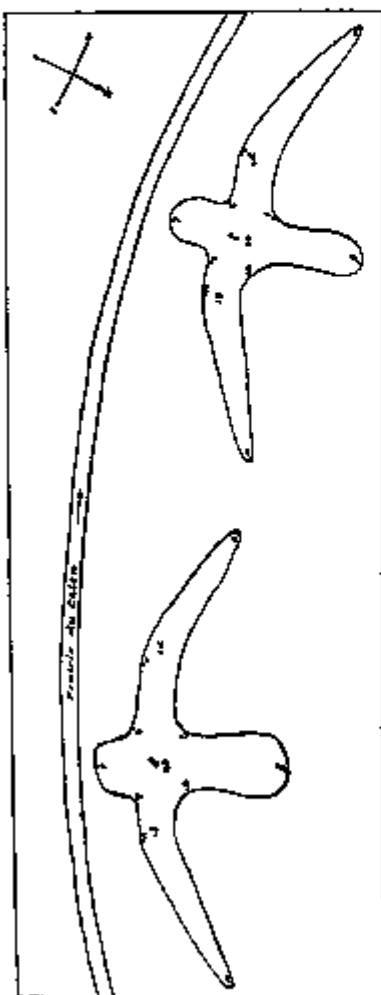


FIG. 18.—Bird mounds at Hazen Corners, Crawford county, Wisconsin.

near the body, 17 feet; distance between the legs at the body, 32 feet; height at highest point, 3 feet. The natural curves of the animal's body are remarkably true to nature.

The following table gives the dimensions (length and width of the long and diameter of the round mounds) of those numbered 2 to 21.

No.	Diameter or length.	Width.	Height.*	Remarks.
	<i>Feet.</i>	<i>Feet.</i>	<i>Feet.</i>	
2	90	13 to 18	3	This is the measurement of the part remaining.
3	83	15 to 15	2½	
4	50	14 to 18	2½	
5	24		2	
6	31		2½	
7	28		4	
8	102	13 to 10	2	
9	22		2	
10	110	14 to 17		
11	106	16 to 19	2½	
12	21		2	
13	28		2½	
14	21		2½	
15	170	11 to 17	2	
16	138	14 to 16	2	
17	74	12 to 16	2½	
18	110	13 to 18	2	
19	173	16 to 22	2½	
20	155	19 to 18	2	
21	180	16 to 33	2	

* Approximate.

The dimensions of bird mound (22) are as follows, commencing with the end of the north wing:

	<i>Feet.</i>		<i>Feet.</i>
a to b	84	Width of north wing at tip	8
b to c	44	Width of north wing between tip	
c to d	27	and curve	15
d to e	100	Width of north wing at curve	18
e to f	34	Width of north wing at body	36
f to g	74	Width of body and tail	15
g to h	108	Width of body at k to l	17
a to e	228	Width of neck, i to k	18
c to k	23	Width of head, p to q	15
e to i	16	Width of south wing at body, k to l	32
e to k	15	Width of south wing at curve, m to o	19
e to l	20	Width of south wing between curve	
e to n	26	and tip, at r	14
e to u	36	Width of south wing at tip	4
e to o	29		

This effigy lies with head down hill, and the washing from the ridge has filled in between the body and the wings until they are probably lower and narrower than when they were first built. The outline of the south wing is filled with this washing for a distance of 38 feet, and hence its dimensions here could not be accurately determined. It and

the mounds numbered 17, 18, and 19 stand on the lowest ground of any of the group. It is about 3 feet high at the point *c* if the measurement is taken from the surface about the head, but only about a foot and a half if taken under the right wing. The surface of the wings and body is rough and rounded, the slopes to the surface of the ground abrupt to the east and gradual to the west. The wings taper and decrease in height to the tips, but the body keeps its height and form.

Mound No. 23 (Fig. 18) is also in the form of a bird with outstretched wings. It lies to the southwest of 22, on top of the ridge, with the head lying crosswise of the highest point.

Mound No. 24 is close to the right or east, on the high part of the ridge, extending in the same direction as 23.

The outlines of both are clear and the slopes to the surface abrupt. The wings curve and taper and decrease in height to their tips, while the bodies of both preserve their height and form. They are covered by a thick growth of young trees. The dimensions of No. 23 are as follows, commencing at the end of the left wing:

	Feet.		Feet.
<i>a</i> to <i>b</i>	94	Width of left wing at tip	9
<i>b</i> to <i>c</i>	37	Width of left wing midway between	
<i>c</i> to <i>d</i>	56	tip and curve	18
<i>d</i> to <i>e</i>	90	Width of left wing at body	25
<i>e</i> to <i>f</i>	37	Width of body at tail	31
<i>e</i> to <i>g</i>	72	Width of body at <i>k</i> to <i>l</i>	29
<i>f</i> to <i>g</i>	109	Width of neck at <i>i</i> to <i>k</i>	25
<i>a</i> to <i>e</i>	240	Width of head at end	24
<i>c</i> to <i>h</i>	22	Width of right wing at body	30
<i>c</i> to <i>i</i>	23	Width of right wing at curve	25
<i>c</i> to <i>k</i>	28	Width of right wing midway be-	
<i>c</i> to <i>l</i>	26	tween curve and tip	18
<i>c</i> to <i>n</i>	44	Width of wing at tip	7
<i>c</i> to <i>o</i>	56		

The measurements of mound 24, also commencing with the left wing, are as follows:

	Feet.		Feet.
<i>a</i> to <i>b</i>	94	<i>c</i> to <i>e</i>	48
<i>b</i> to <i>c</i>	35	Width of left wing at tip	6
<i>c</i> to <i>d</i>	45	Width of left wing midway between	
<i>d</i> to <i>e</i>	95	tip and bend	18
<i>e</i> to <i>f</i>	39	Width of left wing at bend	21
<i>e</i> to <i>g</i>	71	Width of left wing at body	25
<i>f</i> to <i>g</i>	110	Width of body at tail	23
<i>a</i> to <i>e</i>	230	Width of body at <i>k</i> to <i>l</i>	29
<i>c</i> to <i>h</i>	26	Width of neck	27
<i>c</i> to <i>i</i>	23	Width of head	23
<i>c</i> to <i>k</i>	22	Width of right wing at body	25
<i>c</i> to <i>l</i>	24	Width of right wing at bend	23
<i>c</i> to <i>n</i>	35	Width of right wing at tip	6

The nearest spring is some 300 or 400 yards northeast of the group at the foot of the ridge.

Three of the round mounds of this group were explored, in each of which were found skeletons much decayed. In two of them no specimens, but in the other, on the original surface of the ground at the center, a small stone celt, some pieces of melted lead, and a regularly formed gunflint. These articles were close together and about 2 feet from the skeleton.

Trenches were also cut through the long mounds, which showed that the first 10 or 12 inches were of the ordinary vegetable mold, but the remainder to the original surface, of yellow clay. In one or two places small pieces of charcoal were observed, but nothing indicating burial. The result was the same in all the trenches.

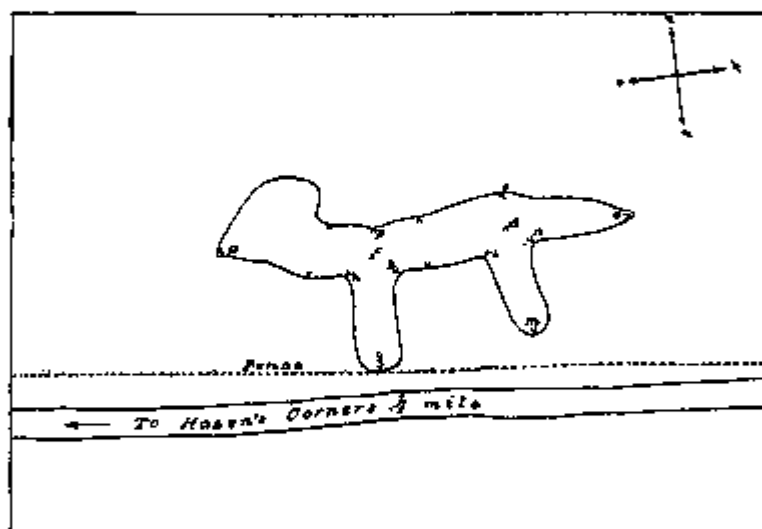


FIG. 19.—Quadruped effigy on Sec. 34, T. 8 N., R. 6 W., Wisconsin.

Northward of this group some 400 yards there is a mound in the form of a quadruped, probably a fox (Fig. 19), partly in the woods and partly in the field on the west side of the road. It is built on the crest of the ridge with the head to the south. The outlines of the body are clear, but those of the head are somewhat indistinct. It gradually decreases in height from the head, where it is about 18 inches, to the end of the tail and legs. It is in the same section as the mounds at Hazen Corners. The nearest water is the spring before mentioned.

The ridge slopes to the east and west from the mound, and also falls slightly to the north and south. A partial exploration has been made, but nothing save a good sized rock was dug out of it.

The measurements of this mound are as follows:

	Feet.		Feet.
Length of nose to end of tail, <i>a</i> to <i>s</i>	145	Width of tail at body	17
Length of body, <i>k</i> to <i>s</i>	62	Width of tail at end	3
Length of tail, <i>s</i> to <i>e</i>	35	Width of body at fore leg, <i>k</i> to <i>p</i>	21
Length of fore leg.....	32	Width of body between legs	19
Length of hind leg	30	Width of body at hind legs	20
Width of fore leg at body, <i>k</i> to <i>k</i>	18	Distance between legs at body, <i>k</i> to <i>l</i> ..	31
Width of fore leg at end.....	16	Distance between legs at toes, <i>i</i> to <i>m</i> ..	50
Width of hind leg at body, <i>l</i> to <i>s</i>	19	Tip of nose to fore leg, <i>a</i> to <i>l</i>	64
Width of hind leg at end	18		

The tail is pointed and the ends of the legs are round.

MOUNDS ON SECTION 35, T. 8 N., R. 6 W.

About a mile southward of Hazen Corners on the Blake river road

is a group of four bird-shaped and one long mound situated on the NE. of sec. 25, T. 8 N., R. 6 W., at the cross roads. The effigy mounds are west of the road and the long one is east of it. They are all situated on the northern slope of the ridge not far from the top; the heads of the effigy mounds are, as usual, to the south and up the hill.

Three of these effigies are of about the same form, the only difference between No. 3 and the others being in the shape of the wings, which stretch nearly at right angles with the body instead of curving like the others. Their bodies are shorter

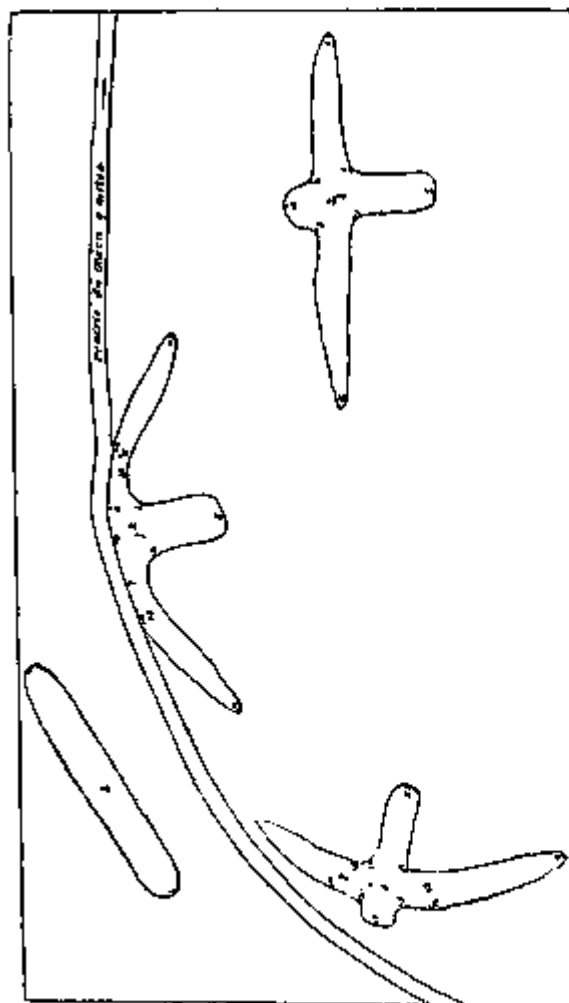


FIG. 20.—Group of bird effigies. Sec. 35, T. 8 N., R. 6 W., Wisconsin.

than those at Hazen Corners; otherwise there is but little difference.

The tops of all the mounds in this group are rounded and the slopes abrupt. Like the others they gradually narrow and descend to the tips of the wings.

No. 1 (Fig. 20) is about 3 feet high; No. 2, $3\frac{1}{2}$ feet; No. 3, $3\frac{1}{2}$ feet; No. 4 (Fig. 21) $2\frac{1}{2}$ feet, and No. 5 (Fig. 20) (the long mound), 2 feet.

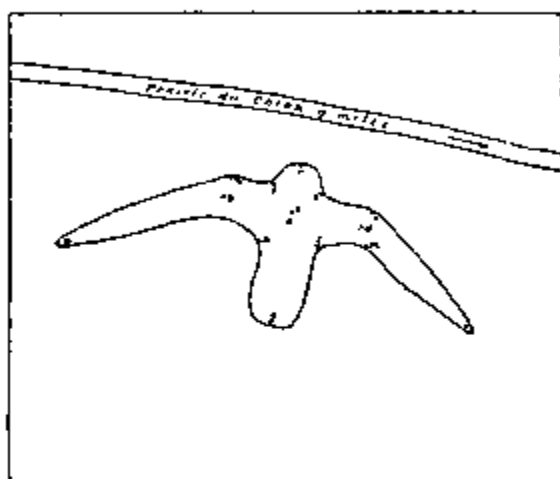


FIG. 21.—Bird effigy, Sec. 25, T. 8 N., R. 8 W., Wisconsin.

