

THE PEABODY EXCAVATIONS
COAHOMA COUNTY, MISSISSIPPI
1901 - 1902

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John Saltonstall Belmont
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PREFATORY NOTE

I wish to gratefully acknowledge the invaluable assistance of Dr. Williams and Dr. Phillips. Only by making continual demands on their time, knowledge, facilities, and hospitality was this paper made even remotely possible. They are also due an apology for the late date of completion of the labor.

James Ford and John Goggin were also most obliging, and supplied data crucial to an understanding of the Oliver material. Lastly, some sort of acknowledgement is due to Charles Peabody and his assistant W. C. Farabee. The mixed blessing of their fieldnotes forms the improbable heart of this paper.

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CHAPTER I

INTRODUCTION

I. AIMS AND FINAL SCOPE

The sole aim of this paper is to provide a key to the considerable amount of raw data in the Peabody Museum from the excavations of Charles Peabody in Coahoma County, Mississippi, in 1901 and 1902. There is a pre-existing publication of these excavations - Peabody's own (Peabody, 1904). ^[See Peabody, this volume] This however is entirely unsatisfactory to the modern archaeologist for two reasons: 1. Peabody had no way of dividing up his material into cultural units and does not attempt it. 2. The stratigraphic data in the publication is very incomplete, as Peabody himself admits; on the first page he urges the interested student to consult his notes on file at the Peabody Museum (Peabody, 1904, p. 23).

The interpretation and eventual publication of Peabody's data is one step in a long-range plan of Dr. Stephen Williams to make available to the profession all the data stored in the Peabody Museum concerning Eastern United States prehistory. As the only large scale scientific excavation ever attempted in the Northern Delta region, Mississippi, ^[Prior to 1961] the Peabody dig assumes great importance and became one of Williams' primary targets. I set out to do what I could to retrieve this material from oblivion.

Complete analysis of the data would involve these steps: 1. Intensive analysis of the field notes with a view to extracting all data on stratigraphy, burials, and structures. 2. Preliminary analysis of the major artifact categories,

especially ceramics and chipped stonework, and tentative separation of the material into phase units. This could be done with the assistance of comparative material from the surface collections of the Lower Mississippi Survey (Phillips, et al., 1951). 3. Correlation of the phases with the stratigraphy, burials and structures, eventually arriving at a more exact and complete definition of the cultural complexes. 4. In the case of the historic component, arriving at an ethnographic identification of the inhabitants of the last phase at Oliver through intensive study of all available historic and archaeological data. 5. Through examination of surface collections define the limits of all the phases and construct a complete sequence of cultures for the Northern Delta. 6. Establish closely the relationship of these phases to others in the general area through extensive reading and, if possible, study of actual material, and fit the Northern Delta sequence tightly into the whole framework of Southeastern prehistory. 7. Make an extensive comparative analysis of the minor categories of artifacts which could not be placed by means of typology or stratigraphy, fixing them into phases; using reference from surrounding phases in spheres (such as domestic architecture in which there is no data from Peabody's excavations), construct pictures of the way of life of the peoples involved.

Only when this stupendous task is complete will the Peabody material be ready for publication. ^[add Ed. note] It was soon

discovered by the investigator that the task could not be completed in the time available, so the scope of the paper was curtailed. It was attempted to do as much as possible with the result that certain phases of the research were woefully incomplete: the half-finished nature of some sections will soon become apparent to the reader. Fortunately the first three objectives were accomplished - the fieldnotes were completely deciphered and their data reduced to graphic form, phases were established, and fairly complete summaries of them were made. A sincere attempt was made to accomplish the fourth objective and the results of what was done will be found in the Oliver Phase, late Mississippian. This last is divided into prehistoric and historic subphases. Tentative dating for these phases will be found in the chronological table at the back of the report.

Finally it may be noted with some regret that lack of space and time forced me to assume a considerable amount of knowledge on the part of the reader. No definition of most archaeological terms are given; in the absence of a comparative section a knowledge of the sequence of cultures in the Lower Mississippi Valley is all but indispensable to an understanding of what follows. ^[add ER note] Such local geographic terms as "the Delta," meaning the low-lying land between the Mississippi and the Yazoo, are used indiscriminately. This paper is basically a translation of the archaeological jargon of yesteryear into the vastly more complex archaeological

shorthand of today: with that warning the reader may
proceed.

II. HISTORY OF THE NORTHERN DELTA

This brief section can only be a very partial undocumented summary based on the preliminary conclusions I reached after three weeks of almost fruitless research in countless sources, a few of which are listed in the bibliography. A few negative conclusions may be put down to begin with: 1. No secondary source or compilation of primary sources of the colonial period surely mention the Oliver site or indeed any Indian village in the region. No maps in the collections at Widener Library, Harvard University, show any village at or near Oliver. 2. The French were entirely ignorant of the geography of the Northern Delta in the eighteenth century. Maps of the mid-century period have the area as a blank; the Sunflower is shown extending only a few miles north of its junction with the Yazoo. The earliest map I could find that showed the whole course of the Sunflower was Collot's map of 1796, in the back of Swanton, 1922. French plans for expeditions against the Chickasaw in the 1730's never even entertain the possibility of crossing the Delta. 3. Although in the early 1800's ownership of the Delta was divided between the Choctaw and the Chickasaw, extensive research revealed no evidence whatsoever that either of these tribes had any towns in the Delta. During the 1700's, the Chickasaw seem to have had impermanent settlements on the bluffs above ~~the~~ Memphis, and during the latter part of the century, Choctaws seem to have farmed the

bluffs above the southern Delta. Chickasaw expeditions against the Quapaw in the 1700's may have originated around Memphis. Myer (1928) reports a Chickasaw warpath through the present Tunica County, but his sources are unknown. Adair (in Williams, S.C., 1930, p. 149) mentions a region with no stones as being part of Chickasaw territory in the period around 1750. This may refer to some portion of the Delta. Aside from these few hints, the two great ^{tribes} ~~tubes~~ of Mississippi are never connected with the Delta. Village lists show none anywhere near the area.

Three tribes are vaguely associated with the northern Delta: the Chakchiuma, the Quapaw, and the Natchez. The Tunica are associated with Tunica Old Fields and Tunica County in the Northern Delta, but all records, from La Salle on, place these people to the south. If they were even in the region, it was in the prehistoric period and no documentation may be brought to bear on the subject. Other tribes (the Taposa, the Ibitoupa, and the Tchula) are sporadically mentioned as living on the bluffs of the Northern Delta in the early 1700's. These tribes are only names in the records and nothing may be said about them.

The Chakchiuma are a knotty problem. The confused account of them in Swanton (1911, pp. 292-296) does little to clarify the question of their location. He cites legends that they were originally united with the Chickasaw and Choctaw, and they may well have spoken a Muskogean tongue.

Yet the evidence (Swanton, 1911, p. 334) that their burial customs were the same as the Yazoo's suggests that they had some connection with the little-known tribes of the Southern Delta. The mode of burials, by the way, was extended, which makes them poor contenders for the people of the Oliver Phase at Oliver, who used bundle burial.

The Chakchiuma are associated with two rather far removed regions: the area around Clay and Oktibbeha Counties in eastern Mississippi, and the area around the present town of Greenwood, near the bluffs of the central Delta. H. S. Halbert (1904) seems convinced the former was their native land, and Adair (Williams, S. C., ^{1939,} pp. 318, 336) says there were some in that area in his day (1740's). But maps and other records (especially see Rowland, 1927-32) consistently place a group of them in the Greenwood area in the 1700's. This group is referred to as "the Chakchiuma nation" but it seems likely that this was only one village of them.

What is probably the Greenwood location is first referred to by Iberville in 1702 (see Swanton, 1911, p. 294 -- the original is more specific). The earliest map I could find with the Greenville location on it dates at 1721. Records for the 1730's are fairly vociferous concerning this group (cf. especially Rowland, 1927-32, passim). In 1733 they attacked the Chickasaws under French instigation, but by 1735 the French governor grew suspicious of them for some reason and had them moved south to the old Yazoo village at

Haynes Bluff. The next year he decided to send the Tunica against them to wipe them out. They escaped however and went back to their old village. Two years later they are mentioned as being used for guides on the Yazoo, which indicates they had some familiarity with the eastern portions of the Delta. The last mention of them I could find was in the report of the Englishman, Atkins (Jacobs, 1954, p. 44), made in 1755. At this time they are still around Greenwood. Some years later the last remnant of the Chakchiuma in eastern Mississippi were wiped out (Swanton, 1911, p. 295). As it does not appear on maps of the late 1700's, it is presumed that the Greenwood group was also extinguished by around 1770.

Tradition (reported in Swanton, 1911, p. 293) gives the origin of the Chakchiuma, along with the Choctaw and Chickasaw as somewhere west of the Mississippi: little confidence may be placed in this myth. All the evidence I have been able to find suggests that the Chakchiuma are a hill tribe like the others, but a group of them, perhaps incorporating refugees from the Delta itself, lived on the Delta's edge. The only thing which connects them with the Upper Sunflower is Myer's (1928) map of trails and he has a "Chakchiuma trail" going across the Delta from the Greenwood region to the mouth of the Arkansas, passing fairly near the Oliver site. That such a trail existed is plausible if not proven. There conceivably could have been a Chakchiuma town at or near the Oliver site, undocumented because the area was unknown

to the Europeans, who cared little about the villages of militarily unimportant tribes anyway. I personally do not believe there was any sort of town in the middle of the swamps, viewing the evident hill-tribe connections of the Chakchiuma, but I do mention the possibility to point out how impossible it is to prove anything from the available records.

The historic connections of the Natchez with the Northern Delta may be summarily dealt with. Most of the pertinent data is in Rowland (1927-32). The final dispersion of the Natchez in 1733 did not satisfy the French, who evidently wanted to kill off the Natchez to the last man. A large group of Natchez found refuge among the Chickasaw. During the 1730's the French put considerable pressure on the Chickasaw to kill off or get rid of their Natchez, and although the Chickasaw do not seem to have actively persecuted them, many of the Natchez moved away to other tribes or fled to inaccessible regions. In 1738 a party of Quapaw captured some Natchez on the Mississippi and it became evident that a remnant of the tribe was hiding in the northern swamps. Quapaws were ordered to root them out but met with no success. After the French expedition against the Chickasaw in 1739-40 the Natchez remaining with the Chickasaws evidently became aware that they were no longer welcome guests, and most of them dispersed, some into the western swamps. Thereupon the Chickasaws promised the French they would do their best to root them out and by next year (1741) were able to assure the

French that there are no more Natchez around. That Atkins in 1755 (Jacobs, 1954, p. 45) mentions a village of Natchez near the Mississippi, not far from the Chickasaws is evidence that actually they stayed somewhat longer. When they at last moved out is not known.

The Natchez then are the only people known to have had a village somewhere in the North Delta swamps during the eighteenth century. Unfortunately their village was not Oliver. Aside from one Natchez-looking pot in a burial, the site is devoid of Natchez ceramics, and analysis of the trade goods indicates that Oliver was abandoned for the last time by about 1700. Where the Natchez were located remains a mystery.

One other tribe remains to be considered: the Quapaw. The early history of this tribe is so well-covered by Phillips (Phillips, et al., 1951, pp. 392-419) that I will attempt to add little. There is one point which I shall question: the location of the towns. Were they really all as close together as Phillips has them (Phillips, et al., 1951, Figure 72)? How did the French measure their distances -- were they taking into account the bends in the river and estimating distance as the crow flies, or were they estimating how far they had floated? I ask these question because most of the maps from mid-century show old Kappa, usually called "Ancient Village of the Arkansas" up opposite Friar's Point, Mississippi, and several of the secondary sources say it was

that far up. It is certainly possible for a mistake to be made on one map and then be perpetuated on others, but is this the case? If indeed the villages were as spread out as these old maps suggests Oliver would be inland, somewhere between Tongigua and Tourima in latitude. It is between these two villages that La Metairie reports the existence of two other villages "plus esloigné~~s~~ dans la profondeur des ^{bois} ~~fers~~" (in Phillips, et al., 1951, p. 402) or "further back in the depths of the swamps." As Phillips notes, this mention, made in 1682, is the only reference that can be found to Quapaw villages not on the major rivers. It is too bad that La Metairie does not specify which side of the river these villages were on, so we cannot say this is proof that the Quapaw included some part of the Delta in their territory. As it is we have only the tantalizing possibility that some Quapaw deigned to mention once the existence of the backswamp hamlet that was Oliver. This is the only documentary record I can find that conceivably refers to our humble site.

There is however a little more evidence that the Quapaw inhabited part of the Delta, on a map evidently from La Salle's expedition, a photostat of which is in Widener. This map includes much of the Delta within the borders of the Quapaw; but it shows no villages in the region. Swanton (1911, frontispiece) on his map gives the Quapaw an enormous amount of territory including a slice of the Delta taking in Oliver. His sources for this are unknown. Quapaw in late times are

found in hunting expeditions to the St. Francis, the Ouachita, and the Tensas, but the Northern Delta is no more mentioned in connection with the Quapaw than it is in any other connection. We know that in early times they had control of both banks of the river, that one of their historic towns (Tongigua) was on the eastern bank. It seems likely that in early historic times they controlled the Upper Sunflower as they controlled the swamps around the Lower Arkansas, but that is all one can say.

As for the history, a fine source for the early part of it is Phillips, et al., 1951, pp. 394-412; for the later part, Faye, 1943, 1944.

The Quapaw were perhaps first seen by Marquette and Joliette in 1673, but it is not certain they actually travelled this far down the Mississippi. In 1682 La Salle came and stayed for a period at the Quapaw towns, of which there were at least four: Kappa, Tongigua and Tourina on the Mississippi, and Osotouy up the Arkansas. Four years later Tonti came down on his way to look for La Salle's lost Texas expedition. On his return he left ten men at the village of Osotouy. These men and the cabin they built constituted the first Arkansas post. The next year the survivors of La Salle's expedition reached the post, and three years later (1690) Tonti visited again, possibly bringing more trade goods. After that no Frenchman except those stationed at the post seem to have been in the area for a decade. During

this time great changes took place, there was a terrible epidemic of smallpox. The population estimate at 1700 is 1500 people, as opposed to 6000 twenty years earlier. At this time there are only two occupied village sites: Osotouy and "New Kappa" somewhere near the mouth of the Arkansas, incorporating the inhabitants of Kappa and Tourima, This new situation was first reported by a bunch of missionaries Tonti was ferrying down to the Lower Valley. They passed the Quapaw villages around Christmas time 1698; at this time the epidemic was still raging.

If Oliver was a Quapaw village it was probably abandoned about this time along with other villages ravaged by the plague. From now on the French keep fairly close tabs on the Quapaw, since they were useful allies. If there has been a Quapaw village in the Delta at this time or especially during and after the Natchez troubles, it would have been recorded.

Be that as it may the Quapaw were, after 1679, the subject of fairly frequent visits by Frenchmen. They were surprisingly constant allies despite the fact that English traders from the Carolinas had penetrated to their towns as early as 1699. By 1705 the plague seems to have dwindled and life continued normally for a while.

Then in 1721 the first French farmers came and six years later a priest was sent up to take care of their needs. No missionary ever seems to have been provided for the Quapaw

themselves. Bossu, who visited them in 1751, described religious dances, idols consisting of dried ravens and snakes, and stated that they worshipped a Great Spirit who was a serpent. (Bossu, 1771) Evidently the native culture was still thriving.

In 1722 the village of New Kappa moved off the Mississippi and up the Arkansas to be nearer the post, and to escape marauding Chickasaws on the River. If the people of New Kappa felt themselves isolated at this time it is most improbable that any Quapaw still remained in the Delta almost completely cut off from tribal support.

The Quapaw were docile during the Natchez War, but after the war, from 1732 to 1749, they conducted a continual series of battles with the Chickasaw, each raiding the other alternatively. For variety they were also attacked sporadically by the Osage. In 1739 the French established a post at the mouth of the St. Francis and some Quapaw went up to establish a village. They went back, however, within the year. In 1746 there were 250 Quapaw warriors, which shows the population had stayed fairly constant since the turn of the century.

Then the plagues began again, hitting them in 1747-48 and 1751. In 1749 the post was moved upriver a ways and the Indians eventually joined it. At this time they had been reduced to one village with 150 warriors -- perhaps 600 souls in all. No longer do they have any military or

political significance in the Southeast.

In 1766 the Spanish arrived to take over the Post, over the violent objections of the natives. The Spanish period was an uneventful one, and the population seems to have increased a little, to 700 souls. In the 1770's the English established a rival trading post across the River, and a band of Quapaw moved over to take advantage of it. The Spanish drove the British out in 1780, and presumably then the Quapaw moved back.

Arkansas Post got its taste of the Revolution in April, 1782 when the half-breed Colbert and his band of Chickasaws raided it in the name of the Americans. The attack was repulsed. In 1800 the post reverted briefly to the French, and the Americans took over in 1803. No one bothered to make a treaty with the Quapaw however until 1818 when they were confined to a small reservation on the Arkansas. It is of interest that this treaty mentions the relinquishment of claims to lands east of the Mississippi, which suggests that the Quapaw still felt themselves to have a historic right to parts of the Delta opposite the Arkansas (Royce, 1899, p. 688-9). In 1824 the Quapaw were removed to the Caddo area, only to return two years later, and be finally removed in 1834.

Over on the Mississippi side of the river, the Choctaw had the only claim recognized by the U. S. to that part of the Delta which included Oliver. The Choctaw-

Chickasaw line ran along what is now the northern border of Coahoma County. In 1820 the Choctaws ceded the Southern Delta, and in 1830 they ceded all the rest of their lands east of the Mississippi. Perhaps 130 years after the abandonment of Oliver the last Indians to rove the area were gone and for a time the Upper Sunflower was entirely deserted.

But this was not for long: already Americans had settled along the Mississippi at Friar's Point. In 1836 Coahoma County was organized. The backswamps remained unreclaimed for a long period afterwards; an army map of 1864 shows no signs of habitation on the Upper Sunflower. By 1878 settlements have pushed into the northeastern section of the county. Clarkdale was presumably founded at about that time and between 1884-6 the levee system on the Sunflower was finished. The whole country was thus opened up only fifteen years before Peabody arrived on the scene; Edward's farm, far from the nearest town, was probably started in the mid-80's at the earliest. Thus the Oliver site was in basically its aboriginal form when Peabody arrived -- even the smallest mounds were visible. It is noteworthy that one mound noted in 1901 was invisible a year later -- cultivation was beginning to take its toll.

No archeological history of the region is attempted. Suffice it to say that although Thomas (1894) records a big mound at Clarksdale, he does not specifically note the smaller Dorr Mound nearby. No mention of either Dorr or Oliver could

be found in the archeological records before Peabody's time. How Peabody himself came to know of their existence is a mystery. Since his time the only recorded archeology at Oliver has been the work of the Lower Mississippi Survey. A surface collection was made in November, 1940, and three test cuts were made the next spring. The Dorr mound was never positively identified by the Survey.

CHAPTER II

DORR MOUND

I. LOCATION

The Dorr site is located about a mile from Clarksdale, Mississippi, on the Sunflower River. It consists of four small mounds and a large one (see Map 1). The exact location of the site is not known. This site is not that reported by Thomas (1894) at the town of Clarksdale. This latter site, now presumably, like Dorr, demolished, had its big mound on the river bank, washing into the river. This mound, moreover, seems to have been of the pyramidal type. The Dorr mound was 400 yards from the river and was conical. Thomas' mound, moreover, had the Clarksdale village church on top of it and was in the village of Clarksdale, tiny as the village was at the time (about 1890). The Dorr mound ten years later had no signs of modern construction and was almost a mile from the steadily growing town.

II. THE DORR DATA AND METHODS OF EXCAVATION

Charles Peabody and his assistant Farabee arrived at Dorr on Friday, May 10, 1901. The big mound was at that time covered with brush, but no trees. Cotton was planted all around it, but not on it. Mrs. Dorr, the wife of the owner, had previously dug a small shallow hole near the top of the mound. This hole is clearly shown in none of the profiles; the shallow depression a bit east of center on Map 2 may be this disturbance. Other modern intrusions are represented by the up to 12 modern (negro?) coffin burials to be discussed.

On May 10, Peabody laid out an east-west row, and a north-south row of stakes. The E-W row was numbered from 0-12 in Arabic numerals, starting at the east end. The N-S row was numbered 0-XVIII in Roman numerals, starting at the south end. Each stake was five feet from the next. Then Peabody proceeded to measure radii of the mound from the summit and center, stake 6 (W), IX (N). This method was a peculiar one: he seems to have walked around the foot of the mound more or less on the level, putting stakes in at ten foot intervals. He then measured the distance from the center to each of these stakes. The resulting circumference is the dashed ink line on my Dorr Map 2. Except possibly on the east side, his line seems to run at about the $2\frac{1}{2}$ foot level.

On May 11, Saturday, excavation was begun. Farabee was put on the north end; Peabody worked on the south,

digging down to a pre-set level in five-foot strips, working toward the center. There was no digging the next day (Sunday), but Monday a 25 man crew was put on, and the mound was totally demolished by the following Friday and the excavation filled in on Saturday.

The data for this excavation are very meagre. It consists of two small fieldnote books (one for Peabody, one for Farabee) written in virtually illegible hands, and a sheaf of paper on which all the burial data was assembled by Peabody later on. One or two additional facts may be gleaned from the brief published account (Peabody, 1904. pp. 23-25).

Detailed study of the fieldnotes has revealed a chaotic and almost completely uncoordinated dig. Peabody and Farabee continually hop around from end to end of the mound, recording each other's burials. Profiles were done, such as they were, by whoever happened to have the tape. Peabody became aware of stratigraphy on the 14th, but he does not seem to have informed Farabee of this until the afternoon of the 16th. On the 17th, Peabody left to reconnoiter the Oliver site and the dig, if it can be imagined, deteriorated even further.

Only a few of the profiles were drawn, and these crudely - most of the profile data consists of a series of figures, e.g: "Breast (i.e. cross-section) at Stake XVI, W to E: 0', 3' 1'', 10', 4' 11'', 20' 6' 2'', etc. " These

are measurements of the height of the mound at ten foot intervals from the West end of each trench. Although the zero E-W stake is at the East end, measurements were made from the West end, presumably because the profiles on the South (Peabody's) side of the mound were drawn with the West on the left side of the page. Farabee, working towards the south, was also compelled to put West at the left side of the page, with the result that his profiles are drawn backwards from what he actually saw, since he faced South, with East on his left, while drawing.

There is a further complication. One would assume that zero on the profiles would be at the western limit of the grid, i.e. at stake 12. Only comparatively recently in my investigation did I discover that this was unfortunately not the case. The trenches were started at zero on the East and dug west, only once to the full 60 feet, and usually between 52 and 57 feet. Thus "zero" on the profiles can mean almost anything. The dig area (see Map 2) thus resembled a typed page with one ragged margin. It took a great deal of work and unfortunately some guesswork to figure out where the western margin was on each trench and thus to be able to construct a reasonably accurate contour map of the site.

About halfway through the dig, Peabody tired of the humdrum slicing from North and South, and began trenching in from the east also (see Sequence of Digging Map). In the last few days the mound was thus the victim of a three sided

attack. It must have been quite a scene. The negroes were probably given a two or three minute rest while the profile drawings of the previous trenches were polished off. Then they were lined up along three sides and dirt flew. Needless to say the data at the two corners suffered. There is one corner especially where Peabody's and Farabee's teams overlapped, and seem to have fought over the peculiarly thick burials at that point. Farabee recorded the heads and Peabody the lower portions of what must be the same skeletons. Lower Valley archaeology in 1901, if not scientific, was certainly fun.

But why go to all the trouble of drawing a contour map and establishing which trenches were dug when? The reason is the method of burial recording used. Only four burials were noted in the profiles or tied with them. These four were not recorded in the text but are noted in the form of grave pits on two of Farabee's last-day profiles. Farabee's motive for doing this seems to have been haste. The records of this day are incredible; Farabee was totally at a loss as to controlling the horde of negroes placed under his hesitant supervision. The burials that he did record all have such hasty notation as "N.G." (no good), "of no advantage," or "could not save it". His notebook was divided into "North Side" and "South Side" sections. A number of the burials are recorded in both sections; many were probably not recorded at all. He quoted from one of his workers: "Funny

thing to dig in God's earth and not know what you're diggin' fur." Evidently the harassed student fully sympathized with this sentiment.

Be that as it may, Farabee and Peabody had related but different burial recording methods. A typical burial of Farabee's is recorded thus: "Skel. 26, 12' E. of Stake XI 4 $\frac{1}{2}$ ' deep, head N, trace, N. G." This means: 1. As near as he can judge from the activity in Peabody's section this is the 26th burial found. 2. It is twelve feet east of the center line of stakes. 3. On the N-S line, it is more or less opposite stake XI. Whether it is in the trench from XII-XI or that from XI-X, or one of the eastern trenches can only be discovered by correlating it with the sequence of digging. 4. It is 4 $\frac{1}{2}$ feet from the surface of the mound at that point. Absolute height, or height from the presumably level bottom of the excavation can only be determined by placing the burial as accurately as possible on the contour map (Map 2). 5. Peabody insisted that the direction of the head be included in all possible burial notations. Thus Farabee included it whether what he found was a full skeleton, just a skull, one leg bone, or, as in this case, a "trace" which generally means a patch of rotten bone. Here "head N" means the longer axis of the bone patch was N-S. The fairly complete data on head direction is virtually useless, aside from being meaningless in most cases. Once in a while Farabee has such notations as "on back", "on right side, knees

bent", or "skull only", which give all too rare clues as to the type of burials.

Peabody's method of burial recording, which Farabee seems to have, unfortunately, used as his model, differs in only one respect. Instead of "12' east of IX", he will have "21' SW of VIII". On his first two burials he mentions the exact compass angle but then he lapses. This notation does not mean as I had first hoped "21' to the west of stake VIII, a bit to the south, i.e., in trench VII-VIII, as opposed to VIII-IX. It means anywhere in that quadrant of the mound southwest of stake VIII along an arc with radius of 21 feet. Especially as one gets far out from center, this is about as bad as not locating the burial at all. This was the main reason why I established the sequence of digging. Luckily Peabody had no special arrangement to his field notebook, so when burial X appears after Profile A and before Profile B, it was found in the trench between these two profiles. Thus the applicable arc is considerably shortened. I need not mention the difficulties that arise in the periods when Peabody made Farabee do his profiles. Then one must depend on double recording of burials, such notations as "S.W." etc., for correlation.

A few burials have even less data, such as one which has merely "in breast (profile) of Stake VII. But 90% of the burials with some work may be placed within 5-10' of their original position virtually, and 1' horizontally.

The data on stratigraphy are very meagre. All that can be squeezed out of it is shown on the map "Stratigraphy of the Dorr Mound." The major stratum seems to be a thin layer of dark, clayey earth referred to by the writers as the "buckshot layer". It was first noticed by Peabody when he came over to inspect Farabee's profile at XIV. Farabee was looking for strata on profiles to the north, but on each he says "no strata visible" or "homogeneous". It is doubtful whether he had learned to distinguish strata whether they were there or not. However the fact that at profile XIV the buckshot layer does not, as in most other profiles to the south, extend across the whole face of the pit indicates that XIV is near the northern limit of the layer. Right after he did XIV Peabody went back and drew his own profile at stake IV, and since he does not mention it, it is likely that the layer was not present this far south. On the profiles at V, VI, XIII, 2, and 4, the authors omit drawings or comments on the profiles. On all the other profiles around the center of the mound, however, the buckshot layer is present. In all likelihood the stratum underlies the whole central mound area. Indeed it is possible that its limits represent the original limits of the mound before it started to wash down and spread out.

Information is scanty and even contradictory, but in general this buckshot layer is about one foot from the bottom of the excavation and 3-4 inches thick. At the very center of the mound, if one can take Farabee's impressionistic

drawings at face value, it seems to grow thicker and a little higher. It is not a construction level of the mound. In his publication Peabody calls it a "sod-line" (Peabody, 1904, p. 24). This interpretation is probably valid.

Within and above this layer is a stratum of sandy soil up to two feet thick, but generally about one foot thick. It rests directly on top of the buckshot layer. The evidence for this interior primary mound of sand is slim, consisting of a vague comment of Peabody's about profile VII, and three very crude drawings of Farabee's. But the existence of similar primary mounds in the coeval Crooks and McQuorquodale sites leads us to accept the meagre evidence at face value.

Artifacts are comparatively scanty. Only three burials have certainly associated artifacts. Other burials have artifacts nearby, but they are recorded separately. After the 14th Farabee seems to have given up describing artifacts with burials, and the investigator must again do his own correlations.

The published data on the Dorr Mound are practically non-existent. There is, we have seen, a fair amount of unpublished evidence; but it is so chaotic and hazy that interpretations are in no cases certain. Those that are moderately sure are presented below.

III. PHASES PRESENT AT DORR AND THEIR BURIALS.

In the Dorr collections are a vast majority of Coahoma sherds, some Dorr Phase pottery, and part of a single Hushpuckena Neeley's pot. What with the lack of stratigraphic data and the poor quality of the burial data it was found impossible to assign most of the burials to one phase or another.

At Oliver, as we shall see, all the Coahoma Phase burials were extended, so we may tentatively say that most of the extended burials here are Coahoma and that those burials of other positions are of another phase, probably Dorr. The presence of only one large Hushpuckena pot fragment in the collections makes it unlikely that very many of the burials derive from this culture. There is one burial, of unknown position, described in the field notes as intrusive, having better preserved bones than the majority. This burial^s might be Hushpuckena, although of course that Peabody called it intrusive means very little as all the Coahoma burials are probably intrusive also.

All the burials whose ~~members~~^{members} are surrounded by pencilled squares on the map (Dorr Map 2) are evidently on the ground level and were presumably placed there before the mound was constructed. They may all be assigned to the Dorr or Hopewellian Phase. Three of these burials are flexed, some seem to be simply skull burials, most have no positional data. Burial 46-7 is a two skull burial and had with ^{it} a good

Hopewellian point encased in a cake of red ochre. Another Hopewellian point was found at ground level at coordinates XII, 6. If there was once a burial with it, no traces were noticed by the excavators. Burial 29 was on the ground level; it is mentioned that sherds accompanied it. These sherds may have been of the Dorr Phase. The other two "H's" on the map represent pieces of galena found near the surface, and which are considered Hopewellian simply in view of the predilection of those people for that mineral. All the other flexed burials, noted in ink, are four feet or more below the present surface of the mound, and there is a high probability that they also date from the Dorr occupation. In summary we may say that Dorr Phase burials seem to be ~~usu-~~ (2) usually skull, partial or flexed burials, that grave goods are rare, that most of the burials were put down just before or during the construction of the mound, and that none of the certainly Dorr Phase burials are close enough to the surface to be considered intrusive.

As for Coahoma Phase burials, they seem to tend more toward the slopes of the mound and can be considered generally intrusive. Four burials had Coahoma artifacts associated (one point, the others pots); two of these were extended, the others had no data; all were superficial. Other scattered Coahoma artifacts recorded in the mound were all within three feet of the present surface.

A comparison with the well documented Coahoma burials

at Oliver suggests that the burial patterns at the two sites are similar in the moderately rare occurrence of grave goods, in the preponderance of extended burials where there is documentation of position, and in the trait of intrusive burial into a conical burial mound. It will be seen however that the "burial mound" at Oliver is a vestigial affair at best. Does the sheer size of the mound here indicate that this component of the Coahoma Phase is earlier? I believe not -- a brief look at the pottery shows no difference between Dorr and Oliver Coahoma components. This mound is large because the Dorr Phase people made it that way. Just because the Coahoma folk here had a big burial mound to bury in, and did not have to use the humble tiny type of burial mound which was in use at Oliver does not mean a thing in terms of relative strength of the burial mound traditions at the two sites. Are we to assume from the presence of nineteenth century American burials in this mound that this culture also was steeped in the venerable burial mound tradition? Not at all. In sum we may hypothesize that despite their use of a magnificent old burial mound the Coahoma people at Dorr had a culture and traditions very much like those that shall be described for their compatriots at Oliver.

CHAPTER III

STRATIGRAPHY OF THE BIG MOUND AT OLIVER

AND ASSOCIATED DATA

I. INTRODUCTORY.

This chapter will serve as an explanation and comment on the maps at the end of the paper. These maps are a graphic distillation of all the stratigraphic, structural, and burial placement data contained in the field notes of Peabody and Farabee pertaining to the Big Mound at Oliver.

In this dig Farabee wrote notes on the appearance of burials (positions, bones present, grave goods) the first season. We have no notes from Farabee for the second season, in which he dug up the smaller Cemetery Mound, except for a one-page summary of the dig. Whether he wrote field notes then is uncertain: if they ever existed they are now lost.

Peabody's notes begin as random comments on anything he saw, but after a while they become formalized. In the second season he has two sections of the same book for burials and for finds, features, etc., noted during the digging of the trenches. There is a separate book for profile data. Later he recopied almost all his data -- burials onto cards, profiles onto profile maps, and post holes and stray finds and comments onto separate sheafs of paper. There are three problems with this recopied data: there are copying mistakes, there is no correlation of data, and the arrangement into separate categories is faulty. Burials which he only recorded as stray bones appear in the stray-finds papers, bones seen in the profiles appear in the profile maps or are ignored. Post holes appear usually in the section reserved

for post holes, but there is a category of features which he calls "ashpits" which seem to be sometimes ashfilled post holes, sometimes trashpits, and sometimes firepits. These appear in the stray-finds section; post holes seen in the profiles are recorded only in the profile maps.

There is a certain amount of duplication of data. Burials could conceivably be recorded in four places: once as stray bones in a trench, once as bones in a profile, once as a burial in the next trench, if that is where the skull was, and once as a "stray" pot found nearby. Correlating his finds required a great deal of effort.

Burial data ^{are} [is] generally good. He records the burial ^{are} position, location in three dimensions, grave goods or objects which he believes are associated, and whether the skeleton is of an adult or a child. Post hole data ^{are} [is] quite good for post holes which he believed originated in his "critical layer". Post holes and features elsewhere are recorded only sporadically and evidently the data are incomplete.

Stratigraphic data ^{are} [is] generally of high quality. At the beginning of the first year he noticed the "sod layer", a thin layer of midden at the bottom of the mound. Features on this, though few, are watched for and well recorded. Unfortunately he soon formed the opinion that this layer represented the original turf under the mound, assumed that it was level, and subsequently made all measurements of height in his profiles from it. During the second half of the first

year he dug down to this layer only. During the second year however he dug below it and gave measurements both to the sod layer and to the floor of his trench. It is evident from the figures that one or the other is exceedingly uneven. In his profile drawings he makes the sod layer straight and his trench floors uneven and we must assume that this was the case. Thus in measuring height of the total mound and of the various strata we must assume that the sod layer is indeed level and use it as our absolute datum. The only check we have is his "critical level", whose height from the sod layer was measured accurately at ten foot intervals in each profile. If we assume, as he does, that the sod layer is indeed flat, in the drawings the "critical level" turns out horizontal also, to within about a foot. This indicates that the sod layer was indeed roughly level.

On one of the last days of the dig Peabody dug a long trench from the ^[west] edge of the mound into the plaza to see if the sod layer did in fact come to the surface when he got beyond the mound tailings. He discovered to his horror that his theories were all wrong, that the sod layer in fact dipped sharply and petered out at a point where it was considerably below the surface. It was not indeed a "sod layer" but a layer of midden whose seeming near-levelness under the whole mound is a matter of luck.

Peabody noticed the "critical level" (whose nature will be dealt with shortly) about half way through the first

season. From then on his preoccupation with it grew; he recorded its height and thickness with increasing accuracy and went to great pains to find all the post holes evidently emanating from it. He recognized no other strata in the mound as such, yet, because he was careful to note all the soil changes he saw in the profiles, we are able to reconstruct what are probably all the major strata in the mound.

The one class of data which is almost totally lacking is artifact placement. True all grave goods and whole pots are recorded but the overwhelming majority of sherds, stone and bone artifacts are unplaced. A few sherds are catalogued by trench number, but this gives us no clue as to their vertical position. Thus the phase placement of the various mound stages can only be deduced from burials when they occur, from stray hints, and from guesswork. Let us now get on to the maps.

II. THE MAPS.

1. MAP 1

This map showing by one foot contours the height and shape of the mound in 1901-02, is relatively self-explanatory. It will be noted that on this map and on most of the others North is not at the top but to the right. This is because that is the way Peabody's own maps are arranged, and because the shape of the excavated area (surrounded by ink lines) is such that it fits onto a piece of paper easier this way.

The contour lines on this map as on the others are at one foot intervals. The figures represent height not from any absolute datum but from, as I have indicated, the sod layer.

In digging Peabody started at the ~~west~~^{east} end, digging five foot wide north-south trenches. It is to be noted that they got shorter as time went on. The trenches are numbered from 1 to 29 starting at the ~~west~~^{east}. The other set of numbers starting at 2 and going to 31 are the numbers of the profiles at the end of each trench. To be more accurate they are the numbers on our east-west row of stakes, one for each profile, placed on the east-west axis of the mound in the middle. The north-south stakes are lettered in the rather peculiar fashion shown on the map. The non-lettered stake in the middle bore the east-west number.

The notation "no data" in the center of the map

bears some explanation. Throughout the higher part of the mound Peabody dug his trenches in stages or steps, working on as many as three or four trenches at once. At the end of the first year he had finished trench twelve and had dug one stage on trench thirteen. Over the fall and winter of 1901 erosion occurred in trench thirteen and in the not yet excavated portion of the mound directly to the ^{west} east. On account of this in the beginning of the second season he dug trench 13 down another level, dug a deep level in trench 14, and cleared the tops of trenches 15 and 16 without recording anything. Thus we can only infer the total original height of the mound in this region from data taken down in nearby trenches.

Two facts that Peabody never saw are evident from this map: (1) The mound is not round but roughly rectangular, (2) The orientation of the mound is not east-west or even north-south. The long axis is actually northeast, southwest, the shorter axis northwest, southeast.

It is evident that the western slope is a good deal steeper than the eastern. One reason for this may be that the ground on the east is a foot or two lower, due to a depression of some sort on that side. Another reason is simple differential erosion. The top on the western side has slumped down considerably, as a discussion of the higher strata will show. Otherwise, this map is self-explanatory.

2. MAP 2

This next map is a cross-section of the mound from west to east at the numbered stakes. An exception was made for strata A and B, stages of a small mound within the mound whose lower slopes are all that reach as far north as this. In order to show their relation to strata 3 and 4 they are drawn as at their highest cross-section, at about stake N. Stratum A reaches to the top of stratum 2, stratum B reaches almost to the top of stratum 4, and at one point seems to break through. The borders of A are dotted because we know them only roughly.

Stratum 1 is the "sod layer", which averages under a foot thick. It was not noticed at the beginning of the dig, at profiles 2 and 3, probably because Peabody was not at first expecting it. It is an axiom of archeology that one sees what one looks for. However it is possible that the layer had thinned to the point of invisibility in this far eastern region. The sod layer is actually a layer of dark rich midden soil; it is not certain whether there are any man-made strata below this. The soil underneath is described as yellowish sand and buckshot which is completely sterile; signs of loading are not mentioned: thus it is presumed to be natural soil.

Stratum 2 consists of clay and "dirt" generally of a light color. Basket loads of dirt are sometimes seen. This stratum is evidently mound fill: on top of it, below

stratum 3, is burnt clay etc., indicating an occupation layer.

Strata 3 and 4 together form Peabody's "critical layer", and are shown as strata A and B in Peabody, 1904, plate 8. The lower layer is generally described as the "ash stratum"; it is rich in cultural material and is evidently a layer of pure midden material. The upper layer is described as light-colored, buckshot or hard clay. A perusal of the map, (or diagram) will show that the bottom of 3 and top of 4 are quite even, whereas the joining between the two strata is very irregular. The thickness and irregularity of stratum 3, coupled with the fact that all the burnt clay is found below this stratum leads me to believe that this does not represent an occupation layer, as Peabody suggests here and there in his notes. His belief was based on the fact that the large number of post holes he found at this general level originated within the critical layer. This was because he always noticed the post holes while digging through the "critical layer" or just after he got below it, and is, as we shall see, a faulty interpretation.

Since these layers bear a very close relationship to each other it is my contention that they represent part and parcel of one construction stage. Evidently a thick layer of midden or garbage dirt was spread over the old floor, and this unstable medium was covered with a cap of buckshot. A strikingly similar method of mound construction was observed in mound C at Lake George in the Southern Delta. Mound C was

an early temple mound dating from about the same time period as the early part of this mound.

Above stratum four there was evidently another occupation layer, although no features of any sort except for postholes are assignable to this level. A possible reason for this is that the site was abandoned for a long period after this construction stage, and rain and erosion may have washed away all the soft midden matter above the durable clay cap. Burials assignable to this occupation level and also that above stratum 2 are from the Coahoma phase. Since this is the earliest occupation of any size on the site, the "sod-layer" must also belong to this phase. At Mound C, Lake George site, "pre-mound" and "primary mound" levels were also found to belong to the same culture.

Stratum 5 is another construction stage composed of loaded earth with a moderate amount of cultural material included within it. Stratum 6 is not exactly a stratum and was certainly not recognized as such by Peabody: it is a thin layer of burnt clay, ashes, etc, from which many postholes and intrusions seem to emanate. Evidently this is another occupation floor. Cultural identification of this layer is difficult. Careful study indicated that the two floor layers on each side of the mound (stratum 9 and 10) were of the same age as stratum 6. Stratum 10 had Hushpuckena Phase vessels associated with it. Stratum 9 may actually not be a floor but burnt clay washed down in quantities from

the top of the mound. Burnt clay patches appeared in considerable quantities on the western slope of the mound and were of great help in determining the shape of the mound during the Hushpuckena period. The brown dots on the west side of this map indicate burnt clay, although no pieces were actually on the numbered stake line. They merely serve to indicate the slope of the mound at the time of the burning of the structure on the stratum 6 floor, as determined by extrapolation from the depth of the actual chunks of burnt clay (daub).

The identification of stratum 6 with stratum 10, the floor containing Hushpuckena material, is admittedly uncertain, since much of the eastern slope as it was in Hushpuckena times is eroded away. There are however other indications: a few burials from their depth and location are definitely assignable to this occupation layer. These contain no diagnostic grave goods, but one is in flexed position and another is a bundle, types of burial which do not occur in the Coahoma Phase. Moreover there are so many Hushpuckena sherds in the collections that one floor at least in the mound must be assigned to this phase. Lastly, the postholes assignable to this floor generally indicated that a true house stood atop the mound at the time. As we shall see the two Coahoma layers did not seem to have houses as such. All these indications add up to a Hushpuckena identification.

Stratum 7 is another mound fill layer which Peabody does not distinguish from stratum 5. Above this is stratum 8, the remnants of another clay floor. Since there at no point is over six inches of dirt above this floor it seems probably^e that this was as high as the mound ever got, and stratum 8 represents the last occupation. It is impossible to be absolutely sure whether this floor belongs to the Hushpuckena or the Oliver Phase. Certainly Oliver people buried extensively in the mound, but this proves nothing about the floor. The Oliver people could have put the extra few feet of dirt on the mound and built on it, they could have built just a new house on an old Hushpuckena floor, or they could have done nothing.

Faint indications suggest that the Oliver people did build atop the mound: 1. Peabody found a considerable amount of sherds, points, and other cultural material of the Oliver phase; but of course it is possible they all came from the few trenches that extended out into the "plaza" area. 2. Although Oliver burials seem to swarm all over the mound, there are none on the very top, possibly because there was a structure there. 3. There may be a structure on this floor oriented to the points of the compass, not to the ~~axes~~^{axes} of the mound. If so, this could only have been built at a time when the mound had deteriorated considerably in its form so as to be a directionless mass of earth, by a people who had no knowledge of the previous use of the mound.

4. There is historical evidence that the Quapaw, possessing a very similar culture to that of Oliver, utilized mound-top structures. There is no evidence that stratum 7, the last mound construction layer, was built up by Oliver folk. My guess is that they did not do it, that major earthmoving projects were beyond the scope of these marginally Mississippian johnny-come-latelies. Nevertheless I may be underestimating them.

That in brief is the stratigraphy of the Big Mound at Oliver. A tribute is due to Charles Peabody. Without having any comparative data, without knowing that burnt clay in quantities means a floor, that buckshot caps almost always mean the top of a construction layer, he made records accurate enough to provide all the information on this map and the others. At a time when stratigraphy was believed to be nonexistent in America, when the existence of stages within a mound had never before been demonstrated Peabody's powers of observation were keen enough, his preconceptions few enough to take down all this data in lucid form, ignorant as he was as to its true meaning. Moore was a good archaeologist for his time; Peabody was twenty years ahead of it.

3. MAP 3

With the help of the key this map, of the "sod-layer", should be self-explanatory. Peabody gives little data on the height of the heap (or heaps) of shell in the middle;

evidently it was at no point over a foot high. Whether this heap is contemporaneous with the fireplaces, etc., around it is uncertain. The small holes, with and without ashes, may be post holes in some cases, but they form no visible patterns. One thing worth noting is that both the shell heap and some spots of ashes go right under the little mound, stratum A. This indicates that most or all of the occupation represented by the "sod-layer" occurred before ~~either~~ the moundlet "A" was built. r. 4

It may be remarked that the abrupt cessation of the shell heap at profile 10 indicates only that Peabody was not aware of it before this point. The lack of profile lines on this map reflects our tentative assumption that the sod-layer was quite level.

4. MAP 4

This map shows all the post holes, or at least all that Peabody recorded, in the "critical level" in the Big Mound.

The recognition, recording and plotting of the post holes on this level represents Peabody's most remarkable scientific achievement. In his field notes he recorded position, depth of top below mound surface, length, direction and diameter of all the post holes. Then he made tables and a large map of them, computing the height above the ground of the tops of the post holes by subtracting their depth from the total height of the mound above each

of them, as noted in his profile drawings. The profile drawings themselves, compiled from notes and rough sketches made in the field, are no mean achievement.

I made an elaborate check of all the data on his maps and drawings against that contained in the field notes. There were few post holes omitted or wrongly placed and some inaccurate computations of height, but the correlation was so near perfect that I carried the check only as far as the first year's field notes. He has done virtually the best job possible of arranging the raw data in intelligible form.

But one must not go overboard: there are limits to the data. He recorded only the large post holes (they average 6" in diameter) and these in the main seem to have been empty (as on mound A, Lake George) and thus painfully obvious to the most casual observer. There may have been smaller post holes and perhaps wall trenches, but we shall never know.

Moreover, there are grave difficulties with his data on height of post holes. For the first six or seven trenches he dug them down in one stage to an arbitrary level. But he soon tired of this and began digging down only to what he called the "sod-line", actually a pre-mound occupation level (^{Coahoma Phase} Deasonville). This is generally flat but not entirely so; thus we have no truly absolute datum level on which to tie our computations.

From trenches 7 to 12 his methods underwent an

elaborate evolution. He began to dig his trenches in two stages. The first stage was dug not down to any level but to a rough depth below the surface of the mound, usually about five feet. All features above this level are recorded in terms of depth below the surface. Features in the second stage are recorded partly this way, partly in terms of height above the bottom. Correlating these, and arriving at absolute heights for his profiles is extremely difficult. Since by the time he reached the bottom of a trench the first stage of the next trench on was already dug, he never had a complete profile to work with, but had to refer back to his field notes to compile the data on any one trench.

There is an interesting problem here. Let's say we have a post hole on the floor of the first stage at the back of the trench near the last one, say at point "L" on the E-W axis. What does the figure he gives for height below surface mean, -- height below surface at the front (west) wall of the trench, or height below the surface above the post hole itself? A careful perusal of his notes indicates that it was the former. Although the floor of the first stage was curved in the north-south dimension, it was flat in the east-west dimension, so on the upslope of the mound, the given depth of say seven feet for a post hole at the back of the trench may mean the true depth below the surface at that point is six feet or less.

A further "refinement" in Peabody's method soon

occurred when he realized that most of the post holes appeared about a foot below the level of his first stage. So he then dug the trenches in three stages: first to about 5 feet below the surface, at which point he made accurate measurements of the height of his profile, noting that profile height actually varied from 4'6" to 5'6". Then he would dig say a rough foot and a half further and proceed to record his post holes. So in one trench the tops of all the post holes are recorded as 6'6" from the surface. This measurement is nothing but a very rough approximation. Moreover it does not measure the tops of the post holes but merely the point at which he stopped digging, surely almost always somewhat below the top.

Soon it occurred to Peabody that these post holes were related to the "critical level" stratum, so from then on he made his second or post-hole-recording floor at the level of the midden. From then on what he records as the top of the post holes is merely the level of this fairly thin midden at that point. So any attempt to segregate his post holes by height of tops in hopes of discerning two or more building stages within the midden is foredoomed to failure. One may be reasonably sure that the holes he assigns to the critical level actually belong there as the nearest other occupation level is five feet above. But this is all.

All one had then was the roughly circular pattern of post holes seen on the map if one ignores the differing colors and the pencil lines. How then did I derive the two rather attractive rectangular and circular patterns shown by the pencil lines? It is a long story. First I tried segregating the post holes by diameter, but could get nothing significant. Then it occurred to me that although the tops of the post holes were not accurately derivable from the data, the bottoms were. One can cut off tops but within the limits of accuracy imposed by Peabody's round-about ways of getting absolute height, the bottoms of the post holes were where he says they were. I then made the doubtful assumption that in building any one structure, the Indians would in all likelihood sink all the major post holes (which are all we have) to the same depth. Surprisingly enough, this seems to work. I divided the post holes into sectors as shown on the map. Then for each sector I plotted the bottom-height of the holes on a graph and in the main the heights clustered beautifully. These conclusions were made:

1. For the whole northern half of the excavations most of the holes with around 4 feet bottom-height (blue color) formed a perfect arc of half a circle.
2. In the incredible jumble of the southeastern sector this arc was continued, for some reason,

by post holes of green color, about 5 feet in depth.