The dimensions of No. 1, commencing with the tip of the left wing, are as follows:

	Feet.		Feet.
a to b	22	Width of left wing at tip	7
b to c	28	Width of left wing midway between	
c to d	27	bend and tip	21
d to e	59	Width of left wing at body	26
a to e	161	Width of body immediately under the	
c to f	25	wings	25
e to g	56	Width of tail	20
f to g	81	Width of head at the front	18
a to h	21	Width of right wing at body	23
c to i	20	Width of right wing at bend	21
c to k	21	Width of right wing between bend	
e to l	17	and tip	17
a to m	24	Width of right wing at tip	8
c to n	37	Width of left wing at bend	22
c to o	36		

In No. 2, they are as follows:

	Feet.		Feet.
a to b	71	f to g	69
b to c	40	c to h	18
c to d	48	c to i	29
d to e	74	c to k	22
a to e	209	c to l	18
c to f	15	c to m	34
c to g	54	c to n	56

	Feet.		Feet.
c to o	54	Width of body at tail	23
Width of left wing at tip	5	Width of right wing at body	18
Width of left wing between tip and bead	17	Width of right wing at head	12
Width of left wing at head	18	Width of right wing between head and tip	15
Width of left wing at body	23	Width of right wing at tip	6
Width of body at butt of wings	41		

In No. 3, they are as follows:

	Feet.		Feet.
a to b	121	Width of body at butt of wings	25
b to c	98	Width of body near the end	28
b to d	28	Width of head	20
b to e	56	Width of right wing at body	25
b to f	18	Width of right wing between body and tip	16
b to g	21	Width of right wing at tip	5
b to h	17	a to c	219
b to i	20		
Width of left wing at tip	4		
Width of left wing between tip and body	17		

Of No. 4, the measurements are:

	Feet.		Feet.
a to b	88	Width of left wing at tip	7
b to c	36	Width of left wing between tip and bead	18
c to d	39	Width of left wing at head	24
d to e	83	Width of left wing at body	30
a to e	214	Width of body at butt of wings	30
c to f	24	Width of body at tail	22
c to g	61	Width of neck at butt of wings	26
c to h	22	Width of head at front	17
c to i	20	Width of right wing at body	28
c to k	23	Width of right wing at head	23
c to l	25	Width of right wing between head and tip	17
c to m	44	Width of right wing at tip	5
c to n	35		
c to o	44		

No. 5, the long mound, is 152 feet long and 19 feet wide at the north end, 22 in the middle, and 20 at the south end.

The tips of the wings, the heads, and tails of the effigy mounds and the ends of the long mound are rounded.

These mounds do not appear to be included in those mentioned in Mr. Stroug's paper.

MOUNDS ON BLAUMER'S LAND.

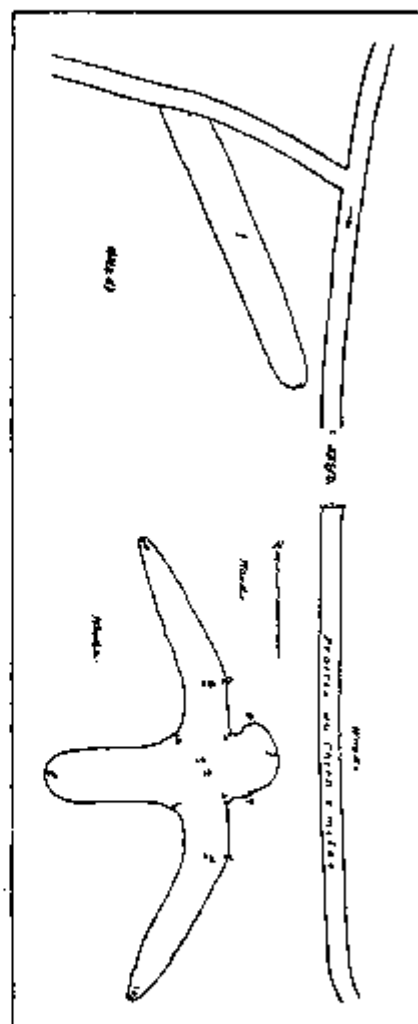
This is a small group consisting of but two mounds, an effigy, and a long mound. They are situated west of the Black river road, just north (10 or 15 rods) of the line between Prairie du Chien and Eastman townships, on SW. $\frac{1}{4}$ Sec. 35, T. 8 N., R. 6 W., on the top of the ridge in the woods. The ridge slopes from them to the east and west. The group

is shown in Fig. 22. No. 1 (the long one) is 142 feet long, 21 feet wide at the north end, 20 in the middle, and 13 at the south end. It is about 2 feet high and extends northwest and southeast.

No. 2, the effigy, 410 feet south and a little west of No. 1, is about 3 feet high, the top round, and the surface tolerably even, with highest point on the back; the slopes to the east abrupt. It measures from—

	Feet.
a to b	73
b to c	38
c to d	41
d to e	72
e to f	36
e to g	70
f to h	106
e to k	22
e to l	20
e to m	24
e to n	26
a to o	49
a to p	42
a to q	45
Width of left wing at tip	"
Width of left wing between tip and bend	17
Width of left wing at bend	21
Width of left wing at body	23
Width of body at end	20
Width of body at butt of wings	30
Width of neck at butt of wings	28
Width of head from p to q	31
Width of head at end	14
Width of right wing at body	24
Width of right wing at bend	21
Width of right wing between bend and tip	19
Width of right wing at tip	7
Expanse of wings, from a to e	200

FIG. 22.—Mounds on Shinner's land, Crawford county, Wis.



The ends of the wings and body are roughly semicircular.

THE COURTOIS GROUP.

About 3 miles north of Prairie du Oien is a group of ordinary conical mounds situated on Sec. 12, T. 7 N., R. 7 W., the general plan of which is seen in Fig. 23. The mounds numbered 1 to 9 are on a long, narrow, sandy swell, about 70 or 80 feet wide, which runs north and south, and is just high enough to place them out of reach of the high water of the Mississippi; the others, numbered 10 to 33, are in the adjoining fields.

No. 1. Circular in outline, rounded on top, 60 feet in diameter at the base and 3 feet high. Made of black sandy loam.

No. 2. An oblong, flat-topped mound; length, 60 feet; width, 35 feet, and height, 3 feet. As it was occupied in early times by the house of a Frenchman, and looks as though it had been plowed or graded down,

the present form is probably not the original one.

No. 4. Similar in size and form to No. 1; 5 feet high. A partial examination of this mound had previously been made, when some specimens were found, but no particulars could be learned in regard to them. It consisted of three layers; first, a top layer, $2\frac{1}{2}$ ft. thick, of black sandy loam; next a thin stratum of silver sand, and a bottom layer, 2 feet thick, of dark muck, slightly mixed with sandy loam. The re-examination revealed nothing save a few fresh-water shells.

No. 5. Conical, 40 feet in diameter and $3\frac{1}{2}$ feet high, had previously been opened by a trench through it from north to south.

A further examination brought to light

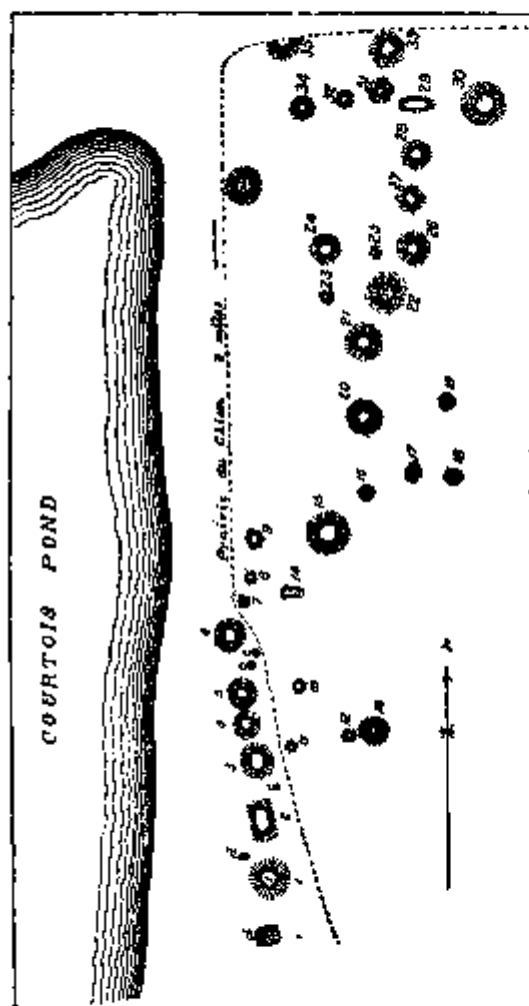


FIG. 21.—Courtois group, near Prairie du Chien, Wis.

some badly decayed human bones, which had been partially disturbed by the previous explorers, but enough remained in position to show that the bodies, or skeletons, had been folded when buried. These lay on the gravelly substratum of the ridge; hence it is presumed that the thin surface soil had been removed before burial. Nothing more, save a few decayed shells scattered here and there through the mound, was observed.

No. 6. Similar in size and form to No. 1; 4 feet high and composed throughout of dark sandy loam, similar to the surrounding surface soil. The plan of this mound, showing the relative positions of the skeletons and articles discovered, is given in Fig. 24.

In the western side (at *f*), about 2 feet below the surface, was a small deposit of fresh-water shells, but so far decayed that no specimens were saved. At *e* a folded adult skeleton was discovered, with head south and face west; under it lay a small stone perforator and above it a small arrow head. The bones were broken and very soft and the skull was crushed flat; from the indications it would seem that they had been broken before

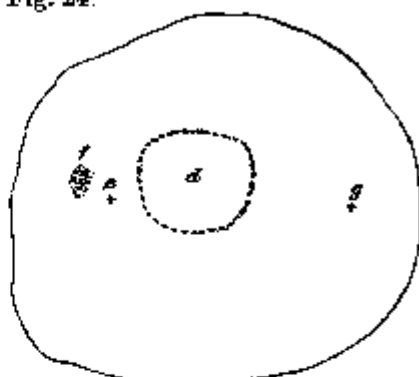


FIG. 24.—Mound No. 6, Courtois group, Prairie du Chien, Wis.

At *d* the original surface of the ridge had been excavated to the depth of a foot and over an area about 12 feet in diameter. In this layer were some 6 or 7 adult skeletons, all folded, with the heads in various directions, but all so soft and badly decayed that none of the skulls could be saved. At *g*, near the eastern side, at the depth of 2 feet, was part of an iron knife blade.

Nos. 3, 7, 8, and 10 were found to consist of dark loam throughout, but furnished no specimens or any evidence of having been used as burial places.

No. 16 is a very small and insignificant mound, scarcely exceeding 20 feet in diameter and not more than a foot in height, though it has evidently been considerably worn down by the plow. Nevertheless it is important as presenting the characteristics of a somewhat peculiar class of mounds quite common in this State, but seldom met with elsewhere; for this reason the figures and details are given more fully than would otherwise be required.

Circular in form, as shown by the plan given in Fig. 25, low, rounded, but somewhat flattish, it was constructed of material similar to the surrounding soil, and of the same character throughout, without any indications whatever of stratification. A circular, basin-shaped excavation had first been made in the ground to the gravel, in this case to the depth of 2 feet. The boundary of this excavated portion is indicated by the dotted circle.

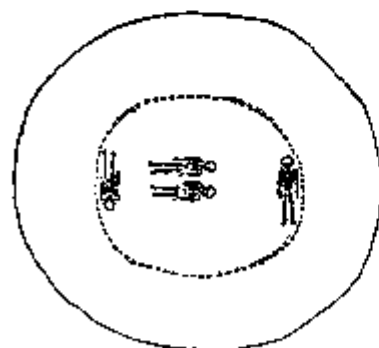


FIG. 25.—Plan of mound No. 16, Courtois group, Prairie du Chien, Wis.

Four skeletons were found at the points indicated in the figure, all lying horizontally at full length; 2 side by side near the center on the gravel, with heads south and faces up; 1 at the north side on the gravel, with head west and face northeast, and the other on the south side, with head to the east. No implements or ornaments of any kind were observed. It is probable that tumuli of this character are the burial places of the common people.

No. 17 was similar in every respect to No. 16 except that the excavation was only to the depth of 1 foot, and that in it were 8 folded skeletons in no regular order, heads being in all directions. On the margin of the excavation and rather above the natural surface of the ground was a broken skull.

No. 18, 20 feet in diameter and 2 feet high, unstratified, was composed of earth similar to the surrounding soil. There were no indications that the original surface had been hollowed out in this case, as in most of the others of the group, nevertheless 2 broken skulls were found a little south of the center at the depth of 3 feet, hence 1 foot below the original surface. A few feet northwest of the center, scarcely a foot below the surface of the mound, were 3 folded skeletons, and in the center another lying at full length, head west and face up. The height of the mound had been reduced by plowing.



FIG. 26.—Mound No. 20 (section), Courtois group, Prairie du Chien, Wis.

No. 19, 25 feet in diameter and 2 feet high, was similar to No. 18. Broken human bones were found in this tumulus to the depth of 6 inches, and 3 folded skeletons at different depths in no regular order of burial. But, what is somewhat singular, the skull in each case had been disconnected from and placed on top of the bundled bones of the skeleton.

No. 20, 70 feet in diameter and 5 feet high. This mound, as will be seen by the section shown in Fig. 26, was stratified as follows: Top layer of soil, 18 inches; next a hard mortar-like substance, or clay mixed with ashes, $2\frac{1}{2}$ feet; below this a layer of black, sticky, wet earth, 1 foot, and a bottom layer of sand 1 foot thick, extending to the gravel 1 foot below the original surface of the ground. On the west side, in the top layer, at the depth of from 9 to 12 inches, were 6 folded skeletons, and at the head of each a single sandstone of considerable size. Other human bones occurred in the same layer at a depth of from 6 to 9 inches,¹ which had been disturbed by the plow. In this layer was also a small pile of lead ore, on it some burned

¹ The measurements indicating the depth of skeletons and articles are always to be understood to the upper surface thereof from the top of the mound.

bones, and on these a folded skeleton with the head west, a lance head by one shoulder, and a stone implement near by.

Near the center, in the hardpan or mortar-like layer (No. 2) immediately under layer No. 1, was a folded skeleton with head east. By the head was a broken clay vessel. Directly under this, in layer No. 3, was a broken clay pot. At the west side, in the bottom or sand layer, was an extended skeleton, head east. Under the body a spearhead, and under the head a few copper beads. Some copper beads were also found around the ankles.

No. 31. Sixty feet in diameter and 3 feet high. The first stroke of the spade brought to light broken human bones, which lay close to the surface and appeared to have been disturbed by the plow, as they were not in regular order. Near the center, a foot down, lay a folded skeleton with head west, and by it a broken pot. A little to the east of the last, and 3 feet down, was another skeleton stretched at full length, with the head and face up. Under the head were a few copper beads. South of this, and at the same depth, was a small copper ornament, and a short distance southeast of the center, also at the same depth, a fine lance head.

No. 22. Sixty feet in diameter and 5 feet high. First foot, soil; the rest black, mucky earth, with a slight admixture of sand. At the depth of 2 feet were seven skeletons, with heads in various directions, some stretched out with the faces up, others folded, also other bones. At the center, about 3 feet down, were a few rib bones, apparently the remains of a skeleton, over which lay a copper plate. At the same depth, a little south of the center, three silver beads were discovered.

Although the excavation in this case, as in the rest of the mounds, was carried down into the gravel beneath, nothing was found below the depth indicated.

No. 26. Sixty feet in diameter and 5 feet high. Composed of earth similar to the surrounding soil. Near the center, 2 feet down, were two folded skeletons, with the heads northeast. At the heads were two pots, one with the mouth up, the other on its side, and in it a lump of lead ore. Under one of the skulls were two perforated bear's teeth. Several soft sandstones were found in the southwest portion, and under them some very soft human bones, the remains of a body buried here.