3. There are five rather brief rows of post holes (A --E on the map) which although they vary greatly in depth between themselves, are internally consistent. Row E is really too short to be significant, but since it parallels row C and is of the same depth I reason it may be related. Where it would extend to the southwest is unexcavated. These five segments form a fine rectangle.

4. No continuation of the rectangle may be found on the E side. The two possible short rows of "green" posts (1 and 2) indicate that this may have been an entrance.

5. Other short possible rows (3 and 4) have unknown significance if any.

We seem to have two structures here, a round one and a rectangular one. The round one seems to have been built in one stage, the posts all being sunk to about the same depth. The rectangular structure, however, seems to have been built in short segments, probably over a fairly short time. The huge size of these structures (respectively about 80 and 60 feet across), and the complete lack of central posts indicate that these were not houses, and were not roofed over. Rather they seem to have been palisades or

fenced enclosures. Whether or not there was wattling between the large posts is unknown. I would think there was, because if people wanted to enclose an area, they would really close it. I have noted the possible entrance to the rectangular structure. On that same side the circular structure has two sets of double posts indicated by small arrows. This may have been its entrance. On the other hand the entrances to both these structures may have been in the unexcavated southwest portions.

Any consideration of these structures must take into account the unbelievably similar post hole patterns found by Collins (1932) on the Deasonville site. He on two occasions found square structures inside round ones of about this size. There are differences; his entrances are on the west, his structures were not on mounds, he had wall trenches. But that we are dealing with the same culture pattern is likely. Both sites have a cord-marked component. That the Oliver structures are Coahoma in date is undeniable, and from this it is suggested that the structures at Deasonville derive from the earlier component there.

The strange fact that at both Deasonville and Oliver square structures were found within round ones led me to believe at first that in all the cases the structures were contemporaneous, and that we were dealing with a very peculiar architectural pattern. Further study suggests however that this is not the case, but before we go further

let us take a look at maps five and six.

5. MAPS 5 and 6

In our perusal of these drawings let us for the moment ignore the dashed deep blue lines signifying the circular and square structures, and consider the other features.

The pencil lines on map 5 indicate the contours of the top and slopes of the mound as they existed after the adding of stratum 2 and before the addition of strata 3 and 4. These contours were in the main drawn by taking the height of the bottom of stratum 3. This stratum is not present in the northwest corner, so here the slope of this primary mound is uncertain. Figuring out the contours on the eastern slopes was most difficult, as here the critical layer strata were not recognized by Peabody. However he does sporadically, on this profile or that, mention layers of midden or buckshot extending partially across the profile. These strata are often given different names from one profile to the next and tracing them from profile 14, where most of the strata on our map 2 have been recognized, to profile 5, was a Herculean labor. A check was provided by the variously noted ash or shell "strata", seemingly small lenses or patches. It was assumed that they represented areas of midden soil on the slopes of former mound stages. When the slope of the critical layer strata was tentatively calculated, it was found that a large number of these patches appeared just

below them. Evidently they derived from the second occupation layer, which is now being discussed. Correlating the data from these patches and the rare notations of the critical layer strata, I arrived at the rather reasonable looking slope.

Unquestionably the mound was flat-topped at this time, but the contours give us ^{no} real indication that the shape of the mound was rectangular: it may well have been round.

The dashed ink circle indicates the approximate circumference of the little mound, stratum-A. The light blue pencil represents the horizontal limits of the buckshot formation which forms one of the major bases for our belief in the existence of stratum A itself. The formation was not noticed by Peabody before profile 24 but it in all likelihood extends further east. It has a peculiar shape: the top side of it begins at the sod layer on the northern edge. From there it rises sharply for five feet or to the southward in the profiles, then levels off and peters out. The highest point in profile 24 is five feet above the sod layer, in profile 27 only two feet. On the southern side the buckshot does not go to the bottom but only forms a sort of band averaging two feet thick. The total shape of the whole thing can be visualized thusly: curl your fingers slightly (keeping them together) and place the heel of your hand on the desk; keep your thumb at the level of your first knuckle.

The sort of quarter dome formed approximates the shape desired. Upon visualizing this shape it immediately occurred to me that it looks like about a quarter of a buckshot cap on a little mound.

This sheds light on a knotty problem connected with stratum B, above and to the south. This peculiar layer of buckshot, check full of burials, is continually described by Peabody as a little mound, despite the fact that it is shaped in cross-section like a crescent, concave side down. The meaning of this odd structure mystified me until I extended the line of the top of it down on the northern side — it coincided strikingly with the outer edge of the quarter dome of buckshot below, if the level southern segment of it (the thumb of the hand) is ignored. Extrapolating from the outer curve of the lower buckshot and on the other sides from the top-curve of stratum B, the circumference of the putative mound "A" shown in map 5 was arrived at. If such a mound exists, the peculiar buckshot formation is explained as a part of the loading on the northern edge and interior of the mound; stratum B is a buckshot cap on top of the mound. The case for the existence of mound or stratum A is further strengthened when it is realized that all of a group of burials whose average height above the sod layer is three feet (shown in map 5) are contained within the putative limits of the mound! In the same way a higher group of burials, marked on map 6,

are all contained in the cap of buckshot, which is evidently an addition to the original mound.

The evidence, especially the noteworthy concentration of burials, points to nothing other than a small "conical" burial mound made in two stages, buried under a temple mound! The next problem is, how do the burial mound stages relate, if at all, to the temple mound stages? That the sod-line goes blithely under stratum A as it goes under stratum 2 has been established. As far as can be told from thickness of submound midden, strata A and 2 would seem to have been constructed at very nearly the same time.

The burials are all of about equal depth (3 feet above "sod") except for the westernmost, which is a foot lower. These depths, it must be admitted, correspond to the temple mound far better than to the burial mound: if they were sunk down from the top of stage two, each burial would have had a three-foot to four-foot pit, which seems reasonable for extended burial. But since Peabody did not often note burial pits or the lack of them, we cannot be sure when the burials are intrusive or were laid out during the construction of stratum A.

A glance at map 5 will reveal an interesting fact: ashes are scattered all over but burnt clay (orange) occurs only at the top of the mound. On the top of the mound there is one area in which burnt clay is conspicuously absent: over the region of stratum A. There ~~there~~ is only a

small patch of ash, and three little areas of "yellow soil" which might mean almost anything except burnt clay, which Peabody is only too happy to call by name.

Whatever burnt clay means -- burnt floor, fireplaces or daub -- it is evident that the burial region of the mound was kept clear of it. What about other evidence of structures? Back to the big circle and Map 4.

Long after setting up these groups of post holes by bottom height it finally occurred to me that Peabody's data on the height of tops of the post holes might not be so useless after all. However much an archeologist has cut off the top of his postholes, there is a good chance that he would have caught some quite near the top. Thus the maximum figure for top height in any pre-established structural group of post holes ought to be about the correct height of all of them. It was found upon investigation that the tops of most of the post holes in the large circle were around six feet plus above the sod layer, and the maximum was eight feet for one posthole, about seven and a half for a couple of others. This however excludes the southeast sector of the circle which has heights ranging up to and even over eight feet consistently.

The top of the buckshot of stratum 4 (see map 6) is just under ten feet; the top of stratum 2 averages seven or more feet. The fact that not a single post hole even approaches ten feet is a good indication that this structure was built

before the addition of strata 3 and 4, in other words on stratum 2.

Map 5 shows two small confirming bits of evidence: (1) the higher southeast segment of the circle is reflected by a rise in the floor level on this stage 2 (Map 5). All the burnt clay is within the limits of the large circle, but not within those of the square structure. It looks as if the circle belongs to this level. There are no recognizable internal features on the floor within the circle, except for the two very large and shallow (up to two or three feet) pits filled with ashes shown at profile 16. Perhaps these were places for great fires of some sort. There are a number of small "ash pits" but nothing that could be interpreted as internal support for the structure, so we must continue to believe it is only a palisade.

We have noted previously that the post holes of the circle seem to give out west of profile 26, possibly because Peabody stopped recording them, possibly because there were none there. Since a continuation of the structure would run it right over the "hallowed ground" of stratum A, this section of the circle's arc could have been left blank.

Let us review the probable sequence of events so far. After living for a considerable period on the ground surface the Coahoma people decided to build a small steep burial mound some 35 feet in diameter and seven feet high. Whether or not burials were inserted at this juncture is un-

certain. After a very brief period, it seems, minds were changed and it was decided to build a temple mound of sorts incorporating the burial mound into the western slopes. On top of the new mound a clay floor was put down, carefully skirting around the burial area, and then a circular stockade was put up encompassing the floor and maybe the burials too. If the little platform mound was indeed round, the circular structure enclosed the whole top.

This temple mound is unquestionably a marginal example of one: it seems to be round, it has no house on it but only a circular stockade; there is a small burial mound incorporated into its structure as a burial area. Transitions are rare in archeology but here is reasonable evidence that a burial-mound-temple-mound transition occurred at this site. I do not mean the temple mound was invented here, sprung forth at Oliver out of the burial mound tradition. Rather, here seems to be a new and imperfectly understood religious practice coming up from the south(?) and being employed in an ignorant and quaint fashion. How the builders of mound C at Lake George would have been amused to observe their zealous if ill-tutored imitators upriver!

Let us move onto Map 6. This represents the mound after the midden (brown) and buckshot (light red) layers had been added. There are three more feet on the mound and from the look of the contour lines, the mound has been squared up, and the structure built on top of ^{it} (dotted blue line) ~~it~~ is

square, and oriented, at least on the southwest and northeast sides, exactly with the mound axis.

What evidence is there that this square structure is indeed associated with stratum 4? The maximum height of post holes in sections A, B and D. (see Map 4) of the square is ten feet, and most of the holes are around eight feet above the sodlayer. This is too high to be emanating from the first mound floor or to be contemporaneous with the circle. That one structure fits vaguely within the other is simply due to the fact that both were enclosing the top of essentially the same mound, not to architectural habit.

A problem is created by segments C and E, supposedly of the square structure: the tops of none of the post holes therein rises above six and a half feet, and moreover the holes would have been an unbelievable seven feet deep if they originated at this level, as opposed to the four feet of the other holes. These holes are probably the remains of an abortive attempt at structure building on the earlier level. Possibly the same holes were ^{re-used} re-used at this upper level -- segment C does fit beautifully into the square -- but it cannot be proved. Thus only the higher segments are included in Map 6. Indeed the square may never have been finished, after all it was only a stockade ^d surrounding a special area, not a complete wall needed to hold up a roof.

Other evidence concerning the placement of most of this square structure on this upper level is derived from a

study of stratum B. This peculiar cap of buckshot is not shown in profiles east of number 23, but a partial circumference could be drawn around the west side from the profile data. If extended, the circumference reached well beyond profile 22 on the east, and well inside the square structure. Was the square rammed in across the mound like a modern super highway, without respect for pre-existing features? Doubt forced me to continue investigation.

Plotting the fourteen burials that were found in the cap revealed a striking fact: the burials all seemed to be one to two feet from the surface of the buckshot cap, except for a few enigmatic burials on the east. These few burials, at or to the east of profile 23, ^{were placed at} ~~placement to~~ only five feet above the sod layer, while the height of burials less than five feet to the westward is eight feet. Why did all the burials conform so nicely to the contours of the buckshot cap, except these only? Idly I drew contour lines through a diagram on which all the burials were plotted, including the peculiar ones. The resulting contour form was a nice little mound, the eastern third of which was sheared off sharply in an almost vertical cliff. The estimated line of the cliff, not quite north-south, looked familiar. All of a sudden it hit me -- this was the line of the square structure. Plotting the southwest wall of this structure in it was found indeed to conform to the bottom of our cliff. All the burials, now that lower-level burials had been sepa-

arated out, were outside the square structure but as it were bunched against the wall, clamoring to get in. Realize that the "X" marks on the map signify only the skull; look up six feet on the side and visualize how big those extended burials are, and how packed in against the wall. From the incomplete data it seems most of the skeletons are oriented southeast, i.e., parallel to the wall.

What we seem to have then is a mound of buckshot built over stratum A as a part of the general construction program. This cap however did not cover quite the whole area of the old burial mound. Post holes for a new structure were sunk into the flanks of the old burying area and the new cap was mounded up against the wall or stopped just short of the wall. Burials were only a foot or two deep: evidently it was thought that the durable buckshot would not wash away enough to create embarrassing exposures even with such shallow burials as these. Shallow burials, a severely restricted burial area, excluded, shut outside the walls, segregated from the main mound area: by now the burial function was unquestionably secondary to the temple functions of the mound. The mound was newly squared up, with a new square palisade to match. True it wasn't exactly a temple yet, it had no roof, but still it was an area certainly dedicated to the rites of the living, no longer to the rest and peace of the dead.

The burial mound tradition was by this time about

^{de Funct}
definite at Oliver. All that remains of it is that the burials are placed in a special soil in a special restricted area. But the "burial mound" is no longer round in places, neither does it extend above the surface of the ground around it. Indeed there seems to be thin portions of strata 3 and 4 extending over parts of the area. Whether this earth was placed there or merely has washed over from elsewhere on the top is uncertain.

In summary there is evidence of a major transition at Oliver during the Coahoma phase, from the Burial Mound tradition to the Temple Mound tradition. Temple mounds are introduced, at the end they are even square with corresponding square structures on top. Burial mounds lose all significance before our very eyes. All this occurs in the framework of one ceramic phase. It is evidently a change only in religious-structure tradition; the concept of a temple mound or burial mound "culture" is quite inapplicable here. Remember that the change from circular to square sacred stockades reflects not at all on the domestic architecture. It like everything else of a secular nature probably remained the same.

6. MAP 7

This map shows the mound during the Hushpuckena Phase, at the level of stratum 6. The contours show that at this time the whole mound was steep, rectangular and imposing. Figuring the contour lines on the west was relatively easy

with the help of the pieces of burnt clay which had washed or fallen down from the burnt structure above. The eastern side presented much graver problems. There were however continuous notations of buckshot at the north and south ends of all Peabody's early profiles. Previous investigation had proven that these were too high up to have anything to do with the buckshot of stratum 4. Plotted horizontally the shape of the buckshot made no sense. However it seemed possible that these buckshot areas were part of a clay mantle associated with stratum 6, so their height data were worked into the contour map with the results shown. Note that the buckshot is on the middle of the southeast and northeast slopes whereas the less steep corner, evidently requiring no stabilizing cap, was left bare.

The relation between the plaza floors below the mound and the mound itself is not entirely certain. We have some evidence that the buckshot tailings of stratum 4 go under the floor on the east, and further building of the mound beyond this stage would mean the plaza floor would be partially covered by the lower slopes of the mound. So this seems the most plausible mound stage to which one can assign the floor on the plaza.

A comment about the shells in the northeast corner of the excavation is in order. According to Peabody there are actually two very thin shell-bearing strata about a foot apart. These may belong to slightly different occupations

but one of them at least is certainly associated with the burnt clay nearby. For this reason I have combined their very similar horizontal outlines and put them on this map.

The deeper post holes at the top, represented by purple dots, may form a vague rectangle. If this indeed is the mound-top structure it seems of modest enough size to be considered a true house, not just a palisade as before.

It must be remembered that these contour maps were made by milking everything possible out of the evidence. They must not be considered accurate and definite reconstructions, although no line was put in without some evidence. These maps show rather the probable general shape and slope of the mound. Big mistakes are possible; all the reviewing of the data could produce no suggestions of a ramp anywhere, for instance, yet one in all likelihood existed.

7. MAP 8

The labors that went into the construction of this map are described in some detail in the section on Oliver Phase burials. Suffice it to say here the contours were arrived at by plotting the height of Oliver Phase burial pits, working on the assumption that most pits would be dug to about the same depth. The contour lines have numbers in parentheses since they represent pit-height, not surface height. One cannot be sure what was the depth of the pits and thus what is the figure to be added to arrive at a surface height estimation. Most of the burials however seem to have been in

pits about two feet deep. Children were sometimes shallower, extended burials usually deeper than the norm. The contours drawn from Early Oliver burials are not drawn continuous with those from Late Oliver burials, since the late burials are a little higher, due to greater slope washing.

The odd dent in the contours at the west side of the mound requires some explanation. Here the burials are much deeper than usual under the modern (1901) surface of the mound. Detailed analysis gave no evidence however that these burials were any earlier than the mass of "Early Oliver" burials on the west side of the mound. This being the case the apparent dent is taken at face value. If this feature really exists it must be a gully of some sort. An examination of the "modern" maps, map 1, shows that there was indeed a somewhat shallower gully there in Peabody's day. Whether there are any circumstances in which such a gully will tend to fill itself up over the years I do not know, but it seems possible.

The features shown on the top of the mound are those belonging to stratum 8, although one cannot be sure that this was an Oliver occupation layer. The post holes shown are all those whose tops are above sixteen feet, on the level of stratum 6, or whose bottoms are above 15 feet, at which level they would be too shallow for stratum 6. There seems to be a north-south row which may be the wall of a house. If this is a house its orientation has nothing to do with

the original orientation of the mound. This along with the possible gully suggests that during the Oliver occupation the mound had fallen into sad disrepair and had lost its fine rectangular shape. If this is true, the Oliver people may well not have been mound builders at all but simply mound-users having no taste for the construction of earthworks. Ethnography suggests that this was the status of many tribes at the historic horizon.

The Southeastern archeologist finds it fashionable to look at the sorry remnants of mounds in the middle of cotton fields, and curse the white man for his ravagings of the monuments of the past. It is most enlightening to realize that little or none of the deterioration of the Big Mound here (before Peabody got to it) was due to the white man.

Evidently the mound was cleared when Peabody arrived, with the exception of a lone chinaberry tree. It was however not cultivated upon. Moreover this area of Mississippi was not subjected to the plow until the 1870's at the earliest. In sum, Peabody found the mound in pretty much its aboriginal shape. One must remember that less than two centuries intervened between the end of the aboriginal occupation and Peabody's dig.

On the other hand if, as we suspect, the Oliver people did nothing to maintain the mound, upkeep may have ceased as early as 1300, the possible end date of Hushpuckena. This means that at about 1700, the horizon this map supposedly

represents, the mound had been deteriorating under the heavy hand of nature for four centuries. This deterioration must have been materially assisted in the last century by the Oliver savages themselves who (we believe) built on the mound, littered it with their artifacts, and riddled its flanks with burials.

Little wonder then that map 8 portrays the mound in a pitiable condition, for which the cotton planters can in no way be blamed.

8. MAP 9

This map is simply a copy, with a few emendations, of a map Peabody himself made to show what the Oliver site looked like. I have located the cuts Dr. Phillips made, and also three pits Peabody dug out in the plaza.

It would be of interest to compare the strata Phillips found (Phillips, et al., 1951, pp. 253-60) with the stratigraphy in Peabody's pits and in the big mound.

The top of Peabody's pit A was at a level of about 2.5 feet above the sod-layer datum. However, since it took him 3 feet to reach sterile soil, we may infer that this first midden had dipped about six inches in some thirty-five feet from the major excavation's edge: this is surprisingly little.

Pit B was 140 feet farther to the east; its top was about half a foot above our old sod layer datum. This means that in 180 feet from the edge of the mound, the modern surface had dropped four and one half feet. In pit B the line between

artifact-bearing and sterile soil was one foot seven inches down; in other words it had also dipped down another half foot from its level in pit A, a bit over a foot from its level throughout Peabody's major excavation. Pit C, 90 feet further east, is a little higher than B -- the center of the plaza has seemingly been passed. This "absolute" height of the top of the pit is two feet above our crude datum. Artifact-bearing soil goes down one foot eight inches only -- the "sod layer" level has returned to approximately its original level under the Big Mound. There is however no sign of the thin black sod layer itself as an entity in any of these pits.

The stratigraphy in these pits is of little interest; Pit A has at the top a foot of soil with much burnt clay, under which there are two feet of dark soil with a few shells in it. Pits B and C have six inches of "top soil" which may be a plow zone, or may be analogous to the first zone in Pit A. Below this in both is a zone about fourteen inches wide undoubtedly analogous to the second zone in Pit A. Below this, Peabody dug two to three feet further into sterile soil in all pits. He divides this sterile soil into three layers, from the top: sandy soil, buckshot, sandy buckshot. If these layers have any meaning, it is geological, not cultural.

How do these levels correlate with the strata defined in the mound? The strata in the profile at stake 2, the first profile, ^{are} ~~is~~ described thus: (1) upper 1.5 feet not

characterized, (2) next two feet very dark soil, (3) next two feet fairly dark brown soil, (4) bottom two feet, "light loam." Ten feet to the west, in the profile at stake 4, Peabody first draws in the sod layer: there it is a little less than two feet above the bottom of his trench. Evidently then the bottom of layer 3 in profile 2 corresponds to the "sod line", the "light loam" corresponds to the sandy, or first sterile layer in the three pits. Layer 2 in this profile must then be the same as the foot of top soil with burnt clay in pit A. The top foot and a half of profile 2 must then be a new stratum: in a word mound tailings of some sort.

There is another feature in the profile at 2: the Hushpuckena floor, stratum 9. This runs across most of the profile two feet or less from the surface. Evidently then it is between levels 1 and 2 as recorded by Peabody.

This same floor is mentioned by Phillips (Phillips, et al., 1951, p. 259) as it appears in Cut C. Cut C is in somewhat closer to the mound so there are a full two and one-half feet of soil above it. Since this stratum is between four and five feet above the sod line, this means Cut C is somewhere to the southward along the seven-foot contour on map 1. Note that this floor has nothing whatsoever to do with Peabody's "critical layer", a feature whose tailings are far below. Phillips' Zone II then corresponds to the first (above floor) layer in profile 2, his Zone III corresponds to Peabody's second or very dark layer and perhaps to part of

his third or dark brown layer. Cut C gets nowhere near the "sod-line" level and sterile soil.

Let us now examine Phillips's Cut A. Phillips (p. 259) tells us that the floor in Cut C corresponds to the break between Zones III and IV in Cut A. If this is the case there are twenty inches of soil above the floor in this cut, which places it (on map 1) somewhere to the south on about the six-foot contour. This means that in Cut A Zones II and III correspond to Peabody's first layer, Zones IV and V to his second and perhaps part of his third layers. Evidently where one places the border between Peabody's layers two and three, and Phillips' Zones IV and V is largely a subjective matter.

Cut B is a separate little problem. One can see from map 9 that it is not in the middle of the plaza as Phillips seems to have thought, but over at one edge. It is near enough to Peabody's mound 1 so that Phillips' Zone II may well be mound outwash, as he suspected. Zone III is then comparable to Peabody's second layer in profile 2, and to the "top soil" or uppermost stratum in his plaza pits.

Further correlation of these various strata is almost impossible. Evidently from Phillips's sherd count charts the floor of stratum 9 marks the bottom of the Mississippian occupation. The cultural layer or layers below it are pretty pure Coahoma in Cuts A and C, and also in Peabody's Profile 2. These soils probably stem in part from Coahoma occupation on the flat, in part from mound outwash including the outwash

from the thick construction layer, stratum 5, if our correlation of strata 6 and 9 is correct. This seems plausible because even though Mississippians built this stage, they probably used dirt containing mainly Coahoma cultured material, especially if the mound construction occurred early in the Hushpuckena occupation.

As for the plaza pits it would be silly to call both cultural layers Coahoma just because they are both below the absolute level of stratum 9. Certainly at least some Mississippian occupation is represented; Peabody's twofold division into "top soil" and "dark soil" probably means little in cultural terms.

Unfortunately then Phillips' stratigraphy cannot be correlated closely with that in the center of the mound. At least some correlation with Peabody's plaza stratigraphy has been possible.

9. SUMMARY.

This chapter, I repeat, is not meant as a complete elucidation of Peabody's stratigraphic data. It is rather an explanation, interpretation and occasional commentary on the maps, which are the major product of my wrestlings with the Oliver field notes. It is hoped that the reader will peruse the maps carefully and be able thereby to gain some idea of the former history of the Big Mound at Oliver.

CHAPTER IV

PHASES AT OLIVER: CERAMICS

I. THE DORR PHASE AND OTHER POSSIBLE EARLY MANIFESTATIONS.

The Dorr Phase, based as it is on a few unstudied sherds from Dorr, a single sherd in Phillips' Oliver surface collection and one pot from Peabody's collection, must remain largely undescribed. It is tentatively defined as the major Marksville manifestation of the Northern Delta. Since most or all of the stamped sherds are of the "cord-wrapped stick" variety, the phase seems to be contemporaneous with the Marksville in the Red River region, not with the later Troyville-Issaquena phases. The pot mentioned above is a beautiful example of ~~Marksville~~^{Mabin} Stamped, about three inches high. It has a crude but recognizable bird design, bona-fide hemiconical punctates, crosshatched rim -- everything one might ask for in a Marksville pot. Aside from Moore's Anderson Landing specimens it holds the distinction of being the only Marksville pot from the state of Mississippi. ^[Ed. note: No longer true] See Toth 1983.

Sadly, this pot is the victim of one of Peabody's unscientific lapses. No mention of it can be found in the field notes, and the catalogue says simply "Neighborhood of Edward's Plantation." My guess is that there is no Dorr component on Oliver itself but there is one somewhere quite nearby, just as there is a Poverty Point component next door to the Lake George site. Nevertheless only future investigation can reveal the probable provenience of this fine vessel.

It may be noted here that conversations with

James Ford have revealed that the "Hopewellian" ^{Helena Crossing} ~~Trammel~~ site, which he just excavated across the River near Helena, bears little close relation to the Dorr Phase. Ford's pottery collections contain a considerable amount of red-slipped and rocker-stamped pottery on a very unfamiliar thin paste, neither of which appears in the small Dorr Phase collections. Moreover the incising was of a shallow, wet-looking variety as opposed to the bold, deep, clean "u-shaped" lines on Dorr material. Burials were in log tombs, a feature not found in the Dorr Burial Mound. Which of these two manifestations is earlier, or whether they were contemporaneous groups from different parts of the Hopewell country I cannot say. However it does look as if the hypothesis of one little Hopewell migration into the Lower Valley is a bit oversimplified.

Other early pottery types at Oliver include four sherds of Yates Net-Impressed in the Peabody collection, probably from one vessel; one sherd of Withers Fabric-Impressed, and Indian Bay Stamped sherds from the bottom of Phillips' cuts. That these sherds were found stratigraphically low raises the possibility that the "sod-layer" or stratum 1 is pre-Coahoma in time. The presence of only one Withers sherd in the Peabody collection however makes this exceedingly unlikely. More probably these types derive from a very thin occupation scattered over the site. Their time position is unfixed, even the contemporaneity of Indian Bay and Withers is not proven. All we can say is that an unknown phase (or

phases), probably between the Dorr and Coahoma phases in time, is feebly represented at Oliver.

There are a few early looking artifacts in the collections: a baked clay ball, a bone atlatl hook and a boatstone. Dr. Williams informs me however that none of these objects need necessarily be pre-ceramic, as a beginner's knowledge of Southeastern archeology at first suggests.

II. COAHOMA PHASE POTTERY

This pottery received only a partial analysis, despite the fact that it forms the majority of the Peabody collections. No attempt was made to separate out subphases on the basis of stratigraphy or typology. The pottery counts in Table 2 give a rough idea of the relative percentages involved. It must be remembered that only the collection from Phillips' cuts represents a random sample. The figure of 11% for Larto in the Peabody collections is, for instance, entirely off the beam. Moreover in the Peabody collection of Mulberry Creek Cord-marked, there are 205 rims, constituting 55% of the sample, while in the cuts rims make up about 8% of the total. The Peabody sherds are in all cases very large, and clearly represent the cream of his finds. In the future an extensive modal analysis of these beautiful sherds must be made, as they constitute one of the finest collections of Mulberry anywhere.

An astounding feature of this phase is the relative lack of decorated pottery. In the cuts decorated pottery is 2.7% of the whole complex; in the Mississippian pottery of these same cuts, decorated sherds amount to 8.1% of the complex. The percentage of decorated pots in Mississippian is actually relatively even higher, since Barton, the major decorated type, covers only the shoulders, and many sherds from the lower portions of Barton pots are counted as Neeleys. In the Coahoma Phase Larto, the major decorated type, covers the whole body.

1. MULBERRY CREEK CORD-MARKED.

This type, on which the whole exterior surface is covered with the marks of a cord-wrapped paddle, is by far the most common on the site, comprising about three-quarters of the whole complex. A better than average whole example is pictured in illustration number one. This vessel is probably shallower and smaller than most, the cord-marking finer. The rim is quite typical. The lip is flat or round, and as on almost all the examples a little clay dribbles out over the exterior of the lip. This slight overhang is evidently produced by smoothing the inside of the vessel when it is wet, pushing a little excess clay out over the lip. A byproduct of this action is the slight eversion of the rim, which is quite characteristic. This slight gentle eversion is to be distinguished from true eversion wherein the top inch or so of the rim is sharply bent out at an angle of ten to twenty degrees. This true eversion occurs on 16 out of 362 rims in Phillips' surface collection, on 8 out of 205 rims in Peabody's collection.

Here we have an example of a functional feature -- slight eversion -- being transformed into a special embellishment of a few specimens. There are two other examples of this phenomenon. The first concerns the slight overlap of the lip. On many pots a considerable amount of clay or even the whole top half inch or so of the rim is folded over. This fold-over, when great, is crudely melded back into the side

of the vessel. These especially large fold-overs seem to have in general been made before the pot was paddled, as the paddling extends over it. On some rims these fold-overs, whose bottoms are always very irregular, disappear completely at the end of the sherd, indicating that the rim was folded over only on one side of the vessel. Perhaps this occurs when the potter discovers that one side of his rim is higher than the other. Often rims with large fold-overs also have small fold-overs like that in the illustration, indicating that the rim-evening operation was carried out twice.

Some of the large fold-overs are left unmarked; a few are the recipient of a special re-paddling, as is indicated by the differing angle of the cords on the fold-over.

The unmarked fold-overs are generally poorly melded into the vessel wall, since the melding was evidently accomplished in part by the paddle itself. These unmarked fold-overs in profile have the appearance of long, flattish exterior rim-straps. That they are not in most cases intended for decoration is evidenced by the ragged and uneven bottom edges of the "straps". Nevertheless, as with the everted rim, there are cases in which the strap seems intentionally that. The line between intentional and unintentional strap is admittedly a little fuzzy, but most rims can be put into one category or the other.

There are 22 intentional straps out of 205 rims in the Peabody collection, 15 out of 362 in Peabody's surface

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ing p.

collection. There are two types of strap -- the long (one inch) flat variety, evidently a development out of the fold-over, and the short, thick round variety, evidently developed from such slight roll-overs as on the pictured pot. The latter type is never cord-marked, the former is, somewhat less than half the time. These straps are recognized by their unthinned and straight and even bottom edges and by their carefully constructed appearance. These may in some or all cases consist of added strips of clay. Indeed some of the so-called fold-overs may be the same thing, added however not for special decorative effect, but only to thicken up the rim a little, if smoothing the inside has made it too thin. The rim-straps in Mulberry differ from those in other types of this complex in that the bottom of the strap is thick and prominent, not melded into the rest of the vessel to create a bulging rim area. On the non-strap vessels the rim area is the same thickness as the rest of the pot.

The third mode that seems to have been inspired by a constructional peculiarity of Mulberry is rim punctation. A fine example of the functional precursor of punctation is provided by the illustrated pot ^[64278]. Here a row of what seem to be small punctations surrounds the rim. This phenomenon only occurs on those pots where the slight eversion is sharper than usual. Close inspection reveals that these "punctations" occur at the end of every cord. In fact they are simply the mark left by the bulge in the cord as it rounds the corner of

the paddle, which is pressed into the slight concavity under the rim. Whether this effect was considered decorative or not is immaterial. The important fact is that a similar effect was sometimes produced by a row of "burred" finger punctations around the rim.

There are 32 rims with added punctations in the Peabody collection of 205 rims; Peabody evidently selected for this relatively rare mode. There are only 7 such rims in the Phillips' collection of 362. Usually the punctations are just below the wet-clay roll-over at the top of the rim. A few are under fold-overs or true straps, five are a full inch below quite unelaborated rims. Two sherds have a double row of punctations. A rare vessel (4 specimens) is notch punctation on, not under, large roll-overs.

There are a few other rare modes of decoration. Four sherds in the Peabody collection have Oxbow or Salomon treatment on the body over the cordmarking. Five sherds in the combined collections have small notches on the lip, a treatment found on Larto. That this treatment was brought over from the Larto part of the complex is indicated by the fact that one of these Mulberry sherds is red-slipped on the interior!

Bottoms exhibit a great variety. Some, as in the illustrated specimen, are round. Others are flat and slightly squared, still others are definitely squared with the corner and edges accentuated. Still others, and this is a purely

Mulberry trait, have clay added to the corners and not smoothed out on the upper edges, producing a sort of castellated bottom.

The major shape is, as I have said, a long straight sided jar with slightly everted rim. There are however a few sherds that must come from shallow bowls, and one that seemingly comes from an "olla-shaped" specimen.

Paste variations and variations in the cord-marking itself were not studied; undoubtedly however they exist.

2. BAYTOWN PLAIN.

Only a brief study of this type was made, but it was enough to indicate differences from Mulberry that go far beyond the mere lack of cord-marking. True, there are body sherds of Mulberry on which the cordmarking has been wiped over or obliterated, but rims are always distinguishable.

Perhaps the main difference is that there are no messy ragged edges of clay as found in the Mulberry castellated bottoms and rim roll- and fold-overs. Rim straps exist on Baytown but they are usually melted into smooth bulges, although sometimes the bottoms of straps are indicated or accentuated by an incised line. Straps are either long or short, often on the interior of bowls. This is a feature never found in Mulberry. Lips are smoothly rounded or rarely sharp. There are round and square, but never castellated bottoms.

One whole vessel has a tri-cornered bottom. Shapes are shallow bowls, semi-bowls of about the same proportion as the

illustrated Mulberry pot, or tall jars. Rims on many vessels are uncurved, again a non-Mulberry mode. Finger punctates are absent, but one sherd has a row of hole-punctates around the rim. Lugs are present: one variety is a rectangle with rounded corners, the other is triangular and quite large. This type of lug is typical of the Bayland phase on the southern Delta. Lips are rarely decorated with a single incised or stab and drag line. Some few sherds have a single stab and drag line below the rim; a treatment labelled "Six-Mile" by Williams and Phillips.

Dr. Williams helpfully divided up a batch of Baytown into three groups on the basis of paste, groupings which he is using with the Bayland material from the south. The first variety is Sharbrough*, which has a fine, well compacted, rather thin paste, and smooth, often polished surfaces. A second variety is Reed, characterized by very thick crude paste and rough surfaces. Baytown U. is the name given to the third variety, which falls in-between. Twelve out of thirteen Sharbrough sherds however were rims, whereas Reed had only six rims out of twenty sherds, and six bottoms. Bottoms tend to be thicker in all cases here and it may well be that this classification has little typological meaning at Oliver, reflecting in large part only the part of the vessel from which a particular sherd derives. Yet it is unquestionable that a wide variation in the paste and surface finish of the Baytown here exists. One whole vessel^v in the collections is definitely

fine Sharbrough from top to bottom. I once thought that the fine paste was typical only of Baytown, and that the rough paste sherds were from obliterated Mulberry vessels or Mulberry-type vessels from which the cord-marking had been omitted. This does not however seem to be the case. The special Baytown type rims appear throughout the paste range and moreover a brief look through the Mulberry sherds suggests that the paste range on them is fully as great as that on Baytown.

3, LARTO RED-FILMED.

A quick study was made of 53 Larto rims, and it was found that they were typologically similar to those in Baytown. Five rims were from shallow bowls with a bulging interior strap and a line under it; fifteen others were from straight or incurving rim bowls without straps; five others were from deep bowls with small exterior straps; seven were from vessels with a small exterior strap not melded into the vessel; thirteen shallow bowl rims had interior straps with no lines under them; five more similar sherds had notches on the lip. There were three rather special sherds: one evidently came from a very shallow four-cornered bowl, really a plate, possessing an interior strap with an incised line through the middle. Another sherd had a stab and drag line under the rim in the Six-Mile fashion. The last had two exterior incised lines and is the only sherd in the collections which comes close to the classification of "Hunt Incised", a

new type from the south.

It will be noted that most of the sherds came from bowls of various descriptions, and that interior and exterior rim straps, usually of the "bulging" Baytown type, are common. The paste tends to the finer end of the scale. Slip color ranges from a fairly dark red to a light red to an almost yellow hue. I have no information on bottom shapes. No lugs were found in the rather small sample.

4.1 INCISED TYPES.

A rather hasty examination of 118 incised sherds indicated that the simple division between Mazique (Alligator variety) and Oxbow obscured what seems to be a sort of continuum of incising from fine to sloppy. Four basic divisions were made and 16 sherds, mainly quite small, remained unclassified.

The first division, all the sherds of which would be classified as Alligator in Phillips's system, is characterized by broad, somewhat U-shaped lines, running parallel and so close together that the space between the lines is about half the width of the lines. Designs are usually triangles or quadrangles of parallel lines running in a zone around the upper part of the vessel. The lines do not usually run in just two directions as in the later Barton Incised, but tend to shift back and forth randomly at various angles away from the vertical around the pot. Each set of parallel lines is separated from the next by a zoning line which generally is

not parallel to the set of lines on either side. No lines (except zones) are vertical, but some sets of lines are horizontal. A few sherds have a set of horizontal lines going all around the rim with the usual triangles beginning below it. Five sherds had a row of small punctates just below the rim, a general mode popular in many types during this phase.

The one whole vessel ^[64286] of this type was in the shape of a long "U". The design went all the way down to where the sides began to curve for the bottom; there was a roundish exterior rim strap. Paste here as in the other divisions tended to be fine and thin, but surfaces were often not polished. No general shape analysis was possible, but rims were mostly neither everted or incurved and the shallow bowl did not seem to be represented. There were fifty sherds assignable to this division.

Sixteen sherds were placed in a second division characterized by somewhat thinner lines with the space between them much wider than the width of the lines. Designs, as far as could be determined, were the same as those of the first division, except for one large sherd which evidently came from a pot with only a series of diagonal lines around the rim. This division might also be placed within Mazique.

The next division consists of twenty sherds with lines of varying width but always widespread. On many sherds a seeming attempt at a parallel-line design is attempted, but a poor job is made of it: the lines are bowed and often cross

each other. Some sherds have a sort of cross-hatch design, others seem to exhibit a quite random pattern. The one pot [6427] of this division (actually transitional between this and the last) is long and cylindrical with a squared bottom. The design on it consists of rough areas of vaguely parallel lines, very wide-spaced.

The fourth division, consisting of sixteen sherds, is characterized by very thin scratchy lines. Designs were usually undistinguishable, many sherds just had a couple of lines straying across the surface. Two sherds had two close-spaced lines around the rim, one large sherd in the Oliver collection though has a well done triangular cross-hatch design.

Both this division and the last could probably be subsumed under Oxbow but in the type of line employed they are quite distinct. A glance at Phillips, et al., 1951, figure 82, will provide the reader with good illustrations of three of my divisions: division one, sherd k; division two, sherd h; division four, sherd o.; division three is not represented.

If one lumps these divisions together, and there are indeed transitional sherds between all divisions, one arrives at a decorated category almost as large in the sherd counts as Larto, large enough to be considered definitely native and reasonably popular.

5. OTHER TYPES.

The other types represented at Oliver are all rare and are either unusual modes or completely alien trade sherds.

There are a few sherds approaching our division three of incising but which have broad, brushy lines. If these are indeed produced by brushing we might call them Salomon. The existence of this type here is however very doubtful.

One sherd is from a shallow bowl with a rim interiorly thickened so that the lip is over a half-inch across. There are two lines on the lip. Two other sherds like this come from Dorr, which also has a pot with two lines on a normal thin lip. This rare but distinctive treatment serves to link the Coahoma Phase temporarily at least with Coles Creek in the south.

There are a number of variations on the red-painting theme; I have already mentioned the red-slipped-interior Mulberry sherd. A similar sherd has extremely fine close parallel line incision on the outside. This is by far the most carefully incised sherd in the collections and looks like no other, though some of our division one sherds approach it. Another sherd, like the last classified as Woodville, has a strange lobed shape and curvilinear zoned punctation and filming. This is almost certainly alien.

Most of the sherds classified as Woodville are simply variants on more usual Coahoma themes. Seven are simply division one Alligator with red paint over the whole thing,

two others are incised on one side, filmed on the other. One sherd has a crude example of division two incising on it, but between two parallel-line zones is a blank space with red in it.

Zoned red painting or red and white painting may or may not be a product of Oliver potters. One rather large sherd has only white on it, others have red and white splashes of paint. One very fine sherd has a red (actually more yellow) rim and a white body with one line of very broad, deep atypical incision running across. Another sherd has a swipe of red paint across it with the surface of the pot showing at the ends; it is thus classifiable as Landon. ^[Red on Buff] These variations of painting are so rare anywhere on this time level that I am loathe to discuss them as trade. Most of the "Woodville" sherds are native-looking; the status of the red and white sherds must remain a mystery until considerable comparative study is done.

The few other sherds are of value mainly for dating purposes. In French Fort^e, both the punctated ("Larkin") and the incised ("McNutt") variants are represented by a few sherds. One sherd of the incised variety is so crude it might be a native copy, but curvilinear designs and zoned punctation are both so poorly represented in the collections that these techniques cannot be considered a part of the normal Coahoma repertoire.

Two zoned punctate sherds might be either Rhinehardt

or crude Churupa; two others with unzoned bands of very fine atypical punctations might be dubbed "Evansville"; most of the Chevalier sherds come from one level and perhaps one pot; in paste, appearance and techniques they have no recognizable Coahoma characteristics.

6. COMPARATIVE DATING OF COAHOMA CERAMICS.

The Coahoma Phase may date anywhere from the time that Marksville-type ceramics died out in the Valley (about 300 A.D.) to the time of introduction of Mississippian ceramics, perhaps as early as 1000 A.D. Maybe Coahoma ceramics were made throughout this period in the Upper Sunflower. We are more concerned however with dating the specific component of this phase of Oliver.

In the southern Delta the only phase with considerable amounts of cord-marked pottery is Deasonville, dating about 300-500 A.D. (these dates are from Willisima, personal communication). After that the Coles Creek culture comes in and continues in some form or another until about 1300. This Plaquemine culture certainly had some influence on the northern Delta, but never was present there as an entity. Through most of this period a Deasonville-derived ceramic tradition held sway. In all probability the Coahoma component at Oliver is contemporaneous not with Deasonville in the south, but with some part of Coles Creek.

[margin note: I have ~~expanded~~ expanded this to 550 by Williams]

[margin note by Williams: Based on a definition of Coles Creek that included Plaquemine]

[margin note by Williams: (plausible but a proved hypo.)]

This conclusion is derived from three facts: (1) the Coahoma people at Oliver had a temple-mound of sorts. This

type of earthwork did not reach the southern Delta until the Bayland Phase -- c. 500-600 A. D. If, as seems likely, this idea was filtering up from the south it would not have reached Oliver until even later. (2) Certain Coles-Creek-like modes are present on Oliver Coahoma pottery. One is the double-line on the lip which appears rarely here; this is characteristic of the Aden Phase, c. 600-800 A.D. Another is the large triangular lug, characteristic of Bayland. Oliver Baytown is in general quite similar to that found in the Bayland Phase. (3) The third bit of data is the presence of Coles-Creek-like trade pottery. The Larkin and McNutt varieties of French Fork represented here are characteristic of the Aden Phase or later. The Chevalier is present as early as the Bayland Phase.

Another factor is the differences between the Coahoma ceramic complex and good Deasonville. The major one is the lack of good Hunt here. The absence of much real Salomon may also be significant. A study of the modes present in true Deasonville Mulberry, Baytown and other types might reveal more differences.

The Coahoma occupation at Oliver was seemingly rather long. There are a pre-mound and two mound stage strata in the Big Mound assignable to this phase. Moreover, the sheer abundance of Coahoma sherds on the site argues for a long occupation. Keeping all this in mind I would date the Coahoma component at Oliver at 600-800 A.D.

I have previously pointed out the striking differences between the Mulberry and the rest of the ceramic complex. Much of this may be due simply to the special constitutional problems a paddled pot creates. It is doubtful, since many modes are shared by both groups of pottery (especially paste and some strap types) that this difference is significant chronologically. It may well be that Mulberry originally came from a different pottery tradition than Baytown, Larto, and Alligator-Oxbow. If so, however, the two traditions were already well merged in the south by 300 A.D.

My conclusion is that the Coahoma component is indeed a single and relatively homogeneous one, however diverse the origins of its material culture may have been.

III. POTTERY OF THE HUSHPUCKENA PHASE

This phase was first separated out from the later Mississippian phase on the site on the basis of the astounding difference between the burial pottery on the Big Mound and the pottery from Phillips' cuts. Further study showed that a single burial pot and some partial pots from the floor on the east side of the mound, plus a few pots from the smaller "Cemetery Mound" could be placed in this phase. Moreover, a considerable number of sherds in Peabody's "general diggings" category, evidently deriving from the fourth occupation layer, are of Hushpuckena styles.

The shapes of this pottery may be briefly summarized. Perhaps the most common shape is a simple jar with unelaborated rim. It is round bodied with a gently in-sloping shoulder which just as gently slopes upward again so that the rim is straight up or slightly outflaring. Neck and shoulder areas are ill-defined, and there is no differentiated rim area at all. Lips are rounded or flattened. Handles are present but not common, there probably rarely if ever being more than two to a pot. They are large, generally more "loop" than "strap" shaped, and extend from the shoulder to the lip. There are a few nodes, but they are rare. Lugs are fairly common. They are invariably quite large, hemispherical when viewed from the top, in the shape of a quarter circle or more rarely a rectangle when viewed from the side. Invariably they may be characterized as "fat" in direct opposition to the thin and

flimsy looking lugs of the next phase. Almost always they are attached to the lip, but one example is attached to the neck about an inch below the rim. Griffin (Phillips, et al., 1951, p. 117) says that the lugs on Barton are merely modifications of the lip. This does not seem to be true at Oliver. One lug in the collections is ^{ic}vertically perforated, two others have ~~inversions~~ ^{incisions} on them.

There are two types of bowl. One is a simple hemisphere unfortunately not usually distinguishable from those of the later phase. The other shape is more of a plate, being quite shallow with a distinct strongly everted plate rim usually a little over an inch wide. The curves between the flattish bottom and the side, and the side and rim are very gentle and graceful, being in all respects similar to the curves on the jar. A variant of this shape is a "four-eared" plate, probably formed by cutting four semi-circular slices out of the plate rim, thus resulting in four broad ears in the shape of a cross. A moderately rare mode is broad notches on bowl lips, sometimes closely-spaced and deep enough to give a scalloped appearance to the rim.

Owing to the paucity of whole specimens from this phase, no general comments may be made about special forms; individual pots will be discussed in the type descriptions.

TYPES

1. NEELEY'S FERRY PLAIN

This is of course the most common type in the col-

lection. The shell tempering ranges from moderately coarse to so fine as to be invisible. In general there is no high polishing and no slip (with one exception). Bowls are almost always better polished with a finer paste, thinner construction and darker color than jars, but there is a wide continuum with no sharp breaks. It would be meaningless to separate out the better bowls and call them "Bell" or any other such name. Although in the survey (1951) some sherds from this site were called "Bell" none of them, with the possible exception of two or three sherds, fit into the classic definition of this type.

It is hard to differentiate objectively between the paste of this Neeley's and that of the later phase to be described. The color on this Neeley's is yellowish (especially on jars) or greyish (bowls). Both colors are found on the later phase but there is also a dirty brown color on the cruder specimens. Moreover the surface of later pots often exfoliates off, a feature never found here.

There is one Neeley's bottle ^[44262] of this period. It has a subglobular body and a long, wide, slightly outflaring neck. The joint between the neck and body is smooth and un-angled, again exhibiting the typical Hushpuckena gentle curvature. In general proportions it is similar to St. Francis bottles, but the construction and general look of the bottle is very different. One interesting feature, also found in a bottle sherd from Peabody's collection, is a deep indentation

in the bottle analogous to the indentation in modern wine bottles. I find no mention of this mode in Griffin's description of more northerly bottles (Phillips, et al., 1951, p. 158-9). Perhaps it will someday be found characteristic of the Hushpuckena phase. There is a bottle sherd in the collections bearing this mode.

Near this bottle in the "Cemetery Mound" was a simple rounded-bottom cylindrical cup ^[61874] of extremely attractive proportions, about one and one half times as wide as high. This may again be a characteristic shape.

There are two complete Neeley's effigies plus a number of tails and heads. The tails are identical to the lugs on the jars. The heads are in all determinable cases out-facing, and are generally well modelled. Features are incised and punctated or, perhaps more often, consist of applique eyes and noses. Applique frog's (?) legs and arms are found on one vessel and two sherds. One fine head is very similar to that illustrated in Phillips, et al., 1951, figure 95g. Within the hollow in the head are small holes about the right size, if I may speculate, for the insertion of feathers. The three recognizable creatures depicted are frogs, birds, and humans.

The two complete effigies are worth describing, though both may be atypical. The first ^[64309] is the only Hushpuckena pot found in a burial of the big mound. The burial was a bundle, like most of the others in the mound, and does

not seem to be deep. If it were not for the pot the burial would certainly be placed with the large group of "Oliver" phase burials. Conceivably the burial is late and the pot is early. Certainly Hushpuckena burials with pots were not rare on the site and this might have eroded out of a mound or been dug up and prized as a beautiful example of the potters art, which it is. The animal is perhaps a frog or maybe a mammal with limbs in relief and an absolutely characteristic Hushpuckena lug-tail. The pot is atypical in that it has a definite brownish slip and is very highly polished. It perhaps might be called "Bell". The slip and ware is identical to that of an Old Town Red effigy to be described, except that the slip has no ochre in it. One cannot set up a variety on the basis of one vessel, but this seems a perfectly legitimate combination of Hushpuckena techniques and when enough of such vessels are found a variety might be set up, preferably not called Bell.