Southeast of the mound, and almost adjoining it, is a long, narrow, pear-shaped pile of dirt (not shown in the plat) about 40 feet long, 10 feet wide at the widest point and 2 feet high. A broad trench across the middle revealed nothing except the fact that it was composed of earth similar to the surrounding soil.

No. 23. A small mound 15 feet in diameter, 1 foot high, and of the same type as No. 16. In the excavation originally made in the natural surface was a single skeleton stretched at full length, head southeast and face up and near by it a broken pot.

the skull only were left. The other, at *k*, 2 feet below the surface, was similarly decayed.

THE VILAS MOUNDS.

This group, shown in Plate 1, is a large one, containing 56 mounds, and is situated on the area bounded by the Mississippi and Wisconsin rivers and the Chicago, Milwaukee and St. Paul Railroad, on Secs. 7 and 8, T. 6 N., R. 6 W., about 3 miles south of Prairie du Chien. They stand on the high sandy bank of the Wisconsin river, in a growth of small trees, some of them being flush with the brink, some on a small table land 10 or 15 feet higher than the others, and the rest on the general level of the prairie, all above high water.

The river banks are about 40 feet higher than the usual water level, the slopes steep, the surface where most of the mounds are situated comparatively flat, but to the northwest it rises in a small table some 10 or 15 feet higher than the prairie that borders on the Mississippi river, and commands an extensive view of the bottoms. The soil is sandy and easy to work, although not deep nor very productive. The trees appear to be of recent growth.

No. 48, S. 77° E. of 49, 62 feet long, extends east and west, and was intended to represent some kind of a quadruped, probably a bear. The eastern end at the time of examination was covered by a heavy growth of corn, and has been so plowed down that its form could not be fully ascertained.

Nos. 23, 24, and 33 were carefully excavated, but furnished no indications of having been used for burial purposes; nor were ashes, charcoal, or relics of any kind found in them; yet under each there was an excavation to the depth of a foot or more. They were composed of dark, sandy soil. Others were examined, but nothing discovered.

THE POLANDER GROUP.

This group is about a mile up the Mississippi river from Lynxville, Crawford county, on Lot 2, Sec. 14, T. 9 N., R. 6 W., at the mouth of a deep, narrow ravine.

The mounds are located partly on top of a narrow bench that runs around the foot of the bluff to the northwest and partly on its western slope. One of them is in the bed of a small creek (now dry) that drains the ravine. A plan of the group is given in Fig. 29. They are mostly simple conical heaps of earth, although there are some long ones in the group. Two of the large ones, close to the foot of the slope, are connected by a long, low embankment, like those found on the Souris river in Manitoba. The majority of them are small and low. The bank upon which they stand is probably 75 feet higher than the road that runs close to its foot on the west side. The bench is covered by a growth of trees, which the owner says have grown up within the last twenty-seven years.

Mound No. 3, situated on the western slope of the bench, is conical in form, about 45 feet in diameter and 7 feet high. Commencing at the top, there was first a thin layer of vegetable mold 2 inches in thickness (a, Fig. 30); next a layer, mostly of clay, slightly mixed with sand, which had probably washed from the bluffs, $3\frac{1}{2}$ feet thick (c); below this a layer of clay, very hard, 18 inches (d); then a layer (b) of loose, fine, dry dust, which gave out a peculiar odor; and lastly,

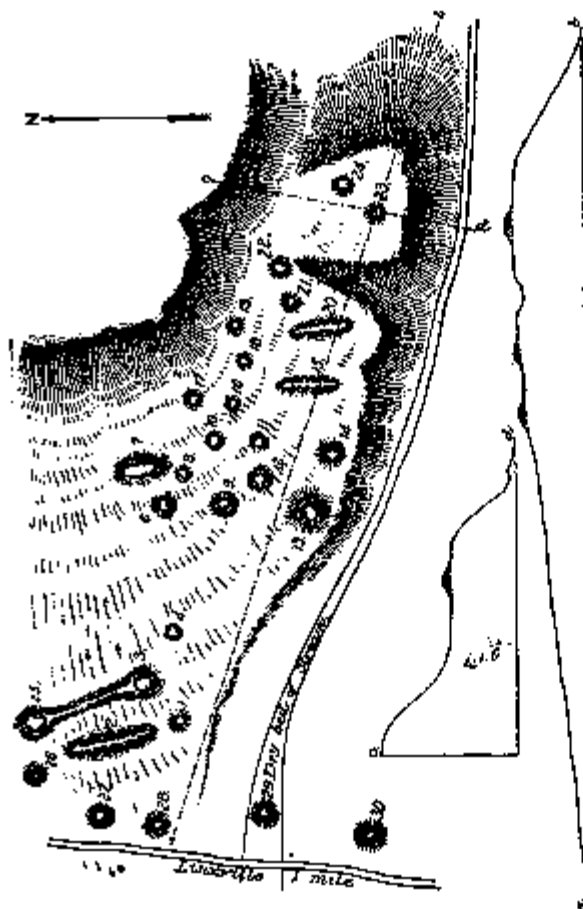


FIG. 30. The Teohuacan group, Sec. 14, T. 8 N., R. 3 W., Crawford county, Wis.

corresponding to the original surface of the ground, a thin layer, apparently composed of decayed vegetable matter (e). Beneath this was an excavation about 1 foot in depth, 8 feet wide, and 12 feet long. Owing to the slope on which the mound was placed, this had been cut into so as to make a level bed, on which the bodies were deposited. Here were twelve skeletons—ten of adults and two of children. The two children were in the northeast corner of the pit; the bones were in confusion. Three of the adult skeletons were in the middle

of the platform; the bones were disarticulated, but those of each skeleton formed into a bundle. Two skulls and a few of the bones of the body were found between the children and the other three, one of the skulls lying on top of the other. In the south end of the pit were three skulls in fragments and the remains of five skeletons in a confused heap. A single skull, but no other bones with it, was found in connection with a few flat stones in the hard clay layer at the depth of 2 feet.

Mound 9, 26 feet in diameter and between 2 and 3 feet high, stood on

the same slope as the preceding and, like it, had an excavation in the original surface of the ground, but much smaller, the length being only 4 feet, the width a little less, and the depth 1 foot. A foot from the top, near the center of the mound, lay a bundled skeleton, apparently an intrusive burial. Nothing was discovered in the pit except what were supposed to be decayed remains of two bundled skeletons.

Mound 8, one of the smaller tumuli of the group, presented some marked variations from those described. The diameter was scarcely 20 feet and height 3 feet. In the central portion, 2 feet distant from each other, were two stone graves, oval in outline, each $3\frac{1}{2}$ feet long by 3 feet wide, built up of cobblestones, and had probably been closed over dome-fashion at the top, though this portion had apparently fallen in. Over these, covering the tops about 6 inches and filling the spaces between and each side of them, was a layer of surface soil, and covering this a single layer of loose sandstones about 6 inches thick. In one grave were two bundled skeletons; in the other, three.

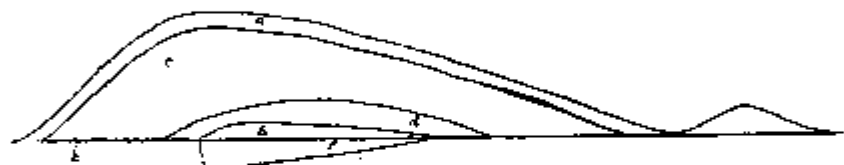


FIG. 35.—Mound No. 3 (section), Poland group, Crawford county, Wis.

Mound 6, circular, 23 feet in diameter and 3 feet high, was constructed as follows: Commencing at the top, there was first a layer, 2 inches thick, of vegetable mold, then a foot of surface soil; next a single layer of rough stones of various sizes; next a layer of earth 1 foot thick. Immediately under the layer of stones, nearly in the center of the mound, were two folded or bundled skeletons, lying on some loose stones. These stones were found to be part of a wall lining a pit in the original soil. This pit was 4 feet long by 3 feet broad between the walls, which were of a single thickness of cobblestones, the sides somewhat flaring, the corners nearly square, 18 inches deep, and sides lined entirely around with stones. Lying on the bottom were the skeletons of three adults and one child, all folded.

In mound No. 1 nothing was found save three good-sized stones. In No. 17 were three folded skeletons. In 29 there was a pile of stones somewhat in the form of an inverted cone, measuring 10 feet across the upturned base and tapering to a point at the depth of 3 feet; a few coals lay on the upper surface. At the bottom of the mound, on the original surface of the ground, were a copper drill and an arrow point.

Trenches were cut across the long mounds, but nothing observed, except that they were formed of loose surface soil.

No. 4 measured 26 feet in diameter and 3 feet high. In the center was a kind of vault formed by a circular stone wall 6 feet in diameter from outside to outside, and 4 feet inside, built in a pit dug in the orig-

inal surface to the depth of a foot or 18 inches. In this vault or grave was a skeleton very well preserved, doubled up and lying on the right side, at the depth of 4 feet from the top of the mound. The vault was covered very carefully with flat limestones like those of which the wall was built. No implements, ornaments, or relics of any kind were found.

No. 11 was about the same size as No. 4. Lying on the natural surface of the ground near the center were four large flat stones, placed so as to form a square. These bore distinct evidences of having been burned. In the area between them lay a single skeleton, folded and placed on its side. There were coals and ashes immediately about and on the stones, but none in direct contact with the skeleton.

Mound No. 12 was like No. 4 throughout, with stone vault and single skeleton, differing only in the fact that the skeleton was stretched out horizontally and that the covering of stones over the vault was less complete.

No. 16, though a small mound only 17 feet in diameter and 2½ feet high, presented some interesting features. It also contained an incomplete stone vault (Fig. 31), which, though only about 3½ feet wide, and of the form shown in the figure, extended from the top of the mound down a foot or more below the natural surface of the ground. This contained a single skeleton in a half upright position, the head being only about 2 feet below the surface of the mound

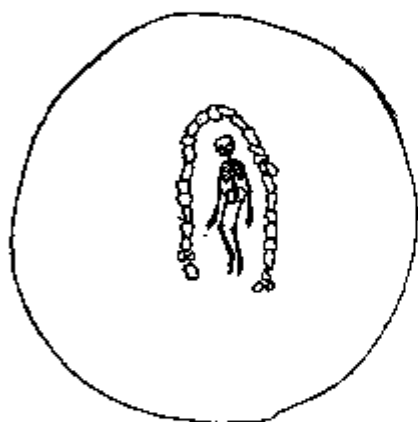


FIG. 31.—Mound No. 16 (horizontal section), Pottawatomie group.

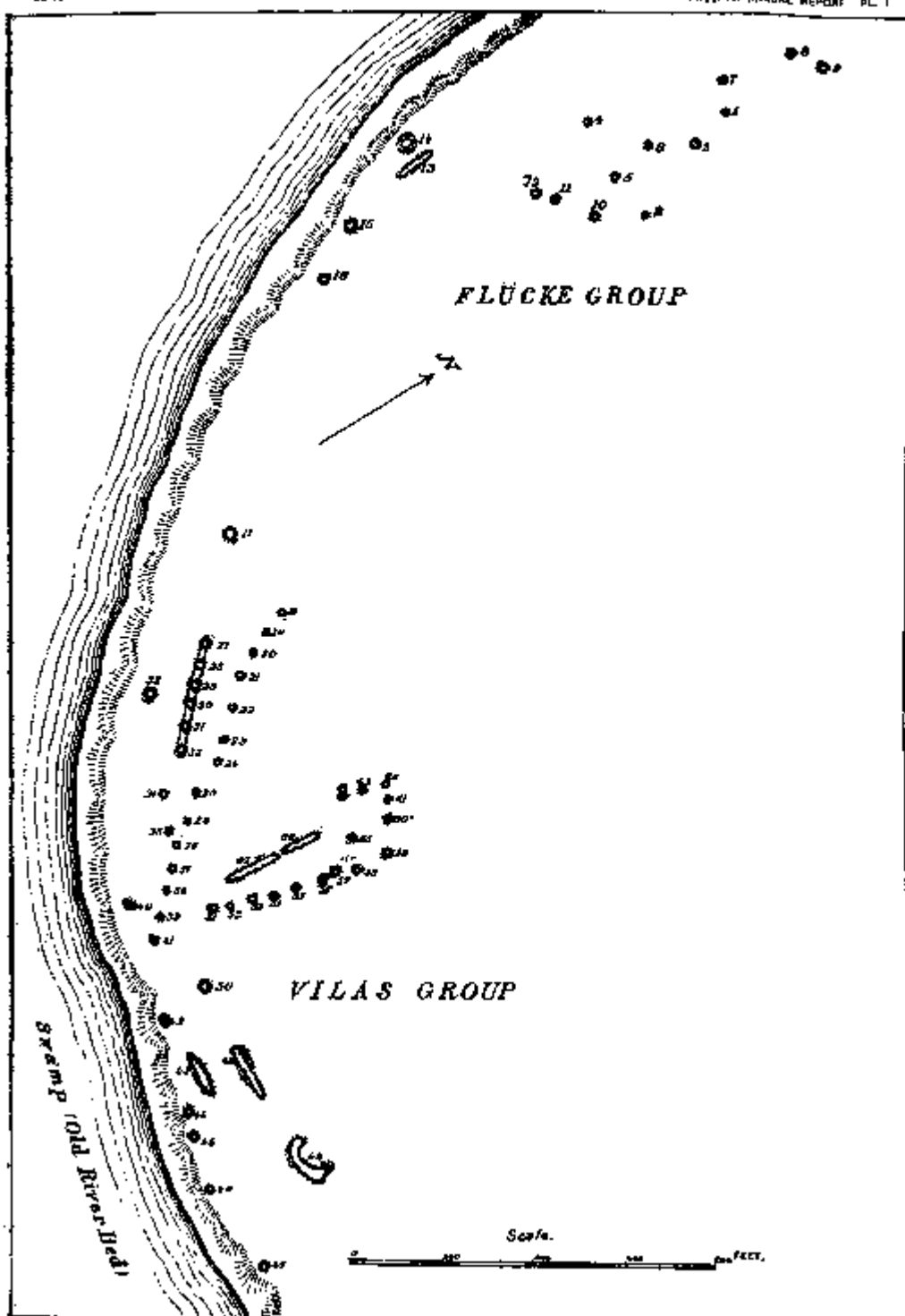
while the feet were down some 3½ or 4 feet below the surface, or nearly 2 feet lower than the head. The head was southwest, the feet northeast. Near the right hip was a discoidal stone. There were no traces of coals or ashes in this mound.

No. 30 contained neither stones, vault, nor skeleton, the only things found in it were a few badly decayed *Union* shells near the bottom.

THE FLÜCKE MOUNDS.

This group, shown on plat (Pl. I) in connection with the Vilas group, is on the farm of Mr. Joseph Flücke, 2 miles south of Prairie du Chien, and in the vicinity of the Vilas group. It contains twelve circular mounds, the relative positions of which are shown in the figure. Of these, numbers 1, 2, 3, 4, and 5 were opened with the following result:

No. 1, 65 feet in diameter and 6 feet high, was composed of dark, sandy soil throughout, except near the bottom, where there were some



PLAN OF THE VI

FLUCKE GROUPS, CRAWFORD COUNTY, WISCONSIN.

very thin layers of black earth, but these were of limited extent, not reaching across the mound, and not exceeding 2 inches in thickness. Beneath the central portion was an excavation in the natural soil, about 12 feet in diameter and extending down to the yellow sand, a depth of something over a foot. On the bottom of this excavation were three skeletons, all lying in a horizontal position. No. 1, on the back, head east, elbows out and hands turned towards the head; near each hand was a fine, large obsidian spearhead, one of which is 9 inches long. Near the head, on each side, were two spool-shaped articles of copper. From the position in which these were found, relative to the head, it is presumed they had been used as ear ornaments. Skeleton 2 was lying close to and on the north side of No. 1, the bones much decayed; no relics with it. No. 3 lay with the head northeast. The bones were partially burnt and charred from the head to the hips and more or less covered throughout with charcoal and ashes. The skull was crushed to pieces and charred until it was black; near it were several large copper beads, or perhaps ear pendants, made of sheet copper rolled into the form of long cones, varying in length from three-fourths of an inch to an inch and a half.

Mound 2 stands on the same elevation as No. 1. It measured about 60 feet in diameter, and a little less than 6 feet high. This, like the other, had beneath it a slight excavation in the natural soil. In this were the bones (except the skull) of an adult, in a close, compact bundle; with them were some of the teeth, but no part of the skull. The flesh had evidently been removed before burial here. Near by was a single arrowhead, the only article found in the mound.

Mounds 3 and 4, each 3 feet high, and respectively 42 and 36 feet in diameter, were similar in construction to 1 and 2, with the usual excavation beneath, but without any evidences of burial in them.

No. 5, a beautiful mound measuring 68 feet in diameter and 7 feet high, stands on the same elevation as 1 and 2. In the center was a circular or inverted conical mass of yellow sand and gravel, extending from the top of the mound to the depth of 3 feet. In this mass were the much decayed bones of a child. One side of the skull was colored by copper; a small copper bracelet made of two pieces of slender copper wire twisted together and a coil of copper wire were found with the bones. As these are evidently of European manufacture this may have been an intrusive burial. At the bottom of the mound, in an excavation in the original surface, were other human bones, but so decayed that it was impossible to tell whether they belonged to one or two bodies.

THE ARMSTRONG GROUP.

This group, which is situated near the Mississippi, one-fourth of a mile below Lynxville, at the mouth of a deep and narrow ravine, and consists of eleven round mounds and one effigy, is represented in Fig. 32.

Mound No. 11, somewhat oval in form, measured 48 feet in diameter from north to south, 33 feet from east to west, and a little over 4 feet high. Near the center was a skeleton lying on a circular platform of stones. This platform or layer of stones was about 5 feet in diameter and rested on the original surface of the ground. The skeleton was so far decomposed that it was impossible to determine precisely its position.

No. 12 occupies the lowest point in the group and is only about 200 yards from the river's edge, on a level about 20 feet above the usual water mark. It measured only 26 feet in diameter and 4 in height, and was composed almost wholly of stones, packed so tightly that it was

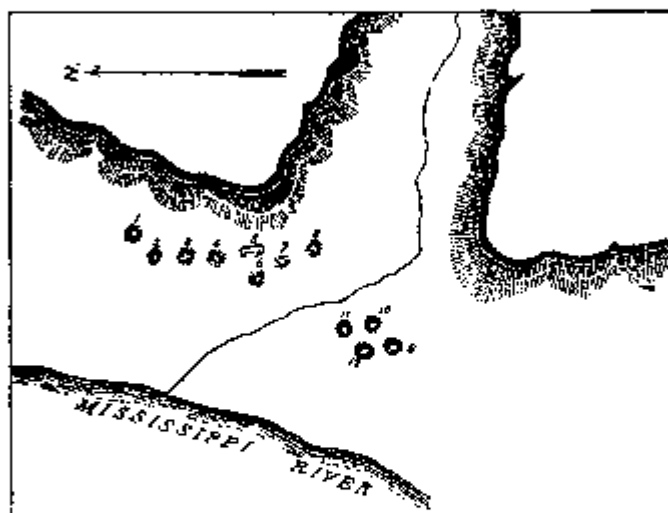


FIG. 32.—Plan of the Armstrong group, near Lynxville, Crawford county, Wis.

difficult to remove them. The stones being removed to the depth of 24 feet, a layer of dark earth was reached, though still filled with stones. At the bottom of this layer, which extended downward 18 inches, was a mass of human bones so closely packed that but little earth was mixed with them. They occupied a space about 8 feet in diameter and rested on a platform or layer of stones which extended under the larger portion of the mound. As there were nine skulls, there were at least nine individuals or rather skeletons buried here. Among the bones were two bear's teeth, a few bone articles, some fragments of pottery, a piece of deer's horn, and the claw of some bird.

On top of the high bluff immediately back of this group is another larger group of mounds, some of which are effigies.

MOUND IN PRAIRIE DU CHIEN.

This mound, which is situated just below Old Fort Crawford, and measures 60 feet in diameter and nearly 5 feet in height, is noticed here on account of the excavation beneath it. This was 12 feet in diameter,

extending 5 feet below the original surface of the ground, and was filled with dark, sandy earth similar to that of which the mound was composed. No specimens of any kind, charcoal, ashes, or indications of burial were discovered.

SUE COULEE GROUP.

This group, a plat of which is given at A in Fig. 33, is situated near the Mississippi river at the mouth of the ravine known as "Sue Coulee." It consists of eighteen beautiful round mounds, standing on a level bench or table, some 30 feet high, which runs back to the bluff. They have been plowed over for about sixteen years. Several of them had been partially explored previous to the visit of an employé of this Bureau, but nothing could be learned of the result.

At B, Fig. 33, is shown a cross section of Sue Coulee at *a-b*; 1 is the creek channel; 2, the table or bench on which the mounds are located; 3, the bluff on the south side; and 4, the bluff on the north side.

Mound 1, 42 feet in diameter and 5 feet high, was composed of yellow, sandy soil similar to that of the surrounding surface, unstratified and no excavation beneath it. Near the center on the original surface were ten skeletons all piled together, with their heads in almost every direction, the leg and arm bones crossing one another. Some stones were lying immediately on them. Among them was a very large flint spear-head and some bear teeth.

Mound 4, 44 feet in diameter and 4 feet high, was composed of the same yellow, sandy soil as No. 1. In the center, lying on the natural surface, were three skeletons, two of them side by side, heads east, the third with the head northeast, the feet of the latter touching the feet of the other two, and all stretched at full length in a horizontal position. They were covered with stones as those in No. 1.

Mound 9, but 30 feet in diameter and 2½ feet high, was composed of darker earth than those already mentioned. A single skeleton, very

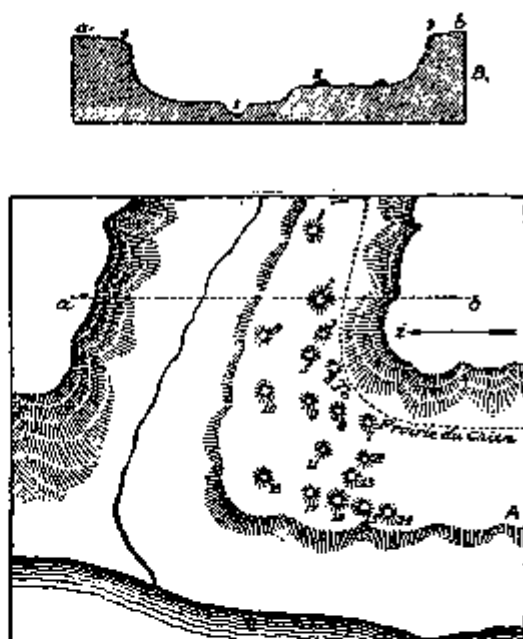


FIG. 33.—Plan of the Sue Coulee group, Crawford county, Wis.

much decayed, probably of a comparatively young person, was found lying on the natural surface of the ground near the center of the mound. Some scattering pieces of charcoal were observed, but no stones.

Mound 12, 48 feet in diameter and 8 feet high, was composed throughout of the yellow earth heretofore mentioned, but the portion extending from the depth of 3 to 5 feet was packed very hard and tight, much more so than that above or below it. No articles or indications of burial were observed.

No. 16 is the middle one of the row (see Fig. 33) of five mounds running parallel to and on the side next the Mississippi. It measured 45 feet in diameter and 4 feet in height. In the central portion, at the bottom, were eleven skeletons close together, with the heads in every direction; no implements or ornaments accompanied them, but at some distance from them, and about a foot above the level at which the skeletons lay, was a large broken pot. At the bottom a pit had been dug to the depth of 3 feet in the natural soil, in which were four skeletons, two lying with heads southeast and the other two, one a child, with heads northwest. Near the head of the former lay a copper plate. This is 10 $\frac{3}{4}$ inches in length and 2 $\frac{1}{4}$ inches in width at the widest part, a thin sheet less than one-twentieth of an inch thick, but slightly uneven. Near each end, on one side, are four rows of small, circular indentations (some of them entirely through), which must have been made with a metallic instrument, as is evident from the raised points on the opposite side of the plate. This lay just below the skull and near the under jaw. Near the hand of the same skeleton were two long, slender, square copper drills or spindles, one about 9 inches long and one-fourth of an inch thick, pointed at one end and chisel-shaped at the other; the other 7 inches long and pointed at both ends, shown in Fig. 34. Near the head of one of these skeletons was a thin, cup-shaped ornament of copper, probably part of an ear-pendant.



FIG. 34.—Copper spindles from the Sue Conlee group, Crawford county, Wis.

Mound 7, which stands on the highest ground of any of the group, is quite symmetrical, 60 feet in diameter and 8 feet high, and, with the exception of a column running down in the center, it consisted of yellow, sandy soil. The column, circular in outline, 5 to 6 feet in diameter, and composed of loose dark earth, extended from the highest central point to the original surface of the ground. The yellow earth immediately surrounding it was very hard.

In this column, at the depth of 5 feet from the top, lay a mass of human bones about 2 feet thick which spread over the entire circuit of the pit. Although but slightly decayed, they were mostly broken into pieces; even the skulls were in fragments, and all were heaped together in such confusion that it was impossible to determine the number of individuals represented, but there could not have been less than 10 or 12.

Immediately below them a small copper spindle was discovered similar to those already mentioned, and some split bear teeth with holes through them. At the bottom of the mound was a complete skeleton, lying at full length on the original surface, face up, head east, and arms by its side. Near the left hand lay a fine copper ax, weighing 1 pound 9 ounces, a little over 9 inches in length. By the side of this was a large round implement of chipped obsidian, and near the right hand were 67 small copper beads, a bear tooth, and the jaw bone and some teeth of a small quadruped.

The respective distances of the mounds of this group from one another, measuring from center to center, are as follows: From 1 to 2, 365 feet; from 2 to 3, 88 feet; from 3 to 5, 88 feet; from 5 to 4, 210 feet; from 5 to 6, 55 feet; from 6 to 7, 238 feet; from 7 to 8, 105 feet; from 8 to 9, 108 feet; from 9 to 10, 112 feet; from 7 to 12, 200 feet; from 12 to 11, 180 feet; from 12 to 13, 90 feet; from 13 to 15, 95 feet; from 15 to 14, 65 feet; from 15 to 16, 101 feet; from 16 to 17, 80 feet; and from 17 to 18, 85 feet.

During the grading of a street that runs by Old Fort Crawford in Prairie du Chien, in a rise near the fort, a number of skeletons were unearthed. One of these had been buried in a small canoe about 9 feet long. Most of the skeletons lay with the head to the southeast; with some were brass or copper kettles with iron bails; on the arm bone of some were bracelets made of thick copper wire. Among the articles found was a fine catlinite pipe and one or two other stone pipes.

VERNON COUNTY.

There are several mounds on the foot hills or lower benches of the bluffs in Sec. 15, T. 11 N., R. 7 W., in the extreme southwest corner of the county. The bluffs are very high and steep with a narrow strip of land between them and the Mississippi river, sloping, but not too steep to cultivate, the soil being very productive. A diagram showing the relative positions of those examined is given in Fig. 35.

No. 1, 40 feet in diameter and 5 feet high¹, unstratified. Near the center, a foot and a half below the surface of the mound, was an irregular layer of burned sandstones, some flat and others irregular in form. Immediately beneath these lay some partially burned human bones,

¹ When no reference is made to the form it is to be understood that the mounds are of the simple conical type.

and near them a single chipped stone hoe. A little northwest of the center, at the depth of 5 feet and apparently resting on the natural surface of the ground, were the remains of five folded skeletons, heads north and faces west. Under one of these was a single perforated bear-tooth. The skeletons had been covered with a mortar-like substance which was dry and very hard.

No. 2, 100 feet northwest of No. 1 (measuring from base to base), 75 feet in diameter and 7 feet high. This was composed throughout (except the surface layer) of blue clay mixed with sand, very hard and tough. Large sandstones, weighing [from 10 to 100 pounds, occurred at all depths, but not placed with any regularity or according to any perceptible plan. At the depth of 8 feet, and hence slightly below the original surface of the ground and a little southwest of the center, were

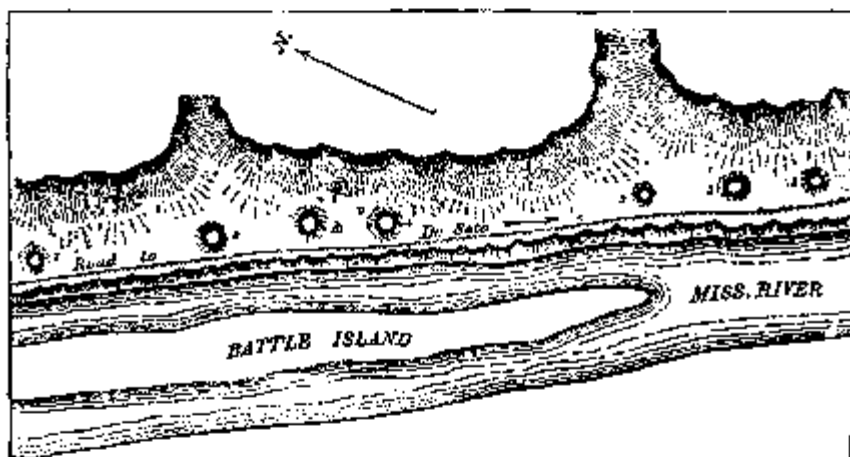


FIG. 35.—Mound group near Battle island, Vernon county, Wis.

six folded skeletons, lying on the bottom with the heads east and faces north. As soon as they were uncovered the bones fell to pieces so that not even the skulls could be saved. The dirt immediately around them was wet and sticky.