The finding of this particular burial is worth relating to give a picture of Peabody's dig in its final phase. It was the next to last burial found, on the last day of the dig, July 2, 1902. During the previous two weeks Peabody had torn through the western third of the mound in a frenzy to meet his deadline. Unexpectedly this slope teemed with burials. He hurriedly recorded about a hundred of them, dismissed others with such simple notations as "Trench 26, human bones" and undoubtedly ignored others completely. His

A modest original plan of cataloging his pots by letters of the alphabet had proved hopelessly inadequate. The last pot in his trenches was, suitably, Omega, the end of the Greek alphabet. In the last days all scientific concern for the humble posthole was abandoned, notes on stratigraphy became distressingly sketchy, No longer does he have time for rough sketches of his partner Farabee (or is it himself?), for the composition of bits of doggerel, for the recording of snatches of melody composed or caught from the lips of his negro workmen. No longer do his field notes exhibit the engaging variety of a well tutored mind -- all is pots and skeletons.

The day before, his last trench was finished, but his thirst for bo^oty was far from quenched. On this last day he yielded to his baser urges, and as he bluntly puts it "began scratching on south slope". He tore up the earth to a depth of three feet, roughly recording the burials found in relation to a stolid chinaberry tree which still stood alone and defiant near one side of the great swath of destruction through the mound. Sadly, only three pots were found, this among them. It was dubbed Aleph, first letter of the Hebrew alphabet. By the end of the day he was only at Gune^l, third letter, and gave up. There was no backfilling to be done as he had thrown the dirt from each trench into the last, so the next day he left. The Oliver site was abandoned to the willing hand of Mrs. Edwards, wife of the owner, who by

this time had taken to emulating the Yankees and was engaged in tearing up a small mound in her back yard.

That we have any data on the provenience of this *
pot at all is due only to Peabody's admirable (for the day)
scientific habits and the happy location of the chinaberry
tree within easy tape-reach.

The other Neeley's effigy ^[24376] is from the Cemetery
Mound in an incredible burial to be described later. The bowl
is small and oval shaped, short from back to front. The head
is column-shaped with gruesome incised features. The tail is
a sort of loop hanging down from the rim with the end touching
but not attached to the side. The pot has evident similari-
ties to the "serpent-cat" effigy described by Phillips, et
al., (1951, p. 161) for the Walls area, but is cruder and dif-
fers in shape of the bowl and direction of the tail. Both
these effigies have resemblances to Walls pots, but there is
no reason to call them trade items, or even to postulate any
close historic relationship between the Walls and Hushpuckana
phases, though such may exist.

2. BARTON INCISED, BARTON VARIETY

This is the most common decorated type of the phase.
The shape is universally the simple jar previously described.
The paste is identical to Neeley's. Overwhelmingly the most
common design is, as described in Phillips, et al., 1951, pp.
115-119) oblique parallel lines forming triangles extending
from the rim to the shoulder. There is never a zoning line

on the top and only on a minority of specimens one on the shoulder. The lines are wide spaced, "V" shaped, generally forming little clay ridges by their sides. The depth and width of the lines generally varies with the space in between them: that is, on small vessels the lines are narrow and shallow, and closer together, on large vessels the opposite. Barely the bottom is zoned by a row of finger punctates. On only one sherd does Barton seem to be combined with punctates all over the body. On two sherds punctates, not lines, make up every other triangle.

A rare design variant is cross-hatched lines. The lines on these sherds (and on one pot ^[61836] of unknown provenience, illustrated here as pot number 2) ³ are scratchier and shallower than usual. Barton, var. Barton, here differs from the type description (Phillips, et al., 1951) only in that the handles tend to be more round in cross-section, the lugs larger, and in that the design goes down further on the shoulder with its lower border ill-confined.

BARTON, VARIETY WALLACE

There are twelve provocative sherds in Peabody's general collection which might be called Wallace Incised, and yet do not fit the type description which was set up for the Lower Arkansas area (Phillips, et al., 1951, pp. 134-6). I should like to present my thoughts on this type. The Oliver sherds are all from jars of the typical shape for the phase. The design is from well down on the body of the vessel up to

the neck. These sherds show the rim area: on all it is undecorated, on two of the sherds there is a Barton style zoning line at the neck, on the others none. The bottoms are unzoned. One sherd has a typical fat lug, though a little smaller than usual. It has Barton incising on the top. The lines are very broad the brushy looking, squarish or slightly shallow U-shaped in cross-section; their ends are square and abrupt. The lines are identical to those on Wallace from the Lower Arkansas. The designs are curvilinear.

A thorough investigation was made of the Wallace Incised from the type sites of Menard and Wallace. It was found that the type of line and the design was identical. As stated in the type description designs were generally either curvilinear on the body or rectilinear, Barton-like designs on the rim, never were the two combined. Rare nodes were brushing between the lines, and various combinations with punctations. A glance at the table (table 1) will show that rectilinear designs on the rim are by far the most common, with 100 sherds in all, and that the curvilinear on the body variant was next in frequency. All these body sherds were presumed to come from everted-rim bowls, but with many it was impossible to tell. Much rarer but definitely present are the opposite arrangement. What is significant is the three sherds from simple bowls and the two from jars. There may have been more sherds from these shapes, but these were the only sherds where the shape was absolutely certain. The

sample is all too small, but the fact that all these sherds were found in one of the cuts, not on the surface, suggests that these shape variations may be earlier.

Classic Barton, var. Barton, on the normal Hushpuckena Mississippian jar shape is present in small numbers at both Menard and Wallace. A restudy of the pottery from the cuts at Menard shows that Barton occurs in small numbers throughout the trenches. The sample again is too small, but it seems probable that Barton is early on the site. James Ford (personal communication) holds this opinion. Certainly in Oliver no true Barton exists during the last occupation. A shape very close to the Wallace everted-rim bowl is found only in the later phase at Oliver.

My conclusion is this: the difference between the Hushpuckena phase at Oliver and the major manifestation at Menard is mainly a matter of time, not space. There is an earlier phase at Menard, albeit poorly represented, which had classic Barton, var. Barton, lacked the late trait of everted bowls, and probably had some sort of Wallace not on everted bowls. If the Oliver Wallace sherds are an example of early "proto-Wallace" the evolutionary development is clear. The differences between this early Wallace and Barton, var. Barton, are basically threefold. The first is the movement of the design onto the body. This occurred to the north in Kent Incised and to the south in Arcola. It seems also to have occurred here. The second is the development of the

broadline technique which seems to have occurred locally here in the Lower Arkansas and Upper Sunflower regions. The last is the development of the curvilinear design, which occurred on Ranch, Wallace, Blanchard and Oliver Incised, not to mention Leland to the south. All three developments seem to have occurred late in the life of classic Barton, var. Barton. The late position of these various "types" will be discussed further in the section on the Oliver phase.

The evidence for the contemporaneity of Barton, var. Barton, and some sort of proto-Wallace is admittedly slim. It was certainly not a major type anywhere that we know of. But the existence of a proto-historic-to-historic phase in the Upper Sunflower would not be known except for Peabody's excavation. Likewise largescale excavation on the Lower Arkansas might reveal a phase contemporaneous with Hushpuckena, and probably also Nodena and Walls. This putative phase would, if our guesses are correct, have significant amounts of "Wallace" on early type pots, call the type what you will. A reexamination of collections from the northerly area might well also reveal small amounts of this type, if the criterion of the everted-rim bowl shape were dropped.

Suffice it to say then that a sort of formative Wallace is present in the Hushpuckena phase, as ^{witnessed}widened by the presence on the sherds of early lugs and Barton zoning lines, and the early shape.

3. PARKIN PUNCTATED

By far the most common punctated variety at Oliver is a type made by making a deep jab with the finger so that a small ridge of clay forms on one side. These are usually spaced fairly close together over the whole body of the pot. Two variants are: (1) placing the punctates directly together so that there is a corrugated effect, (2) lining the ridges up to produce a ridged pinched effect. In the sample of the cuts at Oliver plus the Peabody surface collections, 40 out of 59 punctated sherds were of these varieties. Out of 38 punctated sherds at Menard, only 7 were of these varieties, and four of them came from the tenth level down in cut A. Moreover the more common types of punctate at Menard in Oliver are found only in the surface collections and the top two levels of cut B. Here we seem to have a much clearer case of the temporal distinction hinted at in the incised material. Slash, fingernail, dot and other types of punctates are characteristic of a later period. In the Hushpuckena phase, and probably also at a related phase in the Lower Arkansas, the punctation is generally of the classic type with a "burr" or ridge (Phillips, et al., 1951, p. 110), usually covering the body. The single row of punctates found sometimes under the Barton, var. Barton, are, in all the examples I have seen, also of this type.

4. RED PAINTED TYPES

Most of the painted ware is plain red of a dark,

almost crimson color, usually on bowls. Paste is good, temper generally fine, as on Neeley's bowls of the phase. We have two partial vessels, a simple bowl ^[4385] and the back part of an ^[4270] effigy with a lug-tail identical to that on the Neeley's effigy previously described. There is also a stratigraphically unplaced tripart vessel ^[4386] which is perhaps the most beautiful pot at Oliver and is illustrated in Peabody, 1904, plate 15. Its deep red color places it probably in the Hushpuckena phase.

Painted designs are generally in bands, though no sherds are large enough to tell whether the designs are curvilinear. The commonest treatment is red bands on a buff background (Carson Red-On-Buff), usually on bowl bodies. There are no rim sherds with a band of red around them in the Menard manner. Other sherds have contiguous bands of red and white paint, a few have red and white with a strip of the buff pot surface separating them. One sherd is red, black and buff. Though there are a few plain white sherds they are all tiny. It is unlikely that any vessels were pure white. All in all the painted pottery here shows considerable variety.

5. TRADE TYPE - LELAND

A few sherds bearing designs which could be called "Leland" may be assigned to this phase. I am certainly in no position to separate out varieties of this poorly known type. A few pots, entirely alien in shape, and a few sherds, all on fine paste with "dry" incision and curvilinear designs

come from the late phase. There are a few sherds that are entirely different but also may come under the broad definition of Leland. There are two sherds especially from Peabody's collection with a very fine brown paste, highly polished, which have a deep bowl shape and a large rim strap in the shape of a quarter circle. The design is the Leland Guilloche executed in very dry scratchy lines of variant widths. These are entirely unrelated to the late burial Leland to be described and possibly are on a Hushpuckena time level.

6. OTHER POTTERY OBJECTS

Pipe

There is a pipe ^[81823] which by temper may be tentatively assigned to this phase. It is simply a tube of clay with a small hole and larger hollows for bowl and stem-fitting at each end, bent into an elbow. The center section is flattened and compressed as a result of this bending. May it be noted that this specimen bears not the faintest resemblance to the Siouan disc pipe, being rather an "Algonkian" elbow pipe. The Hushpuckena phase has few elements which can be called Quapaw by the farthest stretch of the imagination. ✓

Sherd Discs

There are 44 specimens in the Peabody collections catalogued as sherd discs. ^[61819, 61820, 61887, 61890, 64387, 64392, 64395] Four of them are the bottom coils of vessels (three Baytown, one Noeley's). Thirty-nine are pure sherd discs, two only (of Noeley's) having holes ^[61820, 61890] and thus being classifiable as spinning weights, for lack of a

better name. No guess is possible as to the function of the others, all about two or three inches across, and cut out of pots: 26 Neeley's, 3 Barton U., 2 Old Town, 2 Mulberry and 2 Baytown. The last four need not worry us, as the plethora of early sherds on the site must have provided an obvious raw material for this enigmatic but thriving industry. There is no need to postulate sherd discs for the Coahoma phase.

One of the Neeley's discs comes from the rim section of a late (Oliver) everted-rim bowl. This indicates that some at least of the discs were being manufactured in proto-historic times. The fact that both of the Barton discs are not of the classic variety supports this; but to say that all the discs were made in late times is unwarranted.

One of the remaining three objects is a miniature (one inch across) chunky stone ^[24395] done in pottery without visible tempering material. The other two are buttonshaped objects of the same size and paste, with nice rounded edges. There is also a small stone (natural?) of identical shape and size. There are in the Peabody Museum bone discs from a northern Algonkian tribe also identical in appearance. The sign says they are dice. I suggest that these objects were also gaming pieces of a sort. The chunky was perhaps a child's plaything.

Miniature Vessels

There are two miniature vessels, each less than two inches in any direction. The first is a tiny pot ^[21797] of more

or less the classic Hushpuckena shape with two little handles. It was found on or near the burnt floor east of the mound on the same level and 12 feet away from a broken Barton, var. Barton pot. The other vessel is a tiny shallow bowl ^[61809] with the broken-off stubs of absurdly miniscule effigy head and tail. The paste is incongruously coarse for so tiny ($1\frac{1}{2}$ inches) a bowl. It is difficult to discover the provenience of this vessel. The catalogue says Trench 12, and on June 21, 1901 in the field notes there is the notation "found little pot." At this point Peabody was digging the top section of trench 12, above the "critical level", which means it came from either of the top two, or Mississippian, occupation layers. This is obvious from the temper; the question is, which occupation, Hushpuckena or Oliver, does it date from? Peabody at this time was being very careful about burials, as he was finding so few of them. He mentions no bones near this pot, so it probably did not come from a burial. This far east on the mound it could only have come from the tailings of the Oliver level, whereas the eastern edge of the Hushpuckena floor reaches into trench 12. I shall guess it came from the latter.

There are no pots of this size from Oliver burials. The children's pots in that phase are small, true, but they are at minimum four to six inches across. We have no certain Hushpuckena child burials, and only these pots suggest what was being made then for youthful employ. Perhaps future

research will prove miniature pots such as these to be characteristic for the Hushpuckena phase.

IV. MISSISSIPPIAN INCISED TYPES

Before we go on to a consideration of Oliver ceramics a resume of my conclusions on the incised pottery of both Mississippian phases, for which the existing typology is sadly inadequate, is in order. Two types have already been described. Barton, var. Barton and "proto-Wallace". Let us call this latter Barton, var. Unspecified A; B, C, D, and E remain to be discussed.

These four varieties have been separated out, after considerable classification and reclassification of sherds, on the basis of line. Variety B has lines of about the same width as Barton, var. Barton, but much deeper, with a deep "U" shape, not a "V" shape. They are in general much closer together than Barton lines; most seem to be parts of curvilinear designs. Many of the examples of this variety are distinctly sloppy.

Variety C has neater looking wide lines of a deep "U" shape. They are about half the width of Wallace lines, farther apart than variety B lines but having about the same proportion of line width to space between the lines. Line ends are not square as in Wallace but universally round or pointed. Designs are identical to Wallace -- short parallel line triangles on the rim and long, free curvilinear designs on the body. My notes are not clear on this point, but I do not believe the two designs occur together.

Variety D is rare, and segregated late in my

studies. The lines are very broad, as broad as on Wallace, but do not have the brushy look of Wallace lines. Moreover they are usually not U-shaped, but rectangular in cross-section. Often they are slanted with a long side and short side only, as if the rectangular instrument were tipped so only one corner dug into the pot. The few examples from Oliver are on extremely fine paste bowl rims. Two designs are represented: concentric semicircles and a design that looks like the number 3. These sherds could probably be classified as Blanchard Incised and may well be not native to the site.

Variety E is represented by three sherds and a single vessel at Oliver. The lines have the brushy look of Wallace lines, but average a little thinner, and as often as not have the profile of Type C or D lines, although some approach Wallace.

[?]
The pot with this type of line comes from a very late burial -- one of a group on the east side of the mound, many of which, though not this particular one, had historic goods. The shape of the pot conforms exactly to what will be described as the typical Late Oliver Phase norm. This vessel differs from the sherds in that the paste is very thin and the lines show on the inside. Dr. Phillips tells me this is characteristic of the tentative new Stokes Bayou variety, which was first conceived of in the survey (Phillips, et al., 1951, p. 149). Most of the sherds of variety E do not have

this thinness.

Investigation of surrounding site collections provided enough sherds to stabilize these varieties and gave some hints as to their temporal distribution. Variety D may be disposed of by saying it was very rare or absent in the collections from around Oliver and on the Lower Arkansas. Since this was one of those varieties of ^{Barton} ~~Leland~~ not represented in the Oliver phase burials, I suggest this is a southern variant (from around Greenville?) of a fairly early date.

Variety B, so well represented at Oliver, is surprisingly rare on other sites around, which may indicate that the late occupation was weak in the area. On the other hand it is the most important incised variety at Menard and Wallace aside from Wallace Incised itself, far outstripping classic Barton. It makes up as much as half of the large "Unclassified Shell-tempered Incised" category.

There is a small sample of good variety B on the Stokes Bayou site near Oliver, but there is a far greater number of extremely interesting sherds which seem intermediate between Barton, var. Barton and var. B. No longer on this site does the classic Barton design hold full sway. There are line filled pendant triangles, simple vertical parallel lines, squares of horizontal and vertical lines, and some pendant semicircles. No intense analysis was made of the sherds, but they seem to be reasonably close to the old style. The two lugs in the collection are definitely smaller and

skinnier than classic lugs. Designs still in general go up to the rim, but on some sherds there is a line slightly below the rim separating *it* off, a shocking development unheard of in old Hushpuckena times.

There is, as we shall see, a definite break in culture and probably also in time between the Hushpuckena and Oliver phases, and it seems reasonable to suppose that some part of the Stokes Bayou occupation fills this gap. An examination of the representatives of the other varieties might throw light on their temporal positions.

The designs on the Stokes Bayou varieties C and E are mainly similar to those on B, except there are more curvilinear ones. Shapes again seem to be a modified form of the Barton jar, somewhat squatter, with a sharper break between neck and body. Neck and body are differentiated in the design as in our old proto-Wallace (variety A), and in contrast to the variety B on the site.

The variety C on Oliver also has a comparatively early look. One sherd has the bottom of a good effigy head on it; there are two lugs of a medium size, designs are of the Wallace type: i.e., foreshortened little parallel-line triangles confined to a small rim area. We only have five sherds, and none of them has the curvilinear on body design but that may well be due to the tiny sample. There are, fortunately, two lugs. They are of a medium style, thinner than Oliver lugs but not as well developed as the Hushpuckena

type. The shape is the shortened, definite-necked jar found at Stokes Bayou.

The designs on the three sherds of variety E at Oliver are curvilinear on the body. The one sherd that shows any shape is from a jar reasonably close to the Stokes Bayou style we have postulated. Although from my descriptions there may seem little difference between this and the old variety A, let me assure you that the sharp corners on the lines and the relative thinness plus other indescribable qualities of the paste make the variety A sherds absolutely unconfusable with variety E. The latter however may quite conceivably be a development out of the former.

Variety E comprises 11 sherds at Stokes Bayou (vs. over 100 of Barton, var. Barton, and var. B). The three sherds in Peabody's collection comprise the only sample of variety E at Oliver, as opposed to nearly 200 sherds of classic Barton and variety B. Even at Stokes it is not common, perhaps in about the same proportion as variety A in the earlier phase.

What we seem to have then is a series of Wallace affines types throughout the Mississippian occupation in the Upper Sunflower, always existing as minority types, paralleling a putative major development over on the Lower Arkansas, of which we really know only the end product. In the Hushpuckena period variety A existed on the Sunflower and there was presumably a very similar type on the Arkansas.

In the Stokes Bayou period the Upper Sunflower potters began to ignore the venerable parallel-line triangle design and to use sharper-cornered instruments in their incising. At the end the Sunflower potters had developed as very much a minority type the Classic "Stokes Bayou" (late variety E) thin-paste variant. In paste and shape the late E pot is in a native style, so we are not dealing with trade ceramics but merely a type of lukewarm popularity in a very restricted phase.

While this general style was struggling through the final stages of its feeble life on the Upper Sunflower, the suddenly burgeoning population on the Lower Arkansas endorsed the local version with wholehearted and frank abandon. They grafted an ancient design style with its roots going as far back as Coles Creek (Mazique), and a middle aged incising technique onto a radically new vessel shape.

This disposes of variety E. We are left with variety C. The rim sherds of this type with their attractive miniature versions of Wallace designs and their parabolic line ends are distinctive enough. But the curvilinear body sherds are not. For instance I found to my great joy a sherd with a curvilinear design in variety C lines with one of Peabody's burial numbers on it. I had shortlived hopes of stratigraphic placement for this type. But upon investigation I found to my chagrin that it came from a peculiarly large variety B pot which had correspondingly wide lines.

Nevertheless a large number of sherds may be assigned to this variety definitely. There are 18 sherds from Oliver, five in Peabody's collection, five in Phillips' surface collection, and eight in the top level of his cut B. This would argue for a late (Oliver) placement of the variety. Moreover there are 26 sherds of a comparable but not exactly similar type at the Wallace site, as opposed to 51 true Wallace sherds. This is a considerable proportion. On the other hand, there are 10 or more at Stokes Bayou, which does not seem to have a distinguishable Oliver component. Moreover there are no good examples in the Oliver burial pottery, but as shall be seen there are few incised pots of any sort here. I can only suggest that variety C started in late Hushpuckena times and continued with relatively little change into the beginning of the late occupations at both Oliver and Wallace and Menard.

Before dropping this topic, a word must be added concerning the Hushpuckena phase in general. Studies by Dr. Phillips have indicated that it extends over a considerable territory in the Upper Sunflower area, components being present on a large number of sites. I looked through surface collections of some ten sites and they all had the Barton, var. Barton and other types of the phase. The population was certainly a lot more dense than in the Oliver Phase.

I think we may call the occupation at Stokes Bayou late Hushpuckena rather than early Oliver. There is a

reasonably sharp break between Hushpuckena and Oliver which is somewhat blurred by the Stokes Bayou material, but only in the matter of design. Stokes Bayou material, are far closer to Hushpuckena than Oliver.

V. POTTERY OF THE OLIVER PHASE.

1. SHAPES

The shapes of Oliver pottery are a new departure. On the jars rim and neck areas are sharply distinguished. The neck rises up like a column from an incurved shoulder on a squat body. The rim, an inch or more wide on the larger specimens, flares out at about a 60° angle from the neck. On the decorated types decoration is applied separately to the shoulder, neck and rim as zones. Bowls are shallow but not flat bottomed with a large everted rim taking off sharply from the body leaving a very definite corner on the inside. The bowl and jar rims are exactly analogous. Some bowls have an even wider rim than usual and have an incised design on the upper side of it. There are also shallow simple bowls, some with effigies a good deal smaller and conventionalized than before. Tails and lugs are much smaller than before, shaped like half wafers. Handles are virtually absent, the one or two examples present being vestigial.

Six bottles are known from the component, all probably from late within it. Two are Nodena Red-on-White bottles, one ^[57313] from a burial with historic goods, the other from ^[64293] a burial without historic goods but in a historic group (NW side). The shape is similar to the bottles from Menard, etc., illustrated in Moore (1908, plate 14, fig. 29) except that the body is squatter with a discernable shoulder. They are illustrated in Peabody, 1904, plate 15. The neck has the

same outflared rim present in the bowls and jars. The design, it may be seen, is not similar to Moore's plate 14, which he (p. 497) and Ford (personal communication) declare to be most common on the Lower Arkansas. Our bottles, like Moore's from Old River Landing (Fig. 29) have thin white parts of the design and little or none of the buff surface of the vessel showing. The design is thus bichromic, not three-colored, and the difference may be significant temporally. It certainly can't be significant spatially, as Old River Landing and Oliver are the furthest-apart sites possessing such flare-necked bottles. Ford (personal communication) says that the Old River Landing example of true bichrome design is the only one known from all Moore's Lower Arkansas collections.

Two other extremely interesting bottles come from the first burial Peabody dug up in his second season. The burial is of an adult (woman?) and child, both bundles, and one of the Late Oliver group on the southeast section of the mound. The two bottles, both of admirable quality, accompany an effigy bowl ^[64261] which is an abysmal example of the shocking degeneration of the potters art in the last stages of the Oliver occupation. One bottle ^[64262] is on Neeley's paste. It has a body much like the others just described, but only a short, wide-mouthed, slightly outflaring neck and no rim section. The other bottle ^[64260] is the superb fish effigy illustrated in the bottom right hand corner of Peabody's (1904) plate 14. The illustration shows that it is a specimen equal to anything

Menard potters were producing at the time. One cannot tell from the illustration whether the vessel is plain or red, ^[Ed. note: it is plain and now found] and as this is one of at least five vessels in the collections that cannot be found I can add no more information than the picture provides. I can identify the burial it came from only through the fortunate circumstance that it was one of the first two Peabody found in his second season. He seems to have had the grandiose plan of drawing each burial, but tired of it after the second. Be that as it may the last pot from this burial is crudely drawn in the fieldnotes and is definitely the one illustrated.

The other two Oliver bottles have no stratigraphic information. One, a small well made oval-bodied vessel with a neck just like that on the Neeley's bottle just discussed, is catalogued under general diggings. The other is another of the lost pots ^[4311; now found] and is known only from the figure found opposite the fish effigy in Peabody, 1904 ^[Plate XIV]. The body is identical to those on the Nodena bottles. The neck is somewhat different but evidently the same general idea.

Another special form is the teapot. There are three examples, two of which are illustrated in Peabody, 1904, plate 14. ^[4284] The righthand teapot ^[now found] is one of the lost vessels. ^[4288] The other ^[4268] is also from the late southeastern group of burials. It is very small and without a red slip. ~~Does have a red slip~~ The last ^[4391] has a red slip and was found eroding out of one of the smaller mounds ^{[4391] left hand one in Peabody's Plate 14} on the site. The neck is of a peculiar shape found in Phillips'

collection of pictures of pots from Menard, but not illustrated in Moore. The neck goes up, then curves in at 45° , then outflares again. The shape may be visualized by adding the rim section of Moore's (1908) figure 4 teapot to the top of his figure 6 teapot on the same page. A reasonable approximation is also offered by his plate 16. [Ed. note: also see Ford 1961: Figs. 5, 13, 14, 18, + 20]

A word more may be added about effigy bowls, the other major special form. A good example ^[64376] is illustrated in Peabody's (1904) plate 13, upper righthand corner. This came from one of the earlier Oliver burials. Close inspection reveals that it is a crude version of the very common Lower Arkansas type of effigy of which a good illustration is Moore, 1908, fig. 22.

Perhaps the best Oliver effigy bowl ^[64283] is badly illustrated in Peabody's book just below the last pot mentioned. It is an exact twin, except for the fact that on this example suspension holes are fore and aft, of the vessel from Old River Landing figured in Moore, 1908, fig. 35. Conceivably the effigy vessel discussed previously at great length (vase "Aleph") and illustrated in that same plate of Peabody's is also of Oliver date. But even if not it is evident that the special mortuary ceramics at Oliver were almost as fully developed as those at Menard, and also strikingly similar. Certain forms, perhaps through inadequacy of sample, are lacking, especially the "head vase", and the red and white painted bowls. Indeed painted bowls of any sort seem absent in the Oliver phase, including the very common Menard type

with the strip of red paint around the outer rim. Absent also are effigy heads flat in the lateral dimension and often perforated as in Moore, 1908, fig. 27.

There are, however, a class of excessively crude mortuary vessels at Oliver unrepresented at Menard, or at least in the illustrations of Menard pottery. Indeed Moore would never have even remotely entertained the possibility of illustrating such vessels. I have three in mind all from late Oliver burials without historic goods. They have features characteristic of Late Oliver pottery in general, and these must be summarized.

In Late Oliver, probably historic, times, a significant change occurs in vessel shapes. The neck sections on jars become shorter, the rim sections protrude hardly at all from the vessel. On the outside they seem no more than a rolled lip, but on the inside profile a flat outflaring expanse of about a half inch is still visible. This difficult to describe lack of relation between inner and outer profiles is characteristic of late Oliver pottery, or which a good example is figured in illustration number 7. It is especially evident on bowls where the corner between rim and body sections is still present though weaker than before on the insides, but the outside profile presents often a smooth curve with no break at all. Where there is a break on the outside, it is not opposite the corner on the inside. Rim sections become often either disproportionately large and curved up instead

of out, or small and vestigial. Lugs and effigy tails are barely distinguishable protruberances on the rims. Two of the effigy heads are mere tiny blobs of clay. The other, ^[64261] the one from the burial with the fish effigy ^[64260] is a featureless column of clay, evidently the degenerate descendant of the "serpent-cat" effigy mentioned previously. This deep bowl has a large upcurving rim section on one side of the vessel (the head side) but the other side has no break at all.

The effect is an asymmetrical bulge, as may be seen in the illustration ^[64261] (pot number 4) at the end of this paper. Rims are pointed, crudely squared off, or grossly round and thick. Two late vessels have indentations on the outside possibly produced by slapping the fabric with a corncob. The paste on some has a wholly new dark brown color. It is very coarse with a rough, and exfoliated surface.

Such miserable parodies of Mississippian pottery are found in association with some of the fine bottles described. Many of the more utilitarian vessels have still an excellent paste and are typologically late looking only in their tiny lugs and in the shape of their everted rims. The miniature children's vessels continue to be, on the whole, well made.

The total complex of late Oliver pottery may indeed be distinguished in shapes from early Oliver pottery, but it may not be characterized as degenerate. Some of the worst pots are found in or near to burials with the best. My interpretation of the late history of Oliver pottery, based on

long study of burial distributions is this. The fine bottles and others were made within a generation or two of the end of the occupation. Probably nothing of the best quality was produced in the last few desperate years before abandonment and the best pots in the latest burials may have been a generation or two old when they were at last consigned to the world of the dead. Almost certainly only the most vestigial effigies were being made at the last, but some fairly good pottery was probably being turned out yet. Separating out the less than ten really awful pots on the basis of burial distribution and depth proved impossible. Degeneration was very swift and some of the perhaps older potters were still turning out decent stuff while their compatriots had abandoned or grossly distorted all the old canons of shape, paste and decoration.

There is then no degenerate period per se. Certainly the phenomenon of total cultural collapse in the face of modern European contact is not unknown in the annals of ethnography, but the meagre archeological and historic evidence suggests that Oliver was abandoned before any such wholesale collapse might have come about.

The degeneration of pottery at Oliver seems to be a feature of certain potters, not of all the potters in the village. This abandonment of the old norms by individuals is quite easily and logically explained by two factors historically known to be operant in the region. The first is disease. Epidemics devastating whole villages reducing whole tribes to

mere remnants are historically documented for all the Lower Valley peoples, especially the Quapaw. That there was disease at Oliver is indirectly substantiated by the archeological record. There are 140 or more Oliver burials in the big mound alone. Over half of these may be assigned with certainty to Late Oliver. The teapot ^[64391] croding out of a small mound and the five or six recorded (and how many unrecorded) late Oliver burials from the Cemetery Mound attest to the fact that there was no lack of other burials elsewhere on the site. 100 is a truly conservative number for late Oliver burials on the site.

On the other side of the coin 50 to 20 or even less warriors are mentioned as being the complement of many villages in the Delta at contact. That Oliver was a small and unimportant village in contact times is evidenced indirectly by its lack of mention in the historical records. Phillips' cuts indicate with their overwhelming percentages of Hushpuckena sherds that the Oliver occupation was very thin. Oliver, and especially late Oliver sherds are very rare in the collection, and are far outnumbered by mortuary vessels.

Historic goods representing, it seems, a very short period of contact are scattered through the areas of the mound reserved for Late Oliver burials -- most or all burials of this subphase, whether they had any of the very rare trade goods or not, were probably made in the historic period. In

the historical section of this paper I give my reasons for believing occupation at Oliver ended not much after 1700; historic contact started not before 1586. A time span of fifty years for the Late Oliver subphase is a liberal estimate indeed.

Over 100 burials representing a complete cross-section in age of the population, for not much over a generation in a small village! Smallpox does not to my knowledge leave marks on the bones. However the indirect evidence for epidemic at Oliver seems incontrovertible. One thing, to get back to the pottery, that an epidemic will do is destroy family structure and make orphans of many. Many little Oliver girls could have grown up poorly tutored at best in the arts of their ancestors. The degenerate pots we are concerned with are the product of ignorance and lack of skill.

The other factor that might have contributed to the ceramic degeneration is the known breaking up of tribes and the constant flow of refugees into the surviving villages of their alien neighbors. Many of the pots being considered may have been the product of refugee women poorly conversant with the ceramic peculiarities of their hosts. The presence of not a few Leland and Natchez-like pots, and of unidentified but southern looking arrowpoints at Oliver attest to contact of various sorts with a region which was largely abandoned by 1700. It is interesting that the art of effigy making^{of} which the southern tribes were totally ignorant, shows the most

spectacular degeneration.

There is, with the possible exception of the teapot shape, no evidence of a possible other factor, European ceramic influence. Now let us move on to the pottery types.

TYPES

2. NEELEY'S FERRY PLAIN.

There is little to add about this type. Paste on bowls is if anything thicker than before; on jars thinner. On many vessels a sort of slip which tends to flake off is present. Tempering is in general coarser than before. There is a class of vessels, mainly miniature children's bowls and teapots, with a very fine and thin paste, often a thin slip, and a mouse-grey color. Some sherds of the collection, often from little bottles, bowls or teapots, never jars, are easily separable from the others, in contrast to the situation in Hushpuckena times. This variant, which in my notes I dub "Teapot Bell", may someday warrant distinction on the variety level.

Notches are no longer applied to the rim, but are replaced by slash punctates made with a sharp instrument. Nodes on the necks or shoulders of jars are common -- there is even one sherd of all-over "Fortune Noded". Two bowls [64266, 64276] have the rim pushed down, as if with the thumb, once on each side.

3. BARTON INCISED.

Barton is mainly of the type B variety already de-

scribed. Designs are of several sorts: parallel-line arcades, "negative arcades" -- empty semi-circles with diagonal hatching above and around them, pendant parallel line festoons or semi-circles, pendant triangles with the filling lines vertical, not following the framing lines (as in the Stokes Bayou specimens) and, perhaps most commonly, the guilloche, or Oliver Incised design. In Early Oliver a row of "burred" punctates is often added underneath the outflaring rim. In Late Oliver of course the rims are too small for this. One or two rows of punctates are often added on the shoulder, if the design is on the neck. In Early Oliver the arcade, the pendant triangle and in one example ^[64384] a concentric squares design are placed on jar necks. The pendant triangle, the Oliver design, and concentric semi-circles are placed on jar shoulders.

The two designs of Old Blanchard, concentric semi-circles and a degenerate version of the aforementioned "3" design (known from two historic bowls, see Peabody, 1904, plate 12) ^[64264 left, 64263 right] are placed on large everted bowl rims. The shape, paste, and type of line however are not Blanchard.

In late Oliver certain changes take place. Jar necks and rims have grown too small to hold any designs. Two examples have all over body designs. One is the Stokes Bayou [?] pot already discussed, and the other is a Rhodes-like pot ^[64296] with an expanded version of the Oliver design which covers the whole vessel. This vessel also has vestigial handles; it may be native. No certain examples of normal Oliver design are

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known for late Oliver, but they might exist.

Late bowl designs are excessively crude. On one the ^[4303] semi-circle design is applied to a simple bowl with no everted rim. On another example ^[5310] the pendant triangle design is applied to the outside of a crude everted rim. This bowl is in a burial with historic goods. No new invention is apparent in Oliver designs or shapes. The major development is the relaxation of the old norms of design, design placement and shape.

4. PARKIN PUNCTATED.

Heretofore I have mentioned that new types of punctation were introduced both here and at Menard on the Oliver time level. These are crescentic punctates, hemi-conical punctates, slash line punctates, and dot punctates. At Menard is a special type made of ultra-short Wallace lines. All these types may have existed earlier, but they became vastly more popular now. The old burr type still continues to be widely used, however. Another development is the construction of designs from horizontal or vertical bands of four or more rows of punctates. What the designs are I cannot say as they are known only from sherds. Vessels are found with two rows of punctates on the shoulder, perhaps another on the rim, and nothing else. ^[4295] This is unheard of in the Hushpuckena phase.

^[64297]
A late Oliver pot exists with all-over "burr" punctates but they are much further apart than on early ex-

amples. There seem to be no combinations of punctates to form ridging or corrugation in the Oliver phase.

5. RED PAINTED TYPES.

The red paint on Oliver vessels is a light reddish-orange color usually quite distinguishable from the Hushpuckena crimson. It occurs on teapots, bottles and probably bowls of a paste very similar to my "Teapot Bell" variant of Neeley's. In the small collection of redpainted sherds from this phase there was no Carson Red-on-Buff, no red, white and black polychrome. Plain red was of course the most common, with red and white, and red and white and buff also present. When it could be distinguished the bands of paint on Hushpuckena vessels all seemed to parallel the rim. On two Oliver sherds the bands are diagonal, and on the bottles, ^[57313, 64293] mentioned previously the designs are curvilinear. No conclusions on continuity between Hushpuckena and Oliver painted pottery are possible with the small sample at hand, but some shapes, designs and the pigment seem to be different.

6. TRADE POTTERY.

There are four certain trade vessels from Late Oliver burials plus a bowl with a rim strap which may come from the south in an earlier burial. One of the certain trade vessels is a small blobular bodied vase ^[64291] with a broad plate-like rim at the top. The paste is very fine, and on the rim is a classic Blanchard Incised design in a nice broad dry line, which types the vessel nicely.

Two other vessels may be called Leland U.; one has ^[64379] a guilloche design, the other ^[64269] has a running looping design something like that made by the seams of a baseball. The pot with the guilloche (~~illustration number 4~~) has another zone of L-shaped areas filled with "Silver City" hatching. This vessel is quite similar to a vessel in Dr. Phillips' collection from the Glass site (~~illustration number 7~~). The last vessel ^[64267], illustrated in Peabody, 1904, plate 14, is a miniature with "Natchez" shape. The major design is a crude form of the "baseball" design of the other vessels; on the stem, invisible in the illustration, is the aforementioned "L" design, this time filled with punctations, not hatching. Despite the Natchez shape, the design similarities indicate that this vessel came from the same general area as the others — the southern Delta, not all the way from Natchez itself. Similar vessels come from as nearby as Neblett Landing (Moore, 1911, figure 19). The same area may have produced the arrowheads found in two Oliver corpses. The southern Delta was being abandoned during the late Oliver period and refugee groups, hostile or friendly, were evidently descending on Oliver, some perhaps coming with a few pots to stay.

VI. OLIVER POTTERY, CONTINUITY, AND THE QUAPAW QUESTION

A comparison of Oliver and Hushpuckena pottery shows considerable continuity but also a great deal of change. The old effigy and painted variants continue, paste, general classification of pottery, the roster of old Survey Types, shows no radical shift. The old shapes categories of bottles, jars, bowls, etc., are still used. But within the broad Mississippian framework there is considerable change. Shapes are no longer smooth and graceful but sharp and angled. Comparison of illustrations 2 and 3 shows the radical difference in pot form. The Barton, var. Barton design creates the simple effect of a textured area on the upper portion of the pot. ^[61826] In the Oliver phase the pot ^{[4298] ← pot # 2 illustrated} has been divided into design zones and these zones contain definite bands of repeating elements with rows of punctates acting not as mere borders but texturally contrasting elements. Nodes, lugs and the few handles are not functional in Oliver; they also serve as repeated decorative elements. Curvilinear designs, like the new nodding and types of punctations, have considerably broadened the decorative repertoire. The popular "Oliver" guilloche is long, gently curving, creating the effect of a moving band around the shoulder. The old Barton design is defunct here. Over at Menard it has been severely adapted to new purposes.

But the old Parkin of the Hushpuckena people has a place in this phase as, seemingly, does their painting tradition. Red slipping seems to exist in this area from Marksville

times on, red and white painting from Deasonville (pre-Coahoma?). Through many changes of population these attractive forms of decoration persist. The line-filled triangle idea is certainly Hushpuckena. The Blanchard designs so popular with native Oliver potters were undoubtedly picked up from the Leland people close to the south. All the effigy forms are native, and Hushpuckena motifs are quite recognizable though executed in the at best moderately competent style of Oliver.

for note
[see Ford 1961] James Ford, on his forthcoming paper on the Menard site, comes out for continuity on the Lower Arkansas from early Mississippian times to the historic, mainly on the basis of pottery, despite a radical change in the stoneworking tradition.

I am not competent to judge on Menard, but the sequences there and at Oliver are so similar that his conclusion must be dealt with here. Frankly I cannot agree with it! Pottery is a poor indicator of population shifts. Let us look at the situation here. In early Mississippian a widespread, fairly homogeneous culture with Barton, var. Barton as a constant feature of its ceramic repertoire spread over the whole northern Lower Valley. By proto-historic times it was gone, replaced at Oliver and Menard by a culture with a somewhat related pottery, an unrelated stone working tradition, and at Oliver at least new burial practices and, perhaps, different ideas on mound construction. One would be hard

pressed to explain this by some sort of frenzied outbreak of invention after many years of a relatively constant culture.

Let us imagine what would have happened if a new group of people came in. First we must remember that wars between Indians ethnographically are not characterized by the wholesale annihilation of populations. True, villages are destroyed and most of the warriors killed off or dispersed, but women and children were often incorporated into the tribe, if only as slaves. And it is the women often who carry on the pottery tradition. In the male spheres -- religious practices, weapon making, and stone working there is a break in continuity. Even in pottery there is a new art style -- the shapes and design-arrangements have a very different look about them. The continuity is in isolated modes of design and form.

No invasion or migration can be proved unless a homeland with an old culture possessing many or all of the intrusive traits can be found. Whether such a place exists for the Oliver Phase is unknown to me. My only feeling is that the direct and major antecedents of the Oliver people are not to be found in the Upper Sunflower, and probably not in the Lower Valley.

CHAPTER V

PHASES AT OLIVER: NON-CERAMIC ASPECTS

I. COAHOMA PHASE

1. BURIALS.

There were traces of twenty three Coahoma burials comprising twenty-nine individuals, four of which are recorded as being children. Two of the burials were evidently disturbed and out of place; seven burials (11 individuals) were from the first stage of the burial mound (stratum A) and fourteen burials including sixteen individuals were from the second stage (stratum B).

There are two slight differences between burials of the lower and upper groups: (1) The lower group had two double burials and a triple burial out of a total of only seven burials as against two possible double burials out of fourteen in the upper group. (2) There seemed to be no regularity of orientation in the lower group whereas all the burials of the upper group except those right next to the square structure, were oriented to the east -- the direction of the structure. The burials next to the structure paralleled it, lying south to southeast, or in one case north-west. These burials although placed outside the major religious structure evidently retained a distinct relationship, to it in their orientation. The meaning of this is impossible to guess at, but it hints that the dead had some place in the religious structure of the society, as reflected in the architectural patterns. The matter of the multiple burials is less easy to explain. Possibly all the burials of the

first stage were made at the same time -- during the construction of the burial mound. In these conditions a certain clustering of burials is inevitable. The crowded yet unbunched pattern of the second stage, coupled with the fact that all these burials are of equal depth from the surface of the mound, suggests that here on the other hand we have intrusive burials made over a long period.

All burials on which there is any information are extended, usually on the back; but, according to Peabody, sometimes on the stomach or even the side. In contrast to the probably contemporary Bayland and Aden Phases to the south, grave goods are not uncommon -- there being eight articles with seven burials. None of the grave goods are with children; a situation very different, as we shall see, from that which pertained in Oliver Phase times.

Two of the objects are not pots. One is a stone pendant ^[64342] very similar to the larger one illustrated in Moore, 1908, figure 3. This similarity to a pendant from Menard made me feel this particular burial was Mississippian but subsequent checks proved beyond doubt that it was unquestionably Coahoma in age. Either the Menard pendant came from a "Baytown" burial, or basically the same technique of pendant making persisted for centuries. ^[Ed. note: Identical stone pendants are found on middle and late Archaic sites in the Yagou Basin.] The other object is a clay pipe. There are three fragmentary Baytown pipes ^[64328, 64329] in the collections, all evidently of the same type: the stem is tubular and expands toward the middle, then flattens out to

Ed. note: neither is listed in Peabody's catalog as being with a burial. Only two such pipes were recorded in the collection analyzed by Starr (this volume) p. 682 and 64396 are clay pipe fragments not included in the study collection.

a round-ended platform. Near but not at the end of this platform is the bowl, which has a sort of flowerpot shape. The whole thing is about four inches long.

No difference exists between the pottery from the lower burials and that from the upper, except that the two specimens from the lower level are unquestionably the finest Coahoma pots in the collection. One is a superb graceful little Mulberry pot, ^[64279] the other ^[64286] is a fine specimen of division 1 Alligator. The first specimen was enlightening to me; no longer do I feel justified in calling Mulberry the ugliest pottery type in the Southeast.

The upper level had three pots, two of which are lost. The other is the pot ^[64278] in ~~illustration~~ ¹; a specimen that receives detailed consideration elsewhere.

There are two other Mulberry pots which came to light over but considerably above the Coahoma burial area, well up in stratum 5. One ^[64271] was a division 2 or 3 incised pot, the other a little Baytown (Sharbrough) bowl ^[?]. Both were in extremely fragmentary conditions and associated not with full skeletons but with single skulls. The impact of these burials first struck me long after I had decided stratum 5 was certainly Hushpuckena in date, and it was a long and gloomy day before an explanation presented itself. The position of these burials directly above all the others and their fragmentary conditions certainly suggests aboriginal disturbance. We can imagine the Hushpuckena folk turning up

see p. 31

two of the really very superficial Coahoma burials in the course of mound construction. Evidently as an act of charity they collected the smashed vessels and the skulls and reburied them. As we shall see skull burial was a perfectly right and reverent mode of inhumation in Hushpuckean times, however much it might have offended the sensibilities of Coahoma people.

2. STONWORK.

Skulking among the hundreds of fine Oliver Phase points in the collections are forty-two gross and boorish specimens immediately recognizable as pre-Mississippian, evidently Coahoma phase, in date. They are in most cases typical Gary points (Ford and Webb, 1956, p. 52-4), a type that is a monument to the lack of lapidary imagination in the Lower Valley. All are about three inches in length, of course ~~shaped~~ ^{stemmed}, roughly chipped, and made of the old yellow-brown flint standby of the area. Most of the stems are straight or contracting, but four have expanding stems very much like point h, plate 9, in Collins, 1932. These points are somewhat better chipped than the average.

There are also three superbly chipped little Alba points of a fine white flint. These are the only points attributable to this phase that could easily have been arrow points. The flake-work on these specimens is hard to equate with that on the Gary points, but it is barely possible these Albas were made here: they are often found associated with

crude spearheads. On the other hand according to Bell (1958, p. 8) Oliver is way out on the periphery of Alba distribution, and these points might have come from the bows of Coles Creek Marauders from the south.

Other chipped stone artifacts attributable to the Coahoma Phase are a few oval knives and one good expanded base drill; two sandstone plummetts with grooved top (see illustration in Peabody, 1904) are Coahoma in date. There are undoubtedly other artifacts in the collections from this phase, but no study was made of the smaller categories of bone, stone and shell tools so no opinions may be offered concerning them.

3. SUMMARY.

As with the other phases we emerge with a clear picture of ceramics, burials and religious structures, a dim inkling of stone-working, and no knowledge at all about minor artifacts, domestic architecture, settlement pattern or extent of relationship with other phases. The Coahoma phase is evidently one of the later representatives of the family of "Deasonville" peoples. They are the only people still making Mulberry Creek pottery that are proven to have shared in the temple mound tradition. Their compatriots at the Deasonville site (Collins, 1932) seem to have had a similar type of religious (?) circular stockade, but evidently here it was not put upon a mound. The evidence for a burial mound-temple mound transition here has been dealt with. The

evolution seen in mound structure, stockade type and burial pattern is logical and straight-forward. The old Deasonville pattern probably was (if we may judge from the Deasonville site) a sacred area enclosed by a palisade on flat ground, with probably a little burial mound or two elsewhere on the site. To combine these two features by the simple expedient of raising one's sacred area onto a mound after the fashion of people in the Southern Delta is not a very great cultural jump to take. Actually the more revolutionary change on the site was that of the second stage when the mound was squared up, the stockade changed accordingly, and the burials relegated to a peripheral but nonetheless integrated feature of the total plan.

The major differences between this and the Mississippian pattern must be emphasized. In a sense the Coahoma Mound was not a "temple" mound at all. There was no house, only an enclosed sacred area and an unenclosed but restricted burial area -- old Deasonville patterns both. In the Mississippian temple mound the whole top surface of the mound as a unit is of little importance -- all is focussed on the house erected in the middle. Burials are not restricted but surround the house in a ring. They are certainly not part of the architectural plan of mound and temple and in many Mississippian cultures burials are not made in the temple mound at all. Certainly the use of the term "temple mound tradition" for both the Coahoma and Hushpuckena practices,

and the use of both that and "burial mound tradition" to describe two features of the same phase is less than instructive.

Whatever its dubious merits as one of the lesser flourishes of formative culture in the Southeast, the Coahoma phase seems fraught with implications for the present conceptual models of Southeastern prehistory.

II. THE HUSHPUCKENA PHASE.

1. BURIALS.

There are eight burials assignable to the Hushpuckena Phase by virtue of the grave goods accompanying them, or, in the case of those in the Big Mound, by virtue of their depth and relation to Stratum 6. There are two bundle burials, one unaccompanied, and the other with the fine effigy ("Pot Aleph") [64309] mentioned elsewhere. This last may be an Oliver Phase burial. There are moreover in the Big Mound two extended burials, one with an uncatalogued arrowpoint in the skeleton, and one fully flexed burial, or as Peabody terms it, a "sitting burial". It was the only such burial recorded in the excavation.