No. 3, 60 feet north of No. 2, 40 feet in diameter and $3\frac{1}{2}$ feet high. The top layer, $1\frac{1}{2}$ feet in depth, consisted of black, rich loam, the remainder of blue clay. The original soil had evidently been removed to the depth of a foot or more—in one portion to the depth of 2 feet—before burial. On the north side, not far from the margin, the clay, for a considerable space, was very hard and dry, immediately beneath which were some four or five folded skeletons, with heads, so far as could be determined, in various directions. Near the southeast margin, at the depth of 6 feet, lay six other skeletons at full length with heads in different directions. Under one of them were three bears' teeth. The owner in a previous examination found near the center, at the depth of 15 or 18 inches, a long string of glass beads.

No. 4, 300 feet north of No. 3, 65 feet in diameter and 4 feet high. At the depth of 4 feet eight skeletons were lying at full length on the natural surface of the ground, with heads east and faces up. They lay on the natural slope of the bench, so that the heads were higher than the feet. Their relative positions are given in Fig. 36 (a horizontal section of the mound), the larger figures indicating adult skeletons and the small one that of a child. Under the one at the northern end of the row were several bear teeth, and near them and at the same depth lay the under jaw of some animal. At the head of each skeleton was a large, irregular piece of sandstone. The composition of this tumulus was chiefly a mixture of sand and light yellow clay unstratified.

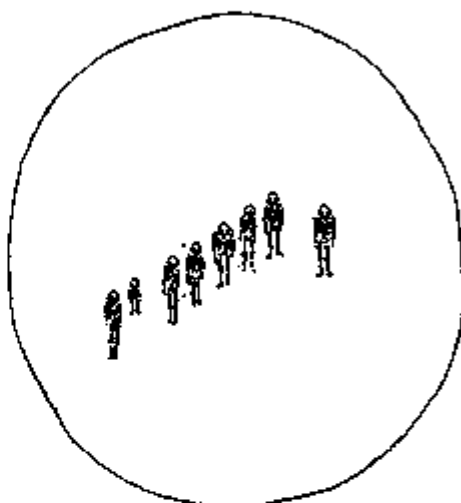


FIG. 36.—Plan of Mound No. 4, Battle Island, Vernon county, Wisconsin.

No. 5, 30 feet northwest of No. 4, was 80 feet in diameter, 5 feet high, and more flattened on top than is usual with tumuli of this type. On the northern side, at a depth of 3 feet, two folded skeletons were discovered, under one of which were several copper beads, and under all bears' teeth. About the center and near the bottom was a single skeleton also folded and under the head were several bears' teeth. In the southern side, at the depth of 5 feet, a single very fine lance head was discovered; no bones were near it.

No. 6, 125 feet northwest of No. 5, 85 feet in diameter and 4 feet high, was composed of rich black earth interspersed with sandstones. Near the center, at the bottom, lay a single badly-decayed skeleton, over which was heaped an irregular pile of sandstones of various sizes.

No. 7, 20 yards northwest of No. 6, 50 feet in diameter and 5½ feet high, consisted chiefly of dry, yellow clay. In the northern side at the depth of 5 feet were three or four much decayed skeletons, apparently folded, with heads east and faces north and in the southern portion at the depth of 2 feet the fragments of a stone pipe. Under the latter was an irregular pile of burned sandstones; but no ashes or coals were discovered, from which fact it is inferred that the stones were placed here after having been subjected to fire.

WHITE'S GROUP.

In the northwest corner of the county, in Sec. 28, T. 14 N., R. 7 W., on land owned by Mr. H. White, is a group of small circular mounds

extending in a nearly straight line along the margin of the sandy level known locally as "Sand Prairie," where it descends to the lower bottom lands of Racoon river. This level extends to the bluffs about a half mile distant, which are here very high and steep. A plan of the group is given in Pl. II, from which it will be seen that it contains 32 mounds of various sizes.

No. 1 of this group, 35 feet in diameter and 3½ feet high, was composed throughout of black, sandy soil similar to that around it. Six inches below the surface, at the center, fragments of a red earthenware vessel were found, but so rotten that they fell to pieces on being handled. A little north of the center, at the bottom, lying on the natural sand stratum, were the remains of four skeletons, heads north. Another skeleton was found in the southern side at the same depth, folded, head south, face east; over the skull was a small lance head.

No. 2, immediately north of No. 1, touching it at the base, was 45 feet in diameter and 3 feet high. It was composed throughout of earth similar to the surrounding soil. Five skeletons were found at various depths, from 2 to 4 feet. Some were lying at full length, others folded with heads in various directions, but were all so soft that none could be saved.

No. 3, 100 feet north of No. 2, 40 feet in diameter and 4 feet high, was not stratified. The skeleton of a child was lying near the center at the depth of 18 inches, head west. Under the head was a brass ornament wrapped in cotton cloth, and about the position of the breast the fragments of another metallic ornament, also a few glass beads. This skeleton had evidently been incased in a wooden coffin of some kind, but whether of bark or boards could not be determined. In the southwestern side the skeleton of an adult was discovered at the same depth, folded, with head south. Nothing else was observed, save a few fragments of pottery near the surface.

No. 4, about 100 feet northeast of No. 3, measured 50 feet in diameter and 4 feet high, unstratified. Nothing was discovered in this mound.

No. 5, 100 feet northwest of No. 3, oblong, 50 feet in diameter north and south, and 4 feet high, was composed of black, sandy soil from the fields. In the northern side, at the depth of 2 feet, were ten skeletons, some folded and others stretched out on their backs, heads in every direction. A little west of the center, at the depth of 4 feet, two more were found folded, with the heads west. On the skull of each of these was a thick copper plate, apparently beaten out of native copper with rude implements. The larger, over the southern skull, represented in Fig. 37, is 8 inches long by 4½ inches wide. About 6 inches above it was a fine large lance head. The other plate is nearly square, 4½ inches by 4½ inches. The bones were so rotten and soft, except immediately under the copper plates, that none of them could be preserved. Fresh-water shells were scattered through the mound at various depths.

No. 7, 25 feet in diameter and 3 feet high, nothing was discovered save a single skeleton near the northern edge, a foot below the surface, and a few fragments of pottery near the head.

No. 8, diameter, 65 feet; height, 6 feet; unstratified; disclosed nothing.

No. 9, diameter, 60 feet; height, 5 feet; unstratified; contained nothing worthy of notice.



FIG. 37.—Copper plate from Mound No. 6, White's group (No. 63394, National Museum).

No. 10, 50 feet in diameter and 4½ feet high. A vertical section of this mound is shown in Fig. 38. The top layer, 2 feet thick, consisted of black, loose, sandy loam similar to the surrounding soil of the field. Six skeletons were lying in this near the center, some folded, others stretched at full length, heads in different directions. The next or lower layer, 3 feet thick, and extending downward slightly below the original surface, consisted of red clay very largely mixed with sand. Skeletons were found in this at various depths. A little south of the center the original soil, below layer No. 2, had been hollowed out to the



FIG. 38.—Section of Mound No. 10, White's group.

gravel. This excavation was about 7 feet long, 3 feet wide, and 1 foot deep. In it were the remains of a single adult skeleton, stretched at full length, face up, and covered with a layer of hard black muck. The bones were nearly all gone, but their forms and positions could be traced. Under the skull was a fine lance head, and about 2 feet south, in the same excavation, a magnificent chipped implement of obsidian, represented in Fig. 39.

No. 11, touching No. 10 at the northeast, 50 feet in diameter and 4 feet high, was composed chiefly of a dark, sandy soil, about 10 feet of the central portion being of yellow clay and sand mixed. In the southern portion, at the depth of 2 feet, were two very soft, folded skeletons, heads west. A little southwest of the center, at the depth of 3 feet, a few human bones were found incased in hard, black muck or mortar-like substance, and immediately under them some copper beads. Near the center, at about the same depth, was a folded skeleton, with the

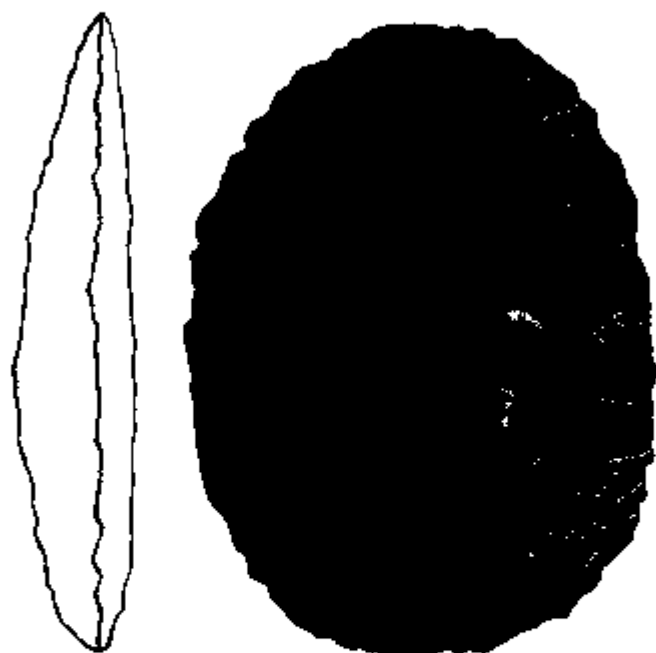
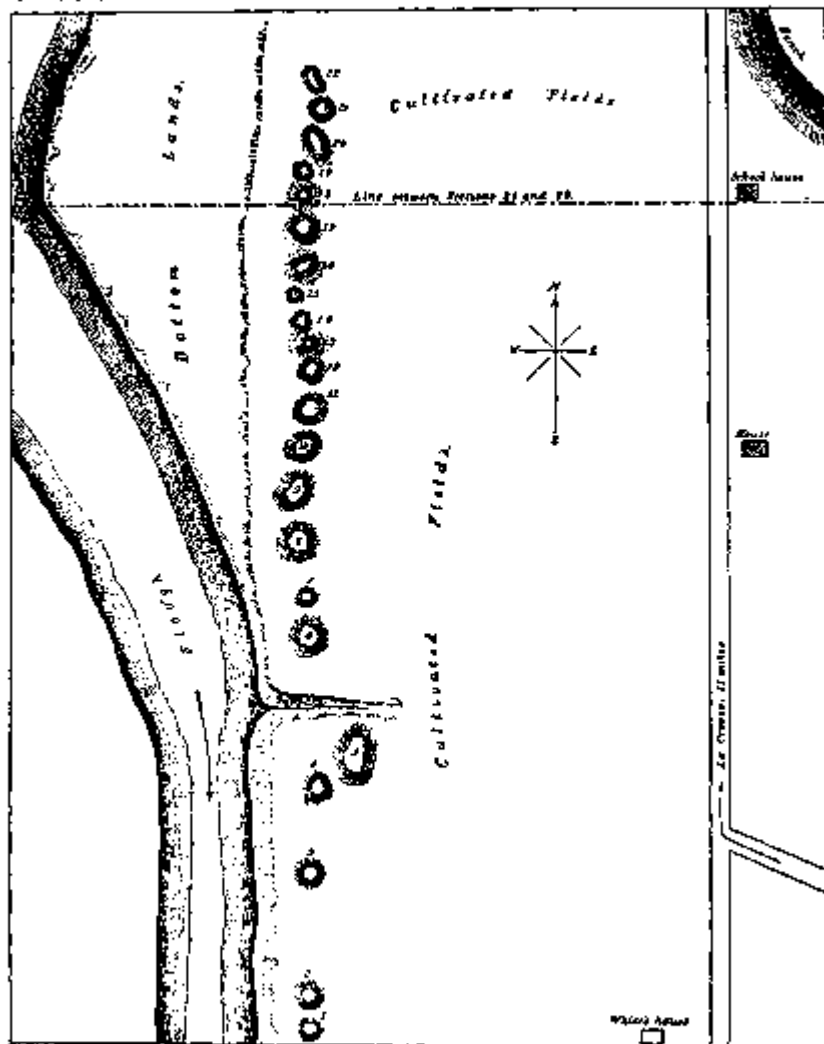


FIG. 38.—Obelisk implement from Mound No. 10. White's group.

head northeast, also incased in the hard, black muck. By the skull was a broken earthen pot and a bottle-shaped vase, short neck and flat bottom. The broken pot, which has been partially restored and is represented in Fig. 40, is equal, if not superior in the quality of the ware, to any mound pottery discovered in the Mississippi valley. A jasper lance head was discovered a little north of the center near the base. The other mounds of the group, which are small, simple tumuli of the conical type, were not opened. Their sizes are as follows:

No.	Diameter.	Height.	No.	Diameter.	Height.
	Feet.	Feet.		Feet.	Feet.
12	45	4	17	50	4
13	35	2	18	35	2
14	25	2	19	25	2
15	20	2	20	50 by 35	4
16	60	4½	21	40	3½



PLAT OF WHITE'S GROUP, VERNON COUNTY, WISCONSIN.

About half a mile south of No. 1 of this group, on Sec. 33, same township, stands an isolated mound of the same type, which, upon opening, proved to be unstratified, as most of the others already mentioned. Diameter about 50 feet and height 7 feet. On the west side a few soft and badly decayed human bones were discovered at the depth

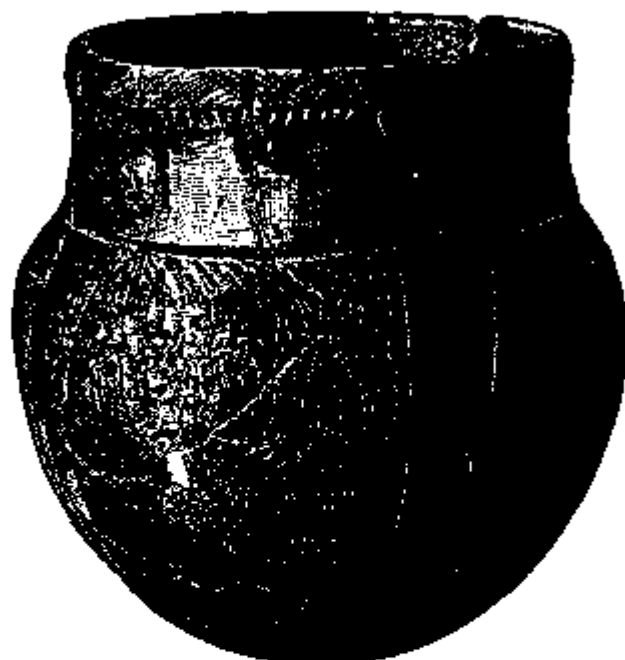


FIG. 40.—Pot from Mound No. 11. White's group.

of 2 feet. On the east side similar bones were found at the depth of 4 feet, and on the southwest, at the same depth, the fragment of a large sea shell (*Bucco perversum*).