There are three recorded burials from the Cemetery Mound which are proven to be Hushpuckena Phase by their associated goods. The first consists of seven skulls laid out together in the form of a "T" within a three-foot-square area. An effigy bowl [64376] was associated, together with abundant red ochre. The second seemingly consisted of a fireplace surrounded by three skulls with all the other bones heaped in the middle and very charred. At the center of the pile was a small Neeley's cup [61896]. The third burial was a few inches below the second; it also consisted of the remains of three skeletons. The three skulls were together in a triangle, and stacked to one side on a pile were the bones in this order: hands and feet, arm bones, shin bones, thigh bones, and "trunks" presumably vertebrae, ribs and pelvis. It is

not certain, but a Neeley's bottle may have been associated with this grave.

No generalizations may be made from this small sample. Two types of burial not found in the succeeding phase are the fully flexed and the multiple burial variants. This careful separation of body parts, especially the isolation of the skulls is never found in Oliver and may be taken as a good Hushpuckena trait. Nothing anywhere near as elaborate can be found in the later phase.

2. STONEWORK.

Since no stonework is placed stratigraphically in the mound it is impossible to be sure which artifacts are of Hushpuckena derivation. By a process of elimination one type of arrowpoint was found to be possibly Hushpuckena: a variety of willow-leaf with the tip pointed, the ~~end~~^{base} round and the widest part at or near the base. There are two whole or partial specimens at Oliver of this type. Points identical to these, and often called "Nodena" points, are found throughout North-east Arkansas at an Early Mississippian time level. These must be sharply distinguished from another type of point also called "willow-leaf" and "Nodena" which, however, is widest at the middle and has both ends pointed, or one end pointed and the other slightly rounded. These points are very common at the Campbell Site (Chapman and Anderson, 1955) in Southeast Missouri and seem to be typical of the protohistoric period in that area. There are eight certain

specimens of this type at Oliver; they must all be considered too late in time to be part of the Hushpuckena Phase.

The number of broad-based willow-leaf points found on this site seems far too small to be the sum total of points for a whole phase. Possibly some of those points assigned to the Oliver actually belong here. Further evidence on this problem must come from future digs with better recording of artifact placement.

3. SUMMARY OF THE HUSHPUCKENA PHASE.

This phase seems to be a full-fledged member of the group of cultures known as Middle Mississippian. Pottery types and techniques all point to such northern manifestations as the Walls, Pecan Point and Parkin Phases.

Here as elsewhere in the Lower Valley evidence of the Southern Cult is entirely lacking; however that the Hushpuckena people had a ceremonial complex fully worthy of the appellation "Mississippian" is beyond doubt. They had a fine large temple mound improved and enlarged once and probably twice. A temple probably adorned the top. Burial rites were elaborate and complex.

The Hushpuckena Phase is of interest because it is the southernmost "pure" Mississippian phase yet isolated. There are no signs of Coles Creek Culture influence here, in direct contrast to the so-called Mississippian Lake George Phase in the Southern Delta. This is not to say that other pure Mississippian phases further south will not soon be

discovered: I have suggested the possibility of such a phase on the Lower Arkansas, there may be another in the Central Delta. Stephen Williams (personal communication) believes he has evidence of an intrusive pure Early Mississippian phase as far south as the Lake George region. The relationship between this phase and Hushpuckena is as yet unknown; one of Williams' pots however bears a close resemblance to the classic Hushpuckena pot form.

The Hushpuckena Phase at Oliver takes on new interest in this light. The evidence pieced together here must be regarded as preliminary data for a new chapter just now unfolding in the annals of the Mississippian peoples.

III. OLIVER PHASE

1. BURIALS AND BURIAL GOODS

To obtain an adequate sampling of Oliver burials I have compiled data on all the well-recorded burials in the Big Mound. This leaves out the few burials in the Cemetery Mound, and those burials in the Big Mound recorded only by such notations as "human bones found." My sample includes perhaps 80% of all the burials of the two subphases; this was an exceedingly difficult task. It was accomplished by first taking all the pots in burials with historic goods. Then ^{These} burials generally occurred in close-packed groups of the same depth. Analyzing the pots of the other burials in these groups I found that none of them possess characteristics that distinguished them from the known historic group. It had come to my notice that there was a huge group of burials on the west side of the mound which had no historic goods, and differed in other characteristics to be outlined presently. I then conceived the idea of making a profile map of the mound using the levels of the skeletons as my data, hoping that there would be a sprinkling of historic burials in the western group which would not conform in their depth to the profile map constructed on the basis of the deeper vast majority of the western burials, but would conform to a profile map made with the help of the historic group on the other sides of the mound. The task proved almost impossible because Peabody recorded not the absolute height of the

burials but their depth from the surface of the mound above them, from the surface of the mound at the profile ahead, or inconsistently from other crude reference points. He began by measuring from the profile ahead of him but this was impossible on the steeply sloping west side of the mound where the burials were often higher than the top of the next profile he was digging up to. Here his scientific method collapsed and he began to record burials in relation to the depth of the floor of the trench behind him, in relation to other burials, etc. I shall not dismay the reader with an account of the labors necessary to unravel this tangle.

Suffice it to say that even with the data no sensible profile maps could be constructed, and those that were proved in the end meaningless. Some of the deepest burials had undeniably late pottery, some of the highest, early. The spectre of reversed stratigraphy haunted my sleep. Then it occurred to me to separate children from adults and it turned out that the higher burials were usually children, and the pots with them, which I had thought in many cases early were merely better made miniature pots. I then reappraised my criteria for early and late, and came to the conclusion expressed in the section on pottery and replotted the burials arriving at the final map discussed in the stratigraphy section. The whole separation of early and late Oliver rests on a certain circularity of reasoning, but the conclusions presented here present the most economical

and reasonable interpretation of the data I could derive.

a. EARLY OLIVER

There are 48 burials assigned to this subphase, comprising 54 individuals, as there are at least six double burials. Some of the single burials are quite close together and may have been in the same pit. 46 of the burials are of the bundle type, with skulls either at one end of the pile of long bones or in the middle. There is no consistency in orientation. The other two burials, a child and an adult, are in Peabody's "on the back" or "extended" category. Whether these burials are fully extended or not is questionable. Over at Menard, Ford (n.d.) found no extended burials but a considerable number of flexed ones. Moore (1908, p. 488) on the other hand found large numbers of both. Ford illustrates his burials and it is easy to see where there might be confusion. Flexure at Menard is of all possible varieties, ranging from complete flexure to partial flexure to a position in which the knees are bent at 90 degrees, but the hip joint is entirely stretched out. Some burials are seated, others have the lower legs turned completely under the upper. Possibly both Moore's and Peabody's "extended burials" are mainly of the slightly flexed variety.

Seventeen of the burials had grave goods, in all but two cases pots, generally one per burial. The two other artifacts were a point (uncatalogued) lying near (not in) the skull of an adult, and a stone pendant with a child who

[?]
also had two pots. The pendant is almost identical to the right-hand one illustrated in Moore, 1908, figure 3. Some of the skeletons seem to have been surrounded with bark, or some organic material.

Only nine out of 38 adult burials contained grave goods, whereas eight out of the eleven children did. Of the three children which did not, one was actually an adolescent and another was buried with an adult, so only one out of nine typical child burials lacked grave goods. Some of the children are given regular adult pots, but many are given small bowls four to six inches across, replicas of adult bowls but in general much better made. It is evident from the amount and quality of the grave goods with children that they held a somewhat special position. Grave goods, since they are absent in the majority of burials, do not seem to be a prerequisite for passage into the afterlife in this culture, and it is hard to conceive of any purely religious motive behind the abundance of goods with children. Nor could they be a symbol of prestige or status. Rather they seem to be a mark of sentimentality or affection. We have no information on the sex of the burials, but perhaps some of the clearly utilitarian bowls were put with the women who made them. Others, such as some of the trade vessels, effigies and bottles are too large for toys, - they may be the child's own food bowl. One bowl with an adult in the cemetery mound was full of "charcoal," perhaps once some sort of food.

All types of vessels find their way into graves, but jars are rare, especially the incised types. The jars that are present are smaller than the norm in the sherd collections. Bowls and of course the special shapes are far more common in the cemetery than in the middens.

b. LATE OLIVER BURIALS

There are 71 Late Oliver burials in the sample, with 82 individual skeletons, 62 of which are adults, six adolescents (burials with the notations "epiphyses not united" or "wisdom teeth not yet erupted") and 13 children or babies. Peabody sometimes says "elderly" or "female" in his records, but he is not consistent enough to give figures on these categories. It is apparent however that members of both sexes and people of all ages were buried here. The incidence of children however is remarkably low compared to their abundance at Mound C on the Lake George site. Perhaps Peabody just missed a great many of the children (though he records many which appear to have been a "mere trace"), perhaps here we have a high "adult mortality rate" because of the epidemics.

61 of the burials were bundles. The others will be treated separately. There were seven double burials, two triples and one quadruple. Moreover all the late burials tended to cluster in groups of five or ten with the bundles, where Peabody supplies information, all oriented in the same direction. Some groups had their orientation east-west,

others north-south. The earlier burials formed no such convenient bunches. In two of these groups where there is good information the burials seem to be laid out in rows. It seems probable that these groups, one of which contains eight bundles in an area little over five feet square, are actually mass funerals made at about the same time. The quadruple burial, which comprises a smaller group, is almost certainly this. If this interpretation is correct, epidemic at Oliver seems likely indeed.

There were 16 out of 48 or 33% of the Early Oliver burials with pots; there are 25 out of 71 burials with pots here, very nearly the same percentage. Yet here 38 burials out of 71 had grave goods of some sort as opposed to only 17 out of 48 in the earlier phase. The reason for this is a phenomenal rise in non-ceramic goods - 21 objects or sets of objects in 18 burials.

Children again are liberally furnished with goods; eleven out of thirteen had goods of some sort. Of the two exceptions, one child is probably in a pit with another, and the other is buried with an adult. As in the adult category, a higher percentage of goods are non-ceramic than before, although the children's bowls are still a common feature.

Most of the trade vessels belong to this last sub-phase. Here they are all (three) ^[64267, 64269, 64291] with children, but on the Cemetery Mound one ^[64379] is found with an adult. These may actually not be trade vessels per se, but the possessions of refugees

See pp. 128-129

2 For notes

coming up from the south.

In the non-ceramic category only three sets of glass beads and two copper balls are true European artifacts.

[Peabody's catalog lists 6 sets of glass beads found with skeletons]

[57321, 64370]

[See Marvin Smith, this volume]

Dr. Willismá (personal communication) has ascertained that these artifacts are typical of the early historic period around 1700. There are also two sets of beads made out of a rolled tube of copper or brass and a copper point found lying near the head of a young adolescent.

[64355, 64356]

[57309]

[64372]

There are moreover pieces of mica found with an adolescent, two bear's teeth, one at each ear of an adult, a small rectangular shell plaque with two perforations found with a child, two bone awls, one each with a burial. There is also a set of tiny turquoise beads of a type common to the Southwest together with a tiny turquoise pendant of the same shape as the stone pendant in the early Oliver burial. This may be evidence of trade with the Pueblos. A set of quartz beads, evidently made in imitation of glass, and six sets of shell beads round out the roster of goods.

[64367]

[64359]

[57317, 57322]

[64421]

[64422]

[]

[64358]

[See Spooner, this volume]

Estimate

Let it be remembered that no jewelry was found with Hushpuckena burials, and only one stone pendant with an Early Oliver burial. It is evident that the jewelry industry received a terrific stimulus from contact. Dr. Willisms has remarked (personal communication) that stone points are overwhelmingly more common on historic sites than prehistoric ones in the Lower Valley. Ford (n.d.) states that nearly all the stone points and scrapers at Menard were found on the

surface and the top few inches of midden. The vast number of Oliver phase points on this site cannot be surely assigned to the later, historic portion of the phase, but it is likely that many or most date from then.

I should like to suggest an explanation. The two industries affected were once in which the whites offered appealing substitutes to the native forms -- metal points and guns on the one hand, and glass beads on the other. A demand was created for which, in the early historic period, the supply was totally inadequate. I know nothing of primitive economics, but here seems a strange situation: in two industries where supply and demand had remained at a stable low level for centuries, the sudden introduction of a new supply of high quality goods does not create a glut on the market, does not force the native industries to the wall, but rather creates an explosive new demand which stimulates native industries to unheard of heights of productivity.

• Later, when supplies of European goods became more readily available, native industries did become moribund and the Indians became quite dependent on the European trade goods, so much so that the control of the supply of trade goods became the major source of political power over the Indians. Once-free people became slavishly dependent on the European. From a functionalist point of view the last minute burgeoning of native industry seems a desperate effort by the society to avoid this suicidal dependence.

Although of course no Indians at the time could have been aware of the eventual consequences of the introduction of trade goods, there was apparently an element of conscious organization involved in the native industrial expansion. Some of the shell beads are far too large to have been made from the ordinary river clam and possibly were made of sea shells. (Dr. Goggenⁱ - personal communication - affirms that some of the beads are from conch columellas.) The turquoise may well have been from as far away as New Mexico. Considerable effort must have gone into securing good sources of supply in the hills for the stone industry. One might formulate a tentative anthropological law: when highly desirable goods are introduced into a society which cannot manufacture them itself, and which has no control over the supply and in fact may be dictated to by the supplies, all the resources of native industry and trade will be marshalled to create substitutes that will fill the demand. The eventual consequence of this is however an institutionalization of the new demand - large and high-quality stores of weapons will become the norm, jewelry will become a prerequisite for a "decent" burial. When the foreign source of high quality, more desirable goods becomes adequate to sate the now permanent demand, the substitute native industries will sink rapidly to a moribund state, and eventual cultural collapse, or at least dominance by the culture of higher technology will result. There is only one solution: rigid control over

^{suppliers}
~~surplus~~, dealers and workers in the new technology and incorporation of these into the society in positions of low power and prestige. This seems to have been accomplished by many Old World societies only marginally capable of supporting an iron technology: the ironworkers are made into an outcast, subservient and despised element in the social structure. This could not be done with the Europeans in the Southeast.

Aside from the theoretical implications of these finds of jewelry, they may provide an answer to a knotty archaeological problem. Trade goods are notoriously rare on early historic sites in the Southeast. Many sites have been found which archaeologists feel certain are historic but which have no trade goods and thus must be called "proto-historic." The discovery that ~~all the beads at Oliver were from the historic group of burials~~, that shell beads in any quantity do not precede glass beads, provides a possible way out. Certainly in a previous study of Fort Walton culture in Florida I found also that large quantities of jewelry were always associated with late sites, trade goods or no. Much more investigation throughout the Southeast will have to be done to support this, but I contend that large quantities of native jewelry on a late site, whether shell beads, "Chickasaw buttons," stone pendants or whatever, are as reliable an indication of historic occupation as trade goods, and much more common. Likewise the lack of large quantities

of jewelry or stonework, especially if burials are found, are a sure sign of a prehistoric site. The Lake George site may, for instance, even without burials be almost unquestionably prehistoric in its entirety.

Before we leave the subject of burials it remains to treat the "extended" burials. Of the ten, for eight we must accept Peabody's word that they are extended. One adolescent is certainly extended: he was the second burial found in the second season and the occasion of one of Peabody's artistic endeavors. One of the other two is an adolescent with a ⁶⁴³⁷⁰brass bell: he is in the feet-under-the-hips position prevalent at Menard. The other is an unaccompanied adult with his legs bent over at the hips so that the feet are resting on the skull. This burial, considered rightly by Peabody to be an oddity, is illustrated in his report (Peabody, 1904, plate 10).

It is noteworthy that of these ten burials, only two, both adolescents, have grave goods (jewelry). Two others contain the foreign arrowpoints that presumably killed them. They were evidently transported directly off the battlefield and buried. Bundle burial entails a good deal of waiting around and some work to get the flesh off the bones. The "extended" burials are evidently, then, evidence of some haste in the burial rites in certain cases. Extended burials may represent a special class of burial whose rites differed from the normal. This class evidently included those warriors

killed in battle.

At this point I should like to compare briefly the Oliver and Menard burials. Ford found a few skull burials, ^[Ed. note: one found in the 1971 salvage; see Ross-Stallings, this volume] a type absent [^] both here and in Moore's digs. Ford only found two pots in 24 burials and advises (n.d.) ^[see Ford 1961] [^] that many of his burials were most likely the returns of the skillful pot-hunter's probe. Both Moore and Peabody seem to have been digging, on the other hand, in relatively undisturbed deposits. We cannot accept skull burial as a distinguishing feature of Menard mortuary customs.

There remains the high percentage of extended-flexed burials at Menard as opposed to the relatively rare occurrence of the type at Oliver. The repertoire of possible burial positions was the same in the two cultures, the Menard people simply had a higher preference for the more hasty burial alternatives. There is a likely historical explanation for this.

If we accept the postulate that plague was responsible for the majority of burials at Oliver a horrible situation is revealed. The Oliver people in their unhappy ignorance, if we may extrapolate from nearby ethnographic examples, laboriously placed their plague-ridden dead in charnel houses, perhaps picked their bones, performed complex rites. We may even imagine that as the plague continued to spread the rites were performed with even greater care to please the gods. Little wonder that these hapless people died by the village-full.

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Ford (n.d.)^[see Ford 1961] quotes a French missionary who laments over the plague at Menard, saying how the poor people were buried two and three or more to a grave. But the important fact is that here missionaries and traders were present before and during the worst of the plagues. There are no records of it, but surely one of the first things the Europeans would have done is entreat the Indians to inhume the plague-ridden dead with all possible speed, if only for their own safety. This may well explain the prevalence of the hasty varieties of burial at Menard.

2. CHIPPED STONE

The only stonework from this phase that is stratigraphically placed consists of six arrowpoints from two burials. These possess a long straight-sided triangular blade, shallow side notches and a slightly concave base. One burial contained five of these points scattered among the bones. It was extended as were all Oliver burials with points, and its head was missing. The other burial had only one point and the man had not contributed his head to an enemy's trophy collection, but both can be reasonably supposed to have died in battle.

There are seven other projectile points in the collections very similar to these. In fact they all closely resemble points "t," "u," and "v" on plate 9 of Collins' Deasonville report (1932). There are four other stemmed projectile points, one of which is serrated and bears some

faint resemblance to those illustrated on p. 129 of Quimby's Bayou Goula paper (1957). All these projectile points are well-chipped, thin, on good flint of various colors and in general have a late look, but are entirely alien to Oliver.

According to Jennings (1941, p. 182) most or all Chickasaw points are triangular. Triangular points are also typical of Menard, Oliver, and probably of the as yet unpublished ^[See Williams and Brain 1983] late Lake George phase of the southern Delta. To the north in northeast Arkansas and southeast Missouri, the points are triangular or "willow leafed." Stemmed points in this period are a southern trait, being typical of the Natchez and it seems of the late population of Deasonville. It is from this general region, or conceivably from the central Delta, whose point types are unknown, that the stemmed points at Oliver come. Certainly those in the burials and perhaps the unplaced specimens came straight from alien bows and were not manufactured at the site. Atypical points at a site should never be considered trade, and except in the turbulent historic period it is unlikely that they were produced by refugee aliens. War is the most logical explanation.

No other alien points are present at Oliver unless some of the "willow-leaf" points which we have tentatively assigned to the Hushpuckena phase are actually from war parties of the late culture of the north at the Campbell site, etc. (Chapman and Anderson, 1955). The number of

"willow-leaf" points (21) is so small that it is unlikely they were a part of the Oliver stonework complex.

The typical Oliver point is triangular with a base about one inch long and length ranging generally between one and two inches, with a few larger and smaller. These points are overwhelmingly the most common on the site, and indirect evidence of their true placement is provided by a cryptic statement in Peabody's notes: "Most of the stones near the top to one foot down." A total of 314 points may be classed as of the Oliver type. There are moreover 217 broken bases and 238 tips which probably once belonged to such points. Bases are generally straight, sometimes somewhat convex, but almost never concave. The two or three exceptions may be the result of flaws in the stone. The base was made by chipping a series of small flakes off each side of the base along the whole length, creating a thin edge which approaches a straight line, evidently the norm. The sides on the other hand tend to be much more convex. This became very apparent when a study was made of the broken bases and it was found that the basal angles in the majority of cases approached 90 degrees. It was at first thought that these bases must have come from a very long point almost unrepresented in the whole point collections. But a re-examination of the latter proved that there was usually a gentle convex curve which allowed the basal angle to be so wide. Many of the specimens indeed have quite straight

sides, curving in only at the top to a blunt point, thus having a shape like a bullet. These points are triangular only in that they have three sides. In fact on some examples the sides actually go out from the base, somewhat like the sides on a Folsom point.

On many of the points a strange flaking pattern was used: one side had diagonal flakes across the whole blade, creating a very flat surface. The other side however had flakes going only from the side to the middle, leaving a slight ridge in the center. Here the cross-section of the points tends to be somewhat plano-convex, although all-told very thin. The stone used is a good flint: grey, black, yellow-brown, pink, yellow and jasper colors are represented. Evidently many sources of stone were being employed. Stones of many colors and thin finely-flaked blades characterize all Mississippian age points in the Lower Valley regardless of shape, in contrast to the thick yellow-brown points of older days.

Another extremely abundant class of stone artifacts are what I have called the triangular scraper, of which there are 281, plus about one hundred tips and bases. Actually many of these crude implements may be merely blanks for points, but a majority of specimens have three definite characteristics which set them off from points: first there is no basal side per se with the points' special thinning. Second, the shape is not geometrically a sort of

equilateral triangle, but a right triangle. That is, if we assume that the shortest side is the base (one cannot be certain) the point of meeting of the other two sides is not above the center of the base, but above one end of it. The longer side, the "hypotenuse," is generally very convex. Indeed all sides are often so convex that the shape approaches an oval. The third characteristic is a nubbin or hump of stone near or at the center on one side up to which most of the flakes lead. The bump looks as if it were caused by a flaw in the stone, but it is such a constant feature of these "scrapers" that this cannot be the case. Perhaps this feature is related to the slight ridge on one side of the points.

These scrapers are more generally made of the yellow-brown flint which is ever the utilitarian standby of people in the Lower Valley. They are on the average larger than the points.

The third common type of stone artifact is the "thumbnail" scraper of which there are 226 specimens. These well-known artifacts are quadrangular with two long sides, and a short and a longer "business end." In section they slant up slightly toward the larger end. The bottom is flat, composed of one flake-scar, the top has two flake-scars with the ridge between them running down the ^{axis} areas of the instrument. The sides and ends are composed of many small steep flakes. Sometimes the flaking on the sides is not steep,

Pipe Drive (20)

but the front end always has a sharp slope. Seventeen atypical specimens, evidently rechipped from other artifacts, have pressure flaking over all the surfaces. These scrapers are, except for three or four specimens, much larger than a thumbnail, ranging from just over an inch long to almost two inches. The colors of stone on these artifacts are just as varied as on the points.

There are a few other smaller classes of objects which might, on the basis of stone colors and fineness of chipping, be assigned to the Oliver phase. There are 21 knife-like objects, generally two to three times as long as wide ranging from one and one half to two and one half inches long. The better-chipped specimens are shaped like a long ellipse, with one end slightly larger than the other, like a very much elongated egg. One long side tends to be more convex than the other. These knives are comparatively as thin as the points, much thinner for their size than the scrapers. A few of the thicker, more crude specimens may be blanks.

There are twenty whole or fragmentary pipe drills. They are among the most carefully chipped objects in the collection. The whole specimens are shaped like long, narrow, thick willow-leaf points, in cross-section they range from flat lenticular to almost round, never being much more than a quarter of an inch wide, and averaging two inches or so in length. Some of the partial specimens may belong to the expanded base type drill of an earlier phase.

Lastly there are five small boat-shaped objects with a flat and a humped side, a bit less than two inches long. They exhibit no pressure retouching and could be blanks of some sort or even artifacts of the Coahoma phase.

There are other stone objects such as celts, both wholly and partially polished, worked pebbles, sharpening stones, and hammerstones, analysis of which was omitted for lack of time. Only intensive comparative study could have established their cultural provenience with any certainty. In all probability some of these objects, plus most of the over one hundred unidentifiable or waste fragments of flint in the collections originated in the Oliver phase.

There are two reasonably well documented sites in the Lower Valley whose stone industries bear strong resemblances to that of the Oliver site, the Campbell site in southeastern Missouri (Chapman and Anderson, 1955, pp. 14-20) and Menard (Ford, n.d.) [see Ford 1961].

The Campbell site is estimated by Chapman and Anderson to be late Mississippian in date (Chapman and Anderson, 1955, p. 150). Stephen Williams informs me (personal communication) that this site and two others in southeast Missouri are probably just prehistoric in date, say about 1600. Thus Campbell is contemporaneous with or a little earlier than the early part of the Oliver phase. Conceivably indirect historic influences from Canada were being felt in southeast Missouri at this time, i.e. the upheavals occasioned

by the expansion of the Iroquois. At any rate the moderate amount of ~~native shell jewelry~~ in the burials and the large quantities of stone on the site foreshadow the general southeastern historic developments.