GRANT COUNTY.

On the bluffs north of Sinepy creek are the remnants of two groups or lines of mounds. These were visited in 1880 by Col. Norris, and in 1890 a second visit was made. Such portions of the groups as have been subject to cultivation have entirely disappeared. On the narrow promontory overlooking the river is a row of small conical mounds, composed largely of rough stones from the adjoining bluff. Five of these mounds were opened in 1880. All contained human bones, which in two cases were charred.

Many of the bones in these mounds were disconnected and often broken as though deposited after the flesh had been removed, probably after exposure of the bodies on scaffolds or after previous burial.

On a second promontory, east of the first, across a deep ravine, is a group of works consisting of two effigy mounds and one oblong mound.

Other oblong mounds, said to have been situated to the north of these, have been obliterated by the plow. The most southern of the effigy mounds would seem never to have been finished. The body is represented by a well-rounded ridge, and the head and forelegs are present, but only a trace of one of the hind legs appears. These mounds are in a forest and have not been disturbed by the whites. The other animal figure is somewhat larger, the body being 90 feet long. The legs are unusually long, the length from the toes to the back line being upwards of 40 feet. The head is merely a heavy rounded projection, and the tail is so obscure as to be barely traceable.

WORKS NEAR CASSVILLE.

About 1 mile south of Cassville the road traverses a bench or level bottom, which is seldom overflowed, extending from the bluffs to a bayou, a distance of nearly 1 mile. Near this road on one side, when visited in 1880, were two lines of works, consisting of effigy, circular, and elongate mounds, and on the other a single row of circular mounds. These, except 1 and 2, are shown in their respective forms and positions in Fig. 41.

No.	Length.	Height.	Shape.	Remarks.
	<i>Feet.</i>	<i>Feet.</i>		
1	10 by 20	3	Oblong	Ordinary earth mound.
2	10 by 30	3	do	Opened; nothing found.
3	90	4	Effigy	Probably represents an elk.
4	90	4	do	Do.
5			Circular	
6			do	
7	150	5	Effigy	Lizard; head and body 90 feet, tail 60 feet.
8	45	3	Oblong	Ordinary earth mound.
9	72 by 84	4	Effigy	A well-formed bird.
10	20	3	Circular	Opened; nothing found.
11	180 by 84	4	Effigy	Probably an eagle.

Nos. 12 to 15 are small circular and oval mounds on the eastern side of the road in a line south of the Eagle's head; Nos. 16 to 28 the row of circular mounds on the west side of the road. The latter vary in diameter from 15 to 40 feet and in height from 3 to 5 feet. Quite a number of these had previously been opened, and, as was ascertained, presented evidences of intrusive burials.

Excavations were made in a number of the mounds of this and adjacent groups, but nothing was discovered save human bones in the last stages of decay.

This locality was revisited in 1890, when slight traces of these works were seen. The railroad had been carried directly through the group and an immense gravel pit now occupies the site. About three-fourths of one of the bird figures remain and some shapeless hillocks mark the line of conical mounds.

Stone cairns containing fragments of decaying human bones were found on top of the adjacent bluff; and upon the bank of the bayou near Cassville is a circular mound 40 feet in diameter and 4 feet high, in the base of which, beneath the hard earth, were four skeletons of adults in a much better state of preservation.

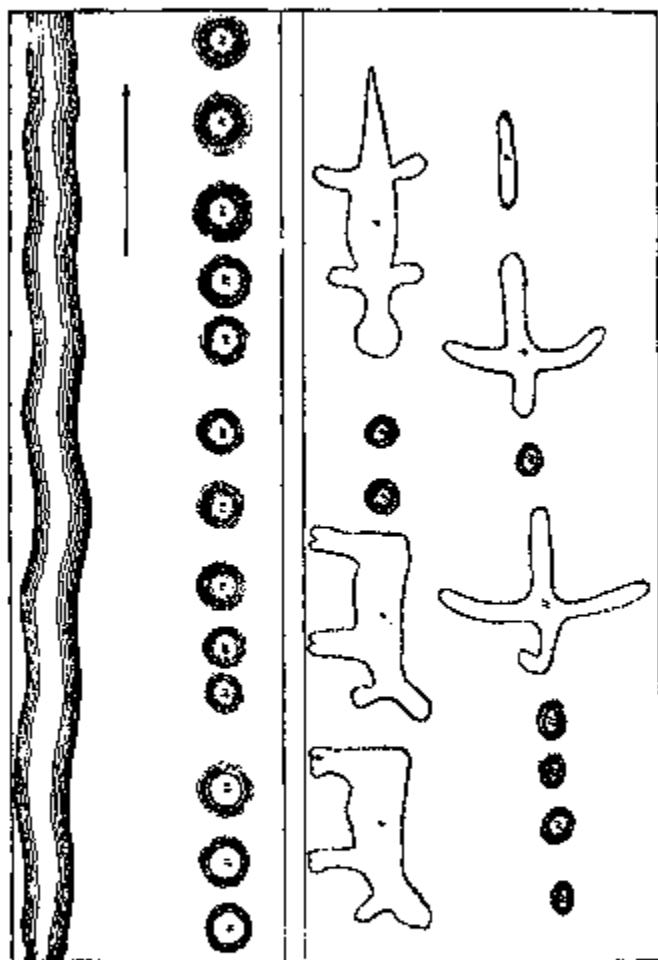


FIG. 41.—Effigy mounds near Cassville, Grant county, Wisconsin.

The large Dewey farm, now owned by Gen. Newberry, extending from 1 to 3 miles north of Cassville, is literally dotted over with mounds and other works. This was a favorite haunt of the modern Indians, who used these earthen structures as depositories for their dead, hence intrusive burials are very common here. In a number explored, of which only the bottom central core remained undisturbed, nothing was found except decaying human bones and very rude stone implements.

A remarkable series of mounds is situated upon the bluffs about 3

miles north of Cassville. These, remarks Mr. Holmes, may be taken as an illustration of the earthworks of this region. The bluffs are here upwards of 300 feet in height and are very abrupt on the margins overlooking the river. The horizontal beds of massive magnesian limestone outcrop along the

brink, giving a series of gray escarped promontories, between which are notch-like recesses cut by the drainage. The steep faces of the bluff are without timber, but the recesses and the upper surfaces are covered with forests; this, together with the dense growth of underbrush, make exploration extremely difficult.

Between Muddy creek, which comes out of the bluffs at right angles to the river escarpment and the Sandy, a rivulet emerging three-fourths of a mile farther south, there is a tongue of the plateau divided into several parts at the outer end and connected by a narrow ridge with the main plateau. This outstanding mass is a mile in length and at the widest part not more than one-fourth of a mile wide. Mounds are



FIG. 42.—Lines of works near Cassville, Grant county, Wisconsin.

found upon the main crest as well as upon most of the spurs. This distribution in groups was determined apparently by the topography, as will be seen by reference to the accompanying map. (Fig. 42.)

The main lines of works occupy the crest of the principal ridge, which borders Muddy creek on the south. Beginning at the outer point we follow the curved ridge encountering first six oblong mounds of the usual character, then a conical mound standing somewhat alone, and beyond this a series of eight conical mounds connected into a chain by low ridges. Traversing a distance of about 700 feet a second chain-

group is encountered, and at the eastern extremity of this lies the only effigy mound of the system so far as observed. East of this a broken series of oblong and chain mounds continues indefinitely. On the southern spur of the promontory are three additional groups of conical and oblong mounds following the crests of the ridges and terminating near the escarped points.

All of these works are in an excellent state of preservation. A few have been dug into by relic hunters. The two isolated conical mounds are of average size, being about 25 feet in diameter and between 3 and 4 feet high. The oblong mounds are straight even ridges, ranging from 80 to 125 feet in length and from 10 to 20 in width, and in height rarely exceeding $3\frac{1}{2}$ feet.

The chain mounds are of particular interest. They have been built with much care and are wonderfully preserved. The cones average less than 20 feet in diameter and are from 2 to 4 feet in height. The distance from center to center varies from 30 to 40 feet and the connecting ridges of earth are about 16 feet wide and from 2 to 3 feet high.

The most noteworthy member of the series is the effigy mound. It is perhaps more suggestive of the puma than of any other quadruped. This work is well preserved, but the loose vegetable mold of which it is composed does not admit of the preservation of more than a generalized form, no matter to what extent the individuality of the original shape was developed.

The full length of the figure may be given as 144 feet, although the tail is very indistinct toward the extremity. The head is toward the east and exhibits no other feature than a slight projection for the nose. The characters of the animal have received proper attention. The body is full and rounded and the extremities fall off gradually in width and height. The curves of the back and legs are well rendered, and the whole conception is presented with sufficient spirit. The distance from the toes to the back line is 36 feet. The body, at the point of greatest relief, is not over $3\frac{1}{2}$ feet high.

The mounds of this group appear to be composed mainly of vegetable mold obtained on the spot.

The conical mound, situated upon the very brow of the bluff, is 25 feet in diameter and 4 feet high. A broad trench carried through it revealed only the decayed bones of a child, extended at full length beneath the central core of hard, dry earth. Pits sunk in the oblong mounds brought nothing to light. A number of circular mounds on the adjacent bluffs was also opened, but nothing save decayed human bones was found in them.

WORKS NEAR WYALUSING.

Four excellent illustrations of the remarkable mound groups of Wisconsin are to be seen near Wyalusing, a station on the Burlington and

Northern Railroad. The village of Wyalusing is picturesquely situated on a narrow strip of alluvial land between the Mississippi river and the bluff, which here rises abruptly in a single step to the height of 350 feet. These bluffs, as those elsewhere in Grant county, are the margin of a plateau which extends eastward from the escarpment. The margin of this plateau is cut by numerous streams and is for the most part too rugged for cultivation. In the marginal region the ridges separating the streams are often narrow, but have rounded and somewhat level crests, which were favorite resorts of the mound builders.

Upon the steep timbered bluff that rises above the village of Wyalusing is found a line of earthworks following the crest of a nearly straight ridge. The principal work of the group is an animal effigy, a quadruped. It is of large size and is in an excellent state of preservation. Singularly enough it does not occupy the crest of the ridge which runs parallel to the river, but lies in a shallow depression in the slope between the crest and the margin of the steep bluff overlooking the village. The head is toward the south and the legs extend down the gentle slope toward the river. The form is perfectly preserved, the body is well rounded and the outline is everywhere distinct. So perfect is the preservation that the extension representing the ears or horns shows a slight parting at the outer end, and the two legs of each pair are separated by a shallow depression throughout their entire length. The feeling for correct form possessed by the builders even in this rude method of realization is indicated by the outline which defines the forehead, by the curves of the back and belly, and of the gambrel joints of the legs, as well as by the relief which expresses something of the rotundity and relative prominence of the parts. What additional details of form have been effaced by the lapse of time can not be determined.

The length of the work from the forehead to rump is 115 feet; the length of the head is 47 feet; the distance from the feet to the back, representing the full height of the figure, is 50 feet; the width of the body is 28 feet, and the width of the legs about 20 feet. The relief does not exceed $3\frac{1}{2}$ feet at any point, the ears, nose, and legs not exceeding half that.

Some years ago Mr. D. W. Derby, an enthusiastic collector of mound relics, dug into the body of this effigy about the locality of the heart, and found human bones and an earthen vessel about the size of the crown of an ordinary hat. The vessel had a flat bottom, but was so fragile from decay that no part of it could be preserved.

Running approximately parallel with the greatest length of the animal figure and occupying the crest of the ridge is a row of oblong mounds. These vary from a straight line to accommodate themselves to the crest, and in orientation vary from S. 25° E. to S. 15° W. The largest one is 100 feet in length and the shortest 60 feet. The width averages

about 20 feet and the height is in no case greater than $3\frac{1}{2}$ feet. On the rounded surface of the north end of the ridge is a number of small circular depressions that may represent old dwelling sites; others are seen on a level space about 100 feet north of the animal figure. The ridge terminates at the north in a rounded point and at the south in a long narrow one, and is connected with the chain of ridges on the east by a broad saddle; along this, and extending for an indefinite distance, is an almost continuous series of mounds mostly of the oblong type. In the older cultivated fields only traces of the works are found, but in the new ground, and in the wooded areas, the forms are fully preserved. There is no telling what was the original extent of these wonderful lines of mounds, or what their connection with the other series, the remnants of which are found on nearly every part of the bluffs where tillage has not destroyed them.

A second group of more than usual interest is located upon the promontory that overlooks the village on the north. This promontory extends to the northward, as a narrow ridge with an uneven crest, to the residence of Mr. Derby and beyond. Its trend is parallel with the river, from which it rises at an angle of 40 degrees or more. On the opposite side it falls off with abruptness to a little stream which runs to the southward and passes out at the north end of the village. From the railroad bridge at the crossing of the stream we ascend the point of the promontory by a series of slopes and cliffs to the height of about 200 feet; beyond this point the ridge extends to the northward and is narrow, and for about one-quarter of a mile nearly horizontal.

Upon the level crest, which is forest covered, are four mounds; at the south are two conical mounds and at the north two mounds repre-

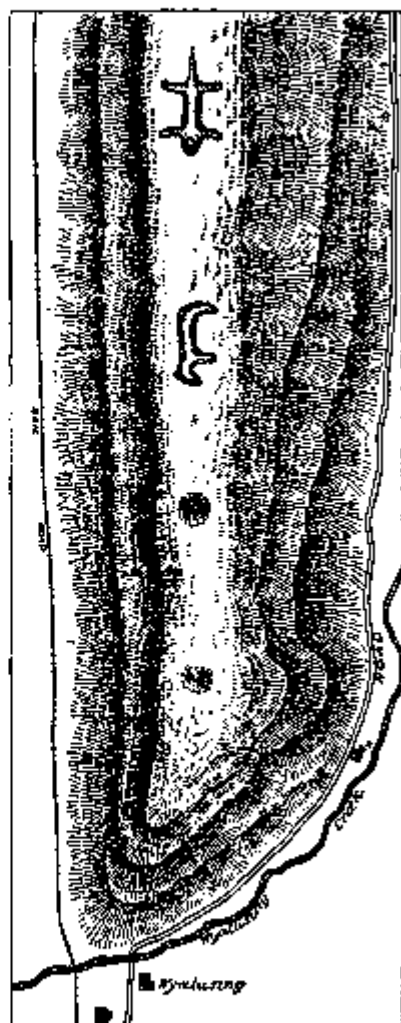


FIG. 41.—Mound group near Wyalusing, Grant county, Wisconsin.

senting animals, distributed as shown in Fig. 43. All are in an excellent state of preservation save where recent excavations conducted by Mr. Derby have mutilated them. The southern mound was conical in shape and about 20 feet in diameter and 6 feet high. When Mr. Derby began his excavations the eastern half of the cone was covered with rough stone slabs obtained from the vicinity. In digging into the center of the mound four stones as large as a human head were found near the surface. At the depth of a foot a circle of stones was encountered, having a diameter of 4 feet; at a depth of about 2 feet the top of a cistern, $3\frac{1}{2}$ feet in diameter, of well laid stones, was uncovered. This was 3 feet deep and had been built upon the surface of the limestones of the bluff. The well was filled with black earth, in which were found seven oblong shell beads, a copper celt of ordinary shape, and a red pipestone, platform pipe; outside of the well a flake of flint was found, and some curious lines of colored sand were observed. These seemed to radiate roughly from the center of the mound and were followed to the circumference by the explorers. Wide trenches were carried across the mound from east to west and from north to south.

The second mound was much like the first and is still perfect, save for the sinking of a pit in the center. Nothing of interest was found. The present diameter is over 30 feet in the line of the ridge and somewhat less across it. The height is 6 feet.

A little over 100 feet to the north of this mound is the first animal mound. The creature, possibly a bear, is represented as lying upon its side with the head to the south and the feet to the east. The body is a neatly rounded ridge 70 feet long and nearly 25 feet wide, and has a relief of nearly 4 feet. The head is about 30 feet long, the projection representing the ears being very slightly indicated and difficult to define. The low ridge representing the forelegs is straight, while that for the hinder ones is bent, thus defining the gambrel joint. The distance from the toes to the back line is a little less than 40 feet. This figure is of the most frequently occurring type of effigy works.

The other effigy mound, 150 feet to the north, is of a form somewhat unusual. It is spread out upon the ridge, after the fashion of a lizard or alligator. The head is toward the south, and is merely a rounded projection of the body embankment. The tail at the opposite end is upwards of 35 feet long, but is very attenuated and indistinct toward the tip. The body is a rounded ridge $3\frac{1}{2}$ feet high and less than 20 feet wide, and the legs, extended to the right and left, are low embankments of earth, the forelegs being bent forward and the hinder ones backward, as shown in the illustration.

Passing north along this ridge, another series of mounds is encountered. The first member is an oblong mound, about three-fourths of a mile beyond the residence of Mr. Derby. This is followed by a series of works in which are oblong, conical, and animal mounds, some of which are almost obliterated by the plow.

On the crest of the bluff, north of the last mentioned mounds and just south of the Wisconsin river, is a continuous straight line of mounds, all of which, except two, are elongate, embankment-like structures, giving to the line the appearance of an interrupted wall. Of the two exceptions one is oval and the other is an effigy mound, probably intended to represent an elk. Several of these mounds were opened, but in none, except the third from the south end of the line, was anything found. This is somewhat oval, 24 feet in diameter, and 4 feet high. In the center was a rude, irregular stone coffin or vault of flat sandstones, so arranged around the single skeleton that a large one sufficed to cover it from animals. The bones were in the last stages of decomposition.

The top of this bluff, for the distance of half a mile, is literally covered with these works, which are uniformly placed so near the brink of the descent to the Mississippi as to present a clear cut outline, except where the view is obstructed by trees. As the position is a commanding one, and as very few of the works were intended or used for burial purposes, it is difficult to conceive of any other object the builders could have had in view in their construction than that of defense. But how they were made available for this purpose without encircling any area or without closing the numerous openings is difficult to understand.

On the NW. $\frac{1}{4}$ of Sec. 20, T. 6 N., R. 6 W., about 1 mile east of the works just mentioned, is another group of considerable interest. This consists of one continuous line of circular and effigy mounds, numbering 36 in all.

THE ELEPHANT MOUND.

This effigy, of which so much has been said and written, is situated on the southeast quarter of Sec. 21, T. 5 N., R. 6 W., in Bloomington township, $\frac{1}{2}$ miles south of Wyahusing. It lies on the right side, head south, in a depression between two drift sand ridges, in what is known as the Cincinnati bottom. This bottom extends from the bluff on one side to a large bayon on the other, and is just above the overflows of the Mississippi. Although the mound has been under cultivation for five years, the outlines are yet distinct. "By a hasty measurement," says Col. Norris, who incidentally visited it while engaged by the Bureau in the northwest, "I made its entire length to the front of the head 135 feet, the width across the body from 55 to 60 feet, the height varying from 3 to 6 feet. I made a rude sketch of it on the spot with pencil, for the purpose of showing the so-called trunk as I saw it. There is a depression some 4 or 5 feet deep between the trunk and breast, and a kind of slight platform or apron-like extension on the upper or back part of the head, from 2 to 3 feet high, or half as high as the rest of the head. Whether the resemblance to an elephant, which arises almost wholly from the proboscis-like extension to the head, is due to intentional work done by the builders or has resulted from the drifting of the loose, sandy soil, of which it is mainly composed, is a ques-

tion difficult to decide. I can only say that I represent it as I found it." This sketch, which is not reproduced here, shows the trunk somewhat distinctly as curved inward toward the fore legs. It is very doubtful whether this should be considered a part of the effigy. If both Mr. Warner and Col. Norris show correctly what they saw, the trunk was evidently a shifting line of sand.

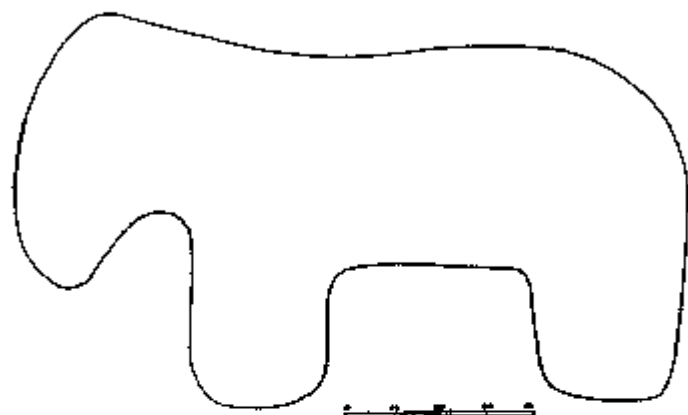


FIG. 44.—Elephant mound, according to Middleton's survey in 1884.

In November, 1884, Mr. Middleton was directed to call to his assistance a civil engineer and make a regular and careful survey of this mound for the purpose of modeling it for the New Orleans Exposition. This was very carefully done, and the result is shown in outline in Fig. 44. His report in reference to it, as seen at that time, is as follows:

"The 'Elephant mound' is located on the southeast quarter of Sec. 21, T. 5 N., R. 6 W., Bloomington township, in a long rectangular depression or rather cul de sac as shown in Pl. III, the level of which is a few feet only above high water. The immediate spot on which it stands is a little higher than the general level around it. For 200 yards north the surface is even, with a slight rise to the foot of the bank. This bank is about 20 feet higher than the mound level. Going east along line *a b* (Pl. III) the ground at first dips slightly, but rises a little as it approaches the foot of the bank, which is here about 30 feet above the mound level. South towards *c* the surface is flat for more than 600 yards. The bank on the west is about the same height as that on the east. About 200 yards south is an effigy mound, a bird with outspread wings, head south. Near by there are a number of round mounds placed in a line and two or three long mounds.

"Plowing over it for a number of years has considerably reduced the height of the elephant effigy, and has rendered the outlines of portions of the head and back somewhat indistinct, but the body between the legs is quite plain. It is gently rounded on the surface, the high-

est points being at the hip, where it is nearly 4 feet high. Entire length, 140 feet; width across the body to the farther end of the hind leg, 72 feet; across the body between the legs, 55 feet; across the body and fore leg, 77 feet; across the neck, 40 feet; length of head from back to nozzle, 60 feet; width of hind leg at the body, 32 feet; at the foot, 15 feet; length of hind leg, 22 feet; across the fore leg at the body, 28 feet; at the foot 15 feet; length of fore leg, 28 feet."

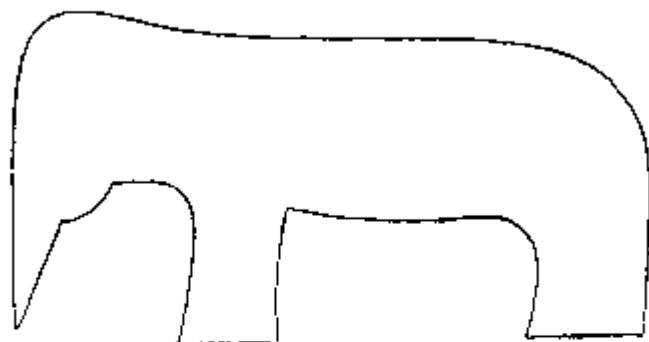


FIG. 45.—Elephant mound, after Warner's figure.

Fig. 45 is another view of this mound, which is an exact copy, reduced to half size, of the original manuscript pencil sketch by Jared Warner, from which the figure in the Smithsonian Report for 1872 was made.

SHEBOYGAN COUNTY.

MANITOWOC AND SHEBOYGAN MOUNDS.

There are some scattering mounds on the hills bordering the Sheboygan marshes on the north. These are usually isolated, simple conical tumuli, though some are in irregular groups on elevated situations.

The only one opened (the rest had been previously explored) was situated on a sandy ridge half a mile north of the marsh and 100 feet above it. It was about 50 feet in diameter at the base and 5 feet high. After passing through 18 inches of surface soil the central mass was struck, which appeared to be composed of earth mingled with firebeds, charcoal, ashes, and loose stones. Near the center of this mass, at the bottom of the mound, a large human skeleton in a sitting posture was discovered, apparently holding between its hands and knees a large clay vessel, unfortunately in fragments. These were covered over by an irregular layer of flat bowlders. Nothing else worthy of notice was found.

About 2 miles west of this, on a bluff overlooking the marsh, was another mound of similar form and slightly larger, which had been previously opened by Mr. Hoissen of Sheboygan. It was found literally

filled, to the depth of $2\frac{1}{2}$ feet, with human skeletons, many of which were well preserved and evidently those of modern Indians, as with them

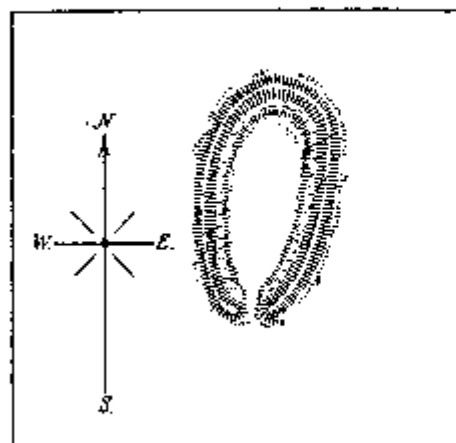


FIG. 46.—Inclosure near Shelbygan, Shelbygan county, Wisconsin.

were the usual modern weapons and ornaments. Beneath these was a mass of rounded bowlders aggregating several wagon loads, below which were some 40 or 50 skeletons in a sitting posture, in a circle, around and facing a very large seashell. This specimen, which with the other articles taken from this mound is in Mr. Hoissen's collection, measures 21 inches in length and 29 in circumference at its greatest girth.

Just south of the outlet of the marsh is a small, oval in-

closure, with an opening at one end of some 4 or 5 feet. It consists of a single wall 3 feet high and a ditch about two feet deep (shown in Fig. 46).

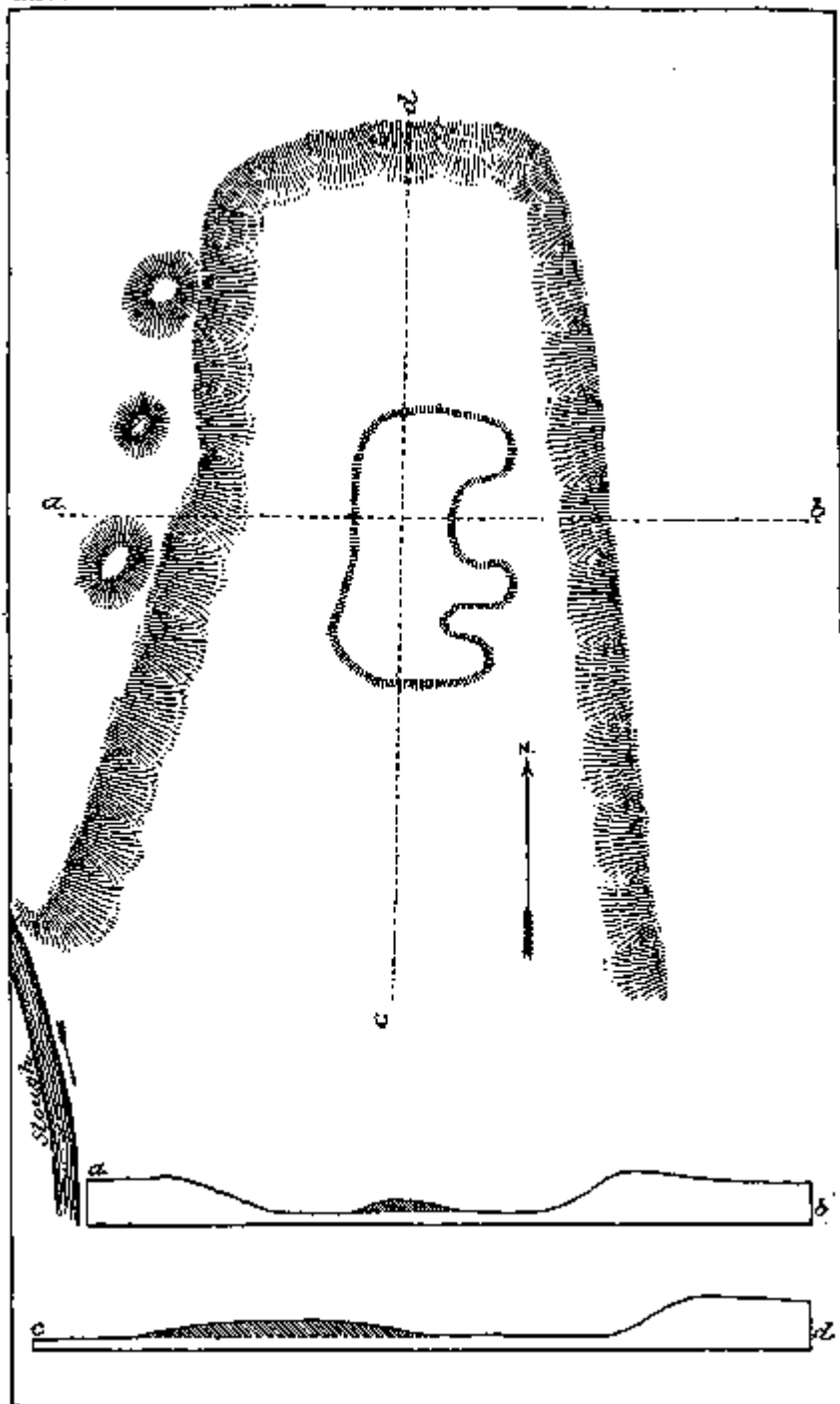
BARRON COUNTY.

THE RICE LAKE MOUNDS.

The only explorations in this county were around Rice lake. This group, a plat of which is given in Pl. IV, is situated at Rice lake village, on sec. 16, T. 35 N., R. 11 W., about half a mile above Red Cedar river. The land at this point is somewhat broken, and the area occupied by the group is cut by a small ravine that runs northeast to the lake. Some of the mounds are on gravelly knolls, a few in the ravine, some on the slope up to the level which runs back to a ridge a quarter of a mile distant and some on this level. The location was well chosen for hunting, fishing, and procuring a supply of food, as game and fish are still abundant and wild rice formerly grew on the lake.

The group consists of fifty-one mounds, chiefly of the ordinary conical form. There are no effigies or long slender embankments in it. Two of the long type, however, were found at the other end of the village.

The construction varies so little that few only will be described as samples of the rest, No. 1, for instance, as representing Nos. 24, 26, 35, 39, 46, and 45. This stands in the bottom of a ravine about 10 feet above the water level and about 500 feet from the shore of the lake; diameter, 28 feet; height, 4 feet. The construction, as shown in figure 47, was as follows, commencing at the top: First, a layer of dark vegetable mold (a), 2 inches thick which had formed since the mound was abandoned, next, a layer (b) of sandy loam with a slight admixture of clay; third, the core (c), forming the central and remaining portion of



ELEPHANT MOUND AND SURROUNDINGS, GRANT COUNTY, WISCONSIN.

the structure and resting on the original surface of the gully. This consisted of clay mixed with sand and was very hard. It appeared to be composed of small, rounded masses about 16 to 18 inches in diameter and 6 to 10 inches thick, doubtless representing the loads deposited by the builders. Lying on the original surface of the ground, underneath the core, were two skeletons (1 and 2) bundled, as was the case with nearly all found in this group. The bundling was done by placing the long bones together as closely as possible around the ribs, the vertebral bones being placed here and there so as to render the bundle as compact as possible. Close to these were the charred remains of another skeleton (3) pressed into a layer scarcely exceeding an inch in thickness, but, as there were no signs of fire, ashes, or coals on the surface beneath, burning must have taken place before burial. As all the skeletons were under the core, and the small masses heretofore mentioned showed no signs of disturbance, they must have been buried at one time.

Mound 24 measured but 22 feet in diameter and 3 in height. It differed from No. 1 only in containing four skeletons, none of them charred.



FIG. 47.—Mound No. 1, Rice lake group.

Mound 26, but 25 feet in diameter and 4 feet high, contained four skeletons of the original burial and three of intrusive burial, as did also No. 35.

In No. 46 there had been seven original burials, at the base of the core, as usual, one of a child,—no intrusive burials.

No. 8, oval in outline, 36 feet long, 26 feet wide, and 5 feet high, differed from the others, as it lacked the core and layer of sandy loam. With the exception of the top layer of vegetable mold it consisted of yellowish clay mixed with sand, probably taken from the immediately surrounding surface. Six skeletons were found in it; the first, 3 feet south of the apex and at a depth of 2 feet. No. 2 a foot and a half south of the first. These two appeared to have been buried at the same time, or nearly so, and most likely were intrusive burials. No. 3 was at the bottom, on the original surface, under No. 1; No. 4 a foot northeast of 3; No. 5 two feet east of the last; and No. 6 a foot north of No. 5. The last four skeletons were probably the first interments in the mound, and appear to have been buried about the same time from the fact that they were bundled, and the bones clean and white, although so soft as to fall in pieces when exposed to the atmosphere.

Mound No. 11, standing east of No. 8, is also oblong, 35 feet long,

and 23 feet wide. The construction the same as the preceeding. There had been five original and five intrusive burials, the latter in the center at the depth of 3 feet, the others at the bottom of the mound, in the north end. All of the skeletons were bundled, those near the surface being in a better state of preservation than those in the bottom. A large pine stump was standing over the latter, the roots of which had broken them up to a considerable extent.

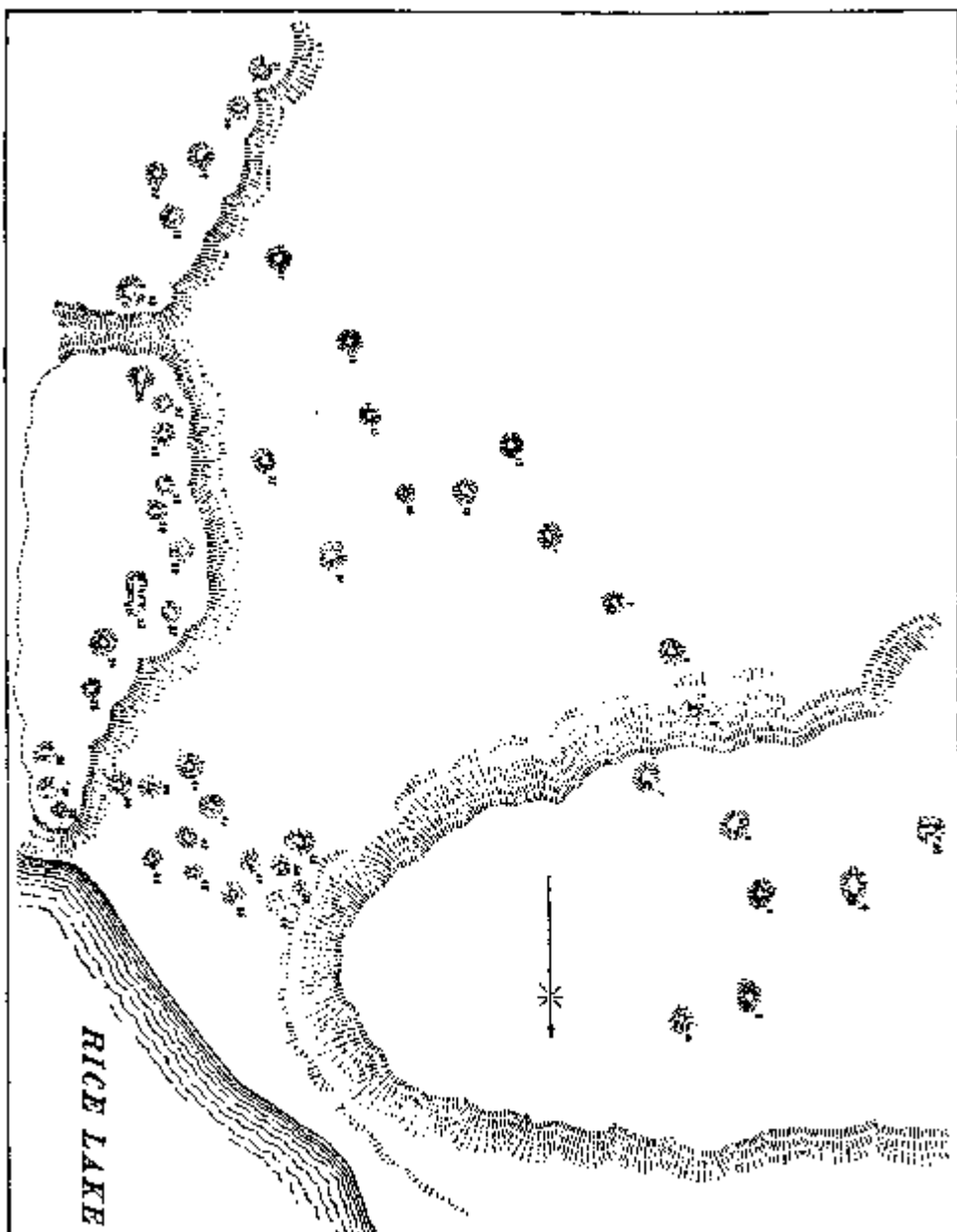
Mound 42, standing in the ravine, measured 27 feet in diameter and 4 feet high. The construction was found to be similar to that of No. 1; first, the thin layer of vegetable mold; then sandy loam and the clay core; but here was a pit in the original soil, rectangular in form, 3 feet long, 2 feet wide, and 1 in depth, the sides and ends flaring. In this mound there had been three intrusive and two original burials. Two skeletons of the former were in the southwest part, at the depth of 2 feet; the third in the center at the depth of 4 feet, a cut having been made in the top of the core to receive it. The material of the layer over it had a disturbed appearance; indicating that these were intrusive burials.

Two other skeletons were found on the bottom of the pit, bundled as usual. The bones of these two are larger than those of any of the other skeletons of this group. Mounds numbered 41, 47, and 48 were so similar in every respect to 42 as to need no further notice.

Mound 49 stands on the lower margin of the gravelly ridge south of the gully, 20 or 25 feet above the water level of the lake; its diameter being 26 feet and height 5 feet. It was found to consist, except the top layer, of an unstratified mass of dark brown loam with a considerable mixture of sand and gravel, having the same appearance as the soil of the ridge on which it stands; an occasional lump of clay, similar to the loam masses heretofore spoken of, was observed. Under this main layer or body of the mound, near the center, was an oval pit, diameters 3 and 2½ feet, and 1 foot in depth. This mound furnished evidence as usual of both intrusive and original burials. The original burials were two adults in the pit; these, as also the skeletons of the intrusive burials, being bundled, an indication that the two peoples who buried here belonged to the same race. Mounds 23 and 36 were similar throughout to No. 49.

GROUP ON SEC. 18, T. 35 N., R. 11 W.

These mounds, which are on the opposite side of the lake from the preceding, are all of the round or conical type and are located on a point of land some 25 feet above and overlooking the lake and the other village just described. No. 8, one of the largest of the group, measured 45 feet in diameter and 5 feet high. Commencing at the top, the first 3 feet was a layer of sandy loam; the remainder was a hard core of clay mixed with sand, made up of small masses, like those heretofore described. The latter rested on a layer, about an inch thick, of what



PLAT OF RICE LAKE GROUP, BARREN COUNTY, WISCONSIN.

seemed to be the decayed vegetable material of the original surface of the ground. A skeleton was discovered southeast of the center, only 3 inches below the surface, bundled. Fragments of a skull were found near the center at the depth of 2 feet. Here there were evidences that a grave had been dug in the mound after it had been completed, and a body buried in bark wrappings, but all save these fragments of the skull had completely decayed. A third was at the same depth. Four feet east of the center was another at the depth of 3 feet, but the skull in this case was wanting from the bundle. In the apex of the central core, in which a cut had been made for its reception, was a fifth at a depth of $3\frac{1}{2}$ feet from the top and 6 inches in the core. No skeletons were found in the lower part of the mound, though at two points the earth was similar in character to that which results from decayed bodies and probably marked burial places. At the bottom of the mound, south of the center, was the only relic obtained, a copper drill or spindle, similar to that shown in Fig. 34; this is $7\frac{1}{2}$ inches long, a little over one-fourth of an inch square, and pointed at each end. When found it was upright.

Mound 12, situated west of No. 8, in a thicket, measured 32 feet in diameter and $3\frac{1}{2}$ in height. The upper layer consisted of loose sandy loam, like the surrounding surface. The remainder, of sand and clay, very hard, rested on the original surface of the ground. Under this was a pit, length 7 feet, width at one end 4 feet, at the other $5\frac{1}{2}$, depth 2 feet, its walls perpendicular and bottom flat. Three bundled skeletons, the only ones found in the mound, were in this pit. With one were a few copper beads.

Mound 14, standing 120 feet from the lake shore, measured but 26 feet in diameter and a little over 3 feet in height. The construction was similar to that of No. 8; first a layer of sandy loam, 1 foot thick, then the core, 2 feet thick; but in this case there was, immediately below the second layer, a stratum of charcoal 4 inches thick, covering an area 6 feet in diameter, and immediately below it a layer of burned earth 3 inches thick and covering the same area. Underneath this, on the original surface, were the remains of three bundled skeletons partially burned. The remains of two logs, which had been nearly consumed by fire, could be traced in the layer of burned earth. They must have been about 6 feet long and 4 or 5 inches in diameter. They were parallel, within a foot of each other, and had evidently been laid on the earth covering the skeletons, but there were no indications of a wooden vault. The evidence seemed conclusive that the fire had been kindled here after the skeletons and logs were in place. The first skeleton was in the center under the two burned logs, and the indications were that it had been wrapped in birch bark, parts of which, although both wrappings and bones were charred, were obtained. The other two skeletons were north and west of this central one, and one of them showed but little of the effects of the fire, while the other was nearly consumed.

Southward, outside of this burned area, but under the core or layer, were two other skeletons, which seemed to have been buried at the same time as the other three.

ROCK COUNTY.

In 1886 Rev. S. D. Peet explored an effigy mound, probably representing a turtle, in the group near the waterworks at Beloit. The results of this examination he reports in substance as follows:

This mound was found by measurement to be 80 feet long, the length of the body and tail being equal, each 40 feet; the width of the body across the middle 15 feet, and across the ends 30 feet.

Other parties had taken off the top before his examination. A broad trench running through the middle, lengthwise, was carried down to the original surface of the ground. Here he found 8 skeletons, banded, lying on the original surface of the mound. The dirt over them showed evidences of fire, but was not baked. The particulars, which resemble closely those observed in another effigy of the same kind belonging to the same group opened by Prof. S. Eaton, may be summarized as follows: First, the mound consisted of black loam; second, the earth was packed tightly about the bones; third, no gravel was found above the skeletons, but the original gravel of the bluff was immediately below them, indicating that the top soil had been removed before burial; fourth, the bodies were laid on the surface and the material of the mound, scraped from the surrounding area, thrown over them; fifth, the bodies or skeletons were evidently not interred in an extended position, for the bones of each individual were folded or heaped together, pieces of the skull in some instances resting upon them; they were probably "banded" skeletons, buried after the flesh had been removed; sixth, there were no implements or ornaments of any kind with them; seventh, some of the bones were tolerably well preserved, others much decayed; and eighth, all of the skeletons were those of adults.

The bones of each skeleton were in a separate pile or bundle, those of the lower extremities being doubled up along the trunk, but the skull in most cases placed on top. It is, therefore, evident that the burial had taken place after the flesh had been removed, probably by exposure on platforms or scaffolds—a custom which seems to have been followed by the mound-building clans of this section. Under one body there was a small layer of stones. These stones were burned, smoked, and cracked, as if they had been subjected to great heat. Two or three pieces of dirt were taken out which were flat on one side, as though the dirt had been wet and packed down upon bark and then left to dry out, or, possibly, a fire had been kindled upon it, so as to take the color out of it. It was difficult to tell where the fire had been placed. Pieces of coal were scattered through the dirt and some of the bones showed signs of fire, though it was apparent that the bodies could not have been cremated.