There are 186 triangular points at Campbell two thirds of which have convex sides. The distinction between straight and convex sides seems from the photographs to be a relatively academic one reflecting only degree of curvature of the sides. The points illustrated all fall well within the Oliver range, and the general lack of concave-sided points agrees exactly with the situation there. But here the similarity ends. At least a third of the convex sided group are said to be reworked willow-leaves, and moreover there are 147 willow-leaf points evidently, from the photographs, mostly of the bi-pointed variety. It is barely conceivable that some or all of the Oliver points are reworked willow-leaf—I am not sure how one tells; however the virtual lack of whole willow-leaf specimens at Oliver makes this possibility exceedingly remote. Nevertheless the flaking on Oliver points suggests that the special trimming on the bases to make a straight line was one of the final stages in point manufacture. This trimming makes sense if triangular points in this culture were originally salvaged willow-leaves with the broken base trimmed off to provide an adequate haft. The parallel flaking on one side of Oliver points also suggests a willow-leaf tradition.

Certainly the Oliver and Campbell "triangulars" bear little close resemblance to the classic, often side-notched Cahokia triangular, and a separate origin for the type may reasonably be postulated. Of course a vague attempt at copying the Missouri point may have been involved. Be that as it may, whether Oliver is later than Campbell or not, the Oliver people seem to have fully freed the convex-triangular point from its humble makeshift origins by the time they arrived on the Upper Sunflower.

As for the rest of the flint industry at Campbell, Chapman and Anderson have no triangular scraper category. If such objects do exist they may be included in their "triangular projectile point blanks" category, in which there are 165 specimens. There are 115 snub-nosed or thumbnail scrapers, but 81 of these are of the small type (under $1\frac{1}{2}$ inches) which is very poorly represented at Oliver. Campbell also has pipe drills similar to the Oliver site and a few large flint knives which seem to be more willow-leaf shaped and better worked than the specimens I have placed in that category. (Numerical and form data in this discussion from Chapman and Anderson, 1955, pp. 15-20).

Despite the differences, Oliver and Campbell stone-working traditions have strong connections and most likely sprang from the same source, a source certainly not in one of the earlier Lower Valley Mississippian cultures. Despite this, the rest of the material culture at Campbell bears

little or no resemblance to that at Oliver: pottery is virtually unrelated in all but the most general characteristics. Conceivably however the bevelled inner rim mentioned as being characteristic of many of the vessels (Chapman and Anderson, 1955, p. 102) may be distantly akin to the Oliver and Menard everted rim, which is indeed in late Oliver pots reduced to a mere interior bevel. (See illustration number 2). Burials also are different -- they are all extended, and contain on the average many more pots than were found in Oliver burials.

The pottery at Campbell seems to derive in very large part from the native Walls - Pecan Point traditions (see Chapman and Anderson, 1955, pp. 100-102). If indeed as I have postulated the stone-working tradition is a better indicator of the origin of a culture than is the ceramic tradition, we must admit that the putative invaders at Campbell incorporated a vast number of native people into their village. Certainly the native culture, with minor alterations, became dominant in important spheres of the culture. Mixing of peoples seems a sloppy and unsatisfying interpretation of archeological data, but here it is an interpretation to reckon with. Amalgamation of tribes was by no means a rare occurrence on the historic level -- we need look no further than the Creek Confederacy for a good example. Amalgamation of peoples must generally lead to a certain merging of cultures. (The Natchez, it may be noted, seem a definite exception (cf. Quimby, 1953), but they could well be the excep-

tion that proves the rule. In their persecution, subsequent diaspora and continued fanatic attachment to their own peculiarities of culture they are, if a parallel may be drawn, the Jews of the Southeast.)

The other stone industry we wish to discuss is that of Menard. My information consists of hasty notes taken on Ford's (n.d.) manuscript. Ford first of all remarks that almost all of the stonework was found in the upper six inches of the deposits, an observation remarkably akin ^{to} the Peabody's comment about Oliver. This fact increases the possibility of there being two as yet undistinguished Mississippian phases at Menard.

Ford's sample is unfortunately small, but he does have 33 triangular points identical to those at Oliver even down to the characteristic flaking on the base. He divides his scrapers into two categories -- 19 "oval blades", the more carefully chipped specimens, and 9 "oval-scrapers", the more crude. His illustrations show most of these to be not so much oval as sub-triangular, just like the ones at Oliver. Illustrations of his cruder variety show the peculiar small hump so characteristic of the Oliver scrapers. There are also 12 snubnose scrapers which are similar to the Oliver and Campbell specimens. I noted down no size data, but the one copied drawing in my notebook is of a scraper of the larger, longer variety.

Ford also has a class of 19 crude vaguely rectangular

knives, a category poorly represented at Oliver. There are also eight "Nodena willow-leaf" points, four of which however were found in a single burial, seemingly as grave goods and not in the body. The large proportion of knives and willow-leaves here may be due to the small size of Ford's sample. Be that as it may, the similarities between the stone industry here and at Oliver are apparent.

Only a brief recapitulation of the other spheres of culture at Menard is needed here. Pottery shapes are virtually identical to Oliver ones, although the everted rim jar is known from only one specimen (number 2401 in Phillips' collection of pictures), due to the local aversion for jars as grave goods. Many of the types present at Menard and not at Oliver are attributable to Caddoan contact, and the major style found only at Oliver, the "pseudo-Blanchard" design on bowls, is attributable to contact with Leland folk. Differences that cannot be so easily explained away are the variant repertoires of incising techniques and designs. These however may be attributable to variant native traditions which had an impact on the products of the putative invaders. Burial types we have seen differ only in proportion. It is uncertain whether Oliver had the tradition of burials around houses on the flat or on small housemounds that appears at Menard.

Suffice it to say that in all spheres of culture on which there is a reasonable amount of data, a strong similarity

exists between Menard and Oliver.

3. ARCHEOLOGICAL EVIDENCE PERTAINING TO ETHNOGRAPHIC IDENTIFICATION OF THE OLIVER PHASE.

I have presented all the available evidence pertaining to the Oliver phase, and concluded that both it and the last component at Menard are manifestations of the same cultural tradition (diluted as it may be by "native" elements in both areas) and that this tradition is alien to the middle Lower Valley. The Campbell site seems to have been strongly influenced by this same tradition, but whether the major element of population on this site stemmed from the alien source is problematical.

Whether or not Menard was the historic Quapaw village of "Osotouy", to deny that the historic occupation at Menard, Douglas (Moore, 1908, pp. 524-31) and other sites in the vicinity were Quapaw is to indulge in quibbling. We know that the Quapaw were the tribe of the Lower Arkansas in historic times. But to infer from this that all the Mississippian material that Griffin (1952, pp. 237-8) lumps into the Menard phase is Quapaw is another matter. I personally believe there is an earlier Mississippian phase which is "native" and not Quapaw. I propose that there was an invasion into the Valley, probably from the north, at around 1500-1600.

Certainly in that period the Quapaw language existed as an entity -- languages do not differentiate fast enough to even think that the Quapaw tongue had not separated from its

closest relatives at that time. But whether the Quapaw tribe as an entity existed then is doubtful indeed, so one can only suggest that speakers of Quapaw, not the Quapaw tribe, were all or part of the invasion. Indeed the Quapaw, before amalgamation in the eighteenth century seem to have been a group of relatively autonomous villages with little or no tribal or confederational organization, although the relatively consistent village lists obtained by early European explorers indicates that they identified with each other to an extent.

Whether or not the people at Oliver spoke the Quapaw tongue is a question unanswerable from archeological data. There is however one indication that the Oliver phase was closely associated with the Quapaw, indeed included in whatever pan-Quapaw organization there may have been: the trade goods.

John Goggia (personal communication) has tentatively identified the trade goods at Oliver as late seventeenth to very early eighteenth century in date. ^[See Marvin Smith, this volume] At this time there is only one convenient and likely source for the goods: Arkansas Post, an establishment expressly set up for the Quapaw trade, very near a Quapaw village.

Trade goods are very sparse in the archeology of the region. Moore found 160 burials at Menard, ten of which had historic goods in them (Moore, 1908, p. 490). Ford (n.d.) ^[See Ford 1961] found four glass beads in his burials which is surprising, seeing that the pothunters left him only three pots. At Douglas Moore found historic goods in three out of 32 burials

(Moore, 1908, p. 525). His two illustrations (41, 42) show that the most common historic artifact was the rolled (presumably by the natives) brass or copper bead. This type of artifact is common at Oliver. It is noteworthy that all the Douglas burials were bundles, closely reflecting the Oliver situation. Eleven out of some 140 Oliver phase burials (80 late Oliver) contained historic goods.

There are three factors which may go to explaining the paucity of historic goods on the Arkansas: (1) Many of Moore's burials especially may date from the prehistoric. (2) Pothunters may have gleaned many of the goodies. (3) Relatively few of these rare objects may have been consigned to the dead. At Oliver we know some 80 of the burials were historic or nearly so, we know pothunting did not leave any visible traces on the Oliver mounds prior to 1901, and probably did not occur to a significant extent. We know also that in the cases of children at least there was little hesitancy to give the dead objects of value. Be all that as it may, even if we double or triple the amounts of historic grave goods at Menard, etc., to compensate for these factors, the proportion of historic goods to total graves at Oliver remains strikingly high. Remember that we are dealing with a small "hick" town in the backswamps that was not occupied for long in the historic period. To my mind the relative abundance of historic goods at Oliver can only be explained by some sort of direct access to the coveted stores of goods

at the Post. The turquoise also in all likelihood came to Oliver by way of the Lower Arkansas settlements.

This of course does not prove that the Oliver people were card-holding members of some sort of Pan-Quapaw Trading and Mutual Benefit League, but along with the evident similarities in material cultures, it indicates a close relationship with the Quapaw. Whether they spoke the Quapaw or any other Siouan tongue is impossible to ascertain.

Archeology then leaves us in the same position as ethnohistory: if we must assign the Oliver phase to any known historic group, the Quapaw are the most logical choice. But logic and probability are not, hard as it is to admit, proof.

CONCLUSION

In a sense this whole paper is nothing but conclusions of one sort or another -- a compilation of raw data must be that. One cannot summarize the contents of a site or the results of an excavation in a single sentence or a paragraph. Peabody had no set objective in these excavations, so what he got was simply what the site offered: stray bits and pieces of information which when fitted into the framework of Southeastern prehistory fill in little corners of gaps here and there. My job was merely to compile these tidbits and point to the holes where they seemed to fit. Out of this can come no general concepts or all-inclusive syntheses.

Still in all one salient fact has emerged from all this drudgery and detail, a fact of no consequence to theories of culture change or models of prehistory, but of no small import to the science of archeology as a whole. The fact is that mouldering in the archives and cellars of museums lie untold riches, limitless data to be had with the expenditure of only a little time. There is only one drawback to this data -- if you go to it looking for something, seeking to solve any one particular problem, the chances are that you will meet with no success. The conclusions I had hoped to reach -- that the Oliver people were Quapaw, that there was cultural continuity in the Northern Delta -- proved impossible of proof. But if one goes to the data merely hoping to discover what is there, if one gets to know each

page of notes and potsherd like an old acquaintance, undreamed of peekholes into the past will be opened. The most important ideas in this paper, those concerning the burial mound-temple mound transition, the Hushpuckena-Oliver dichotomy, the historic Florescence of jewelry and stonework, all came to me unbidden after having digested some new portion of the data.

There is a strange perversity of data such as this, that will answer only questions of its own choosing. Its value is not lessened thereby in the long run and its fascination is considerably increased. Only by prohibitive effort as outlined in the introduction can the answers to modern questions be wrung out of ancient data. The conclusions of this paper are as random and disconnected as the data from which they were derived. It can only be hoped that what ~~views~~ ^{veins} of significance there were have been laid bare and that what was worthy of rescue from oblivion is contained within these pages.

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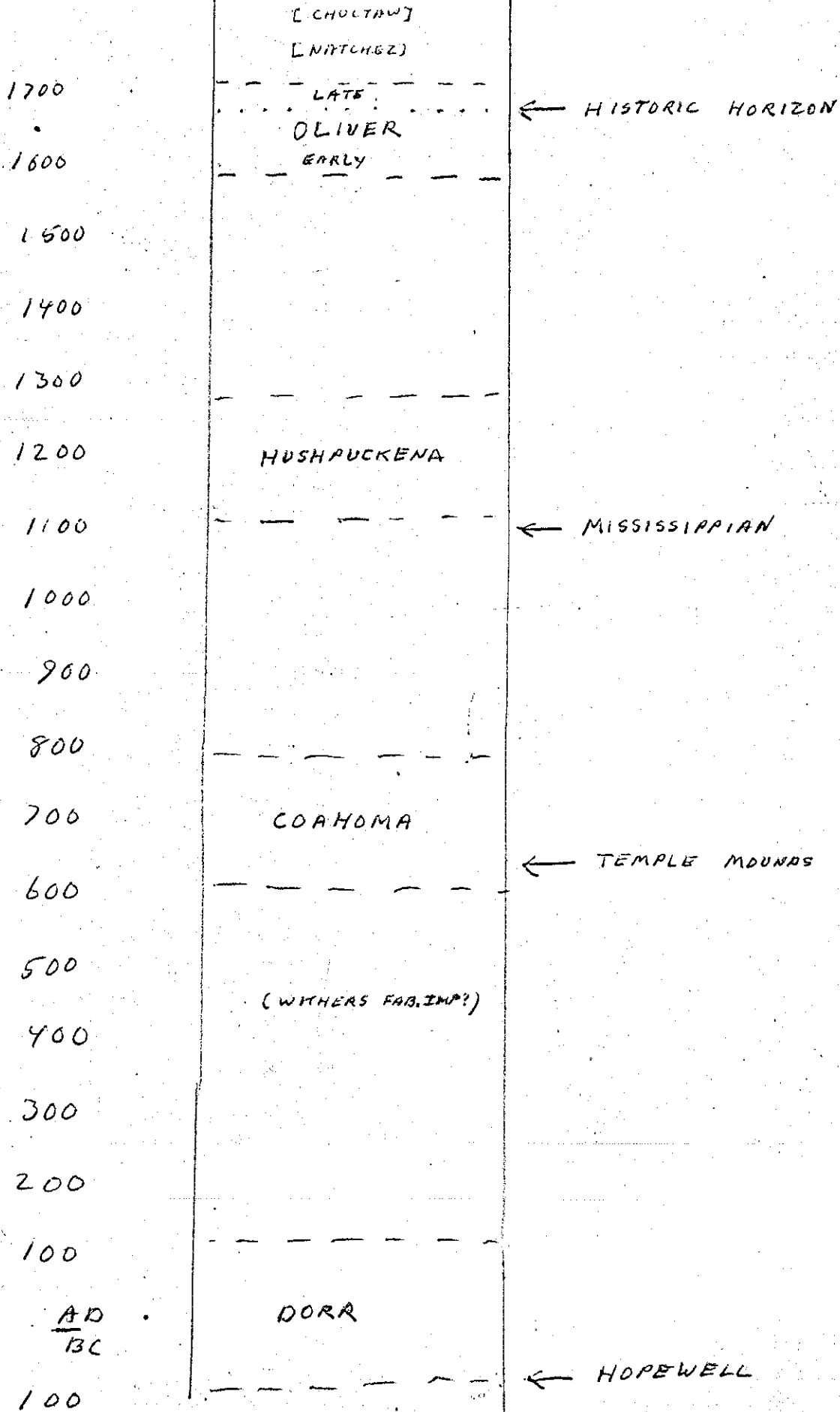
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move up
↑

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CHRONOLOGICAL CHART - UPPER SUNFLOWER SEQUENCE



DORR - MAP 1

- THE DORR SITE
FROM A SKETCH MAP IN
FARABEE'S FIELD NOTES

SCALE

1 INCH = 50 yds.

SUNFLOWER
LEVEE



4' HIGH



BIG MOUND
8 1/2' HIGH
20 x 30 yds.



2' HIGH



2' HIGH



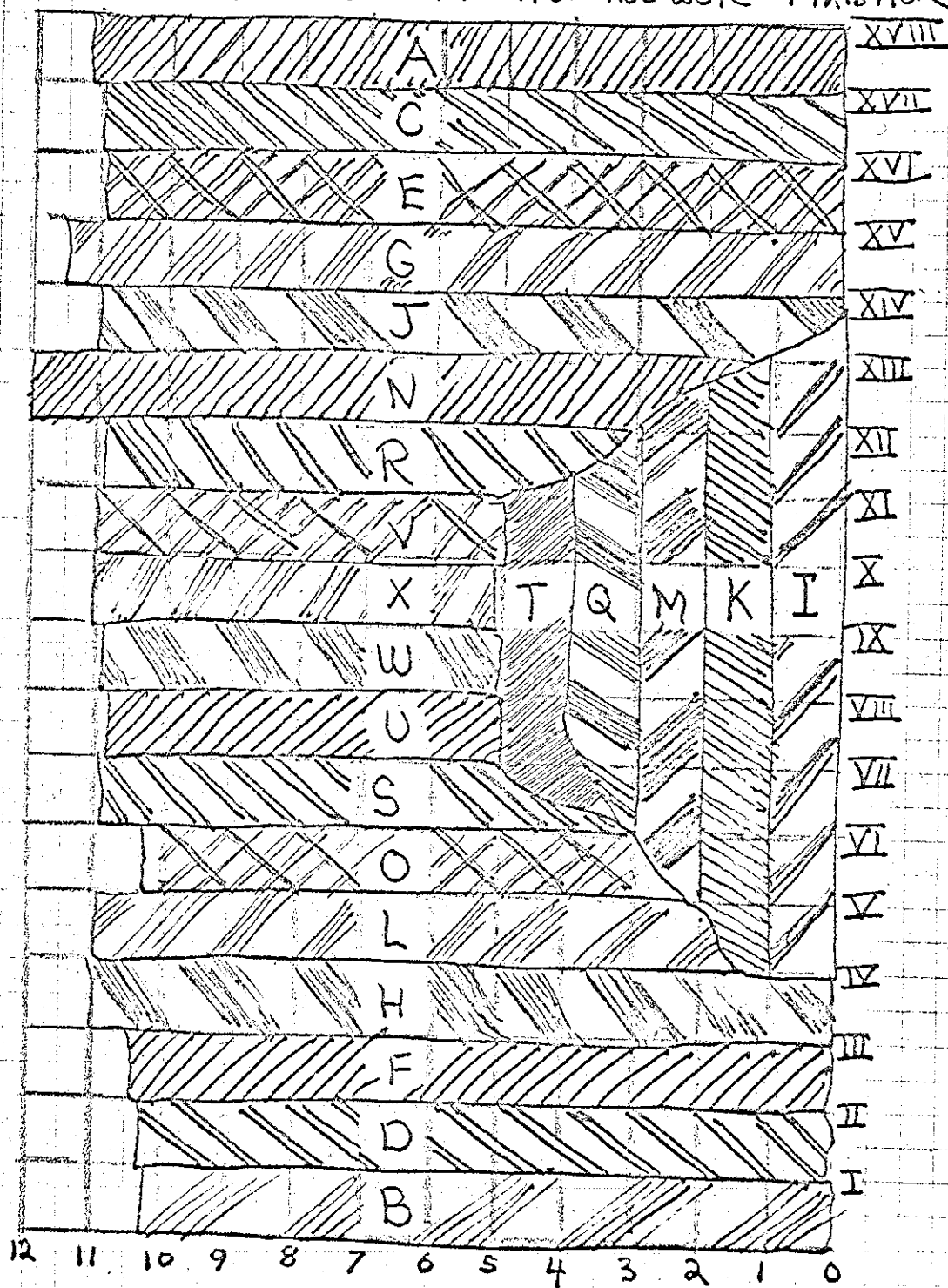
5' HIGH

CLARKS DALE (?)

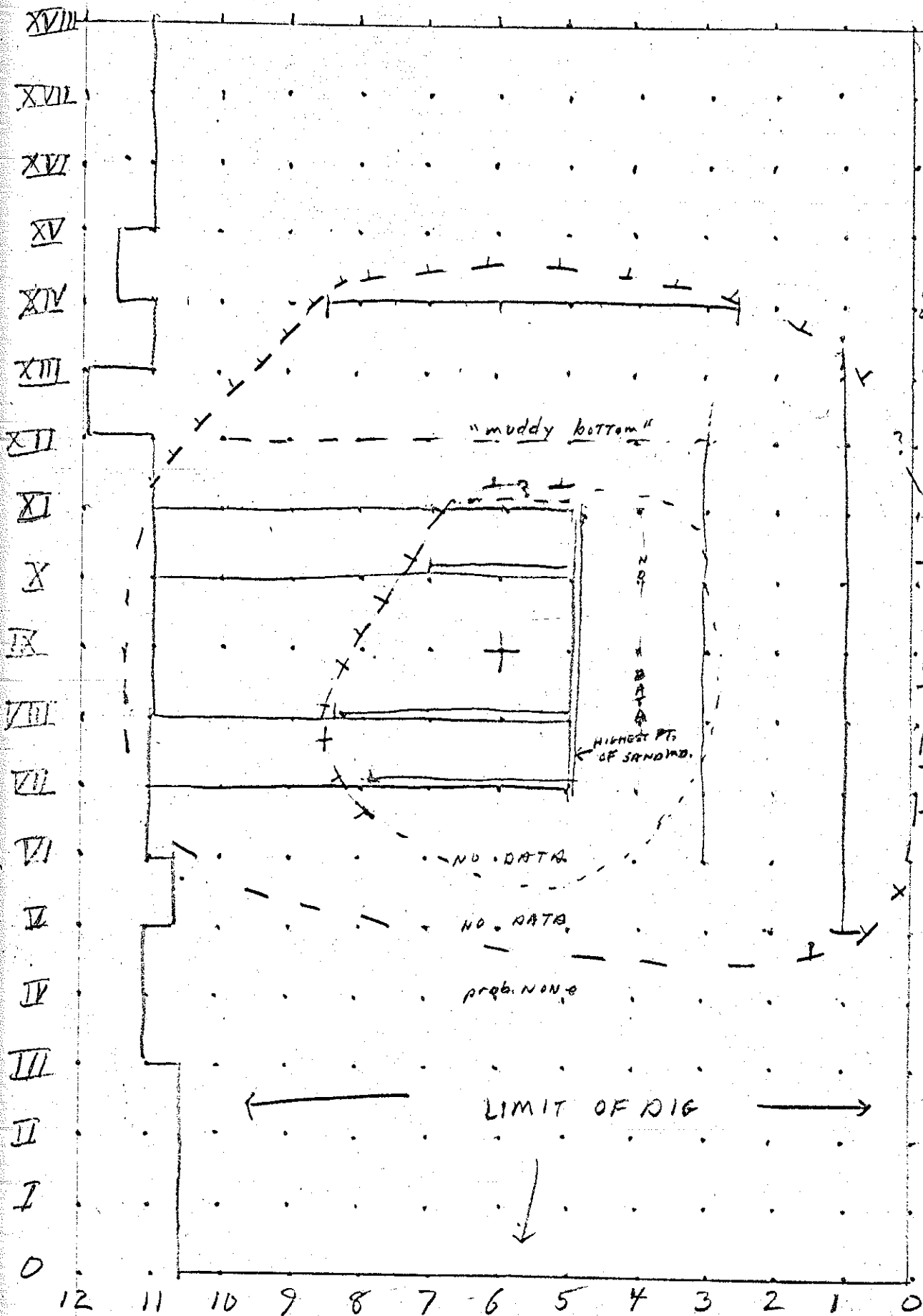


SEQUENCE OF Digging At Dorr

Letters represent the sequence in which the Trenches were Finished



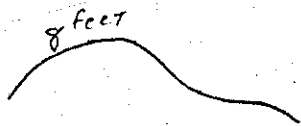
STRATIGRAPHY OF DORR MK.



KEY

- INK: DATA ON SAND MOUND
- PENCIL: DATA ON BUCKSHOT LAYER
- LINES SHOW PROFILES WHERE ON THE STRATA WERE RECORDED
- : STRATUM ends on pr.
- : STRATUM goes beyond PROFILE
- : known border of STRATUM
- : GUESSED border of STRATUM

KEY TO MAP Z



CONTOUR LINES
AT 1' INTERVALS

XVI
3

(LOW MOUNDS)
Peabody's Grid numbers.

----- Peabody's "FOOT OF MOUND" LINE

Burials

- Peabody's numbering system, the duplications (ie 26, 26', 26'') and the omissions (ie NO 48) are his.

23

flexed burials

10

extended "

5

all others bundle, partial, skull; The majority have modern

35

ON or just below buckshot layer

27

probably " " " " " "

INT

one burial singled out by Peabody as INTRUSIVE; NO POSITION DATA

G

four grave pits in Peabody's profiles; NOT REFERRED TO IN HIS NOTES

D

"Deasonville" artifact (Coahoma Phase)

7

"Deasonville" artifact(s) assoc. with burial

3?

artifact assoc. with burial; probably "Deasonville"

H

"Hopewell" artifact (Dorr Phase)

H-46-7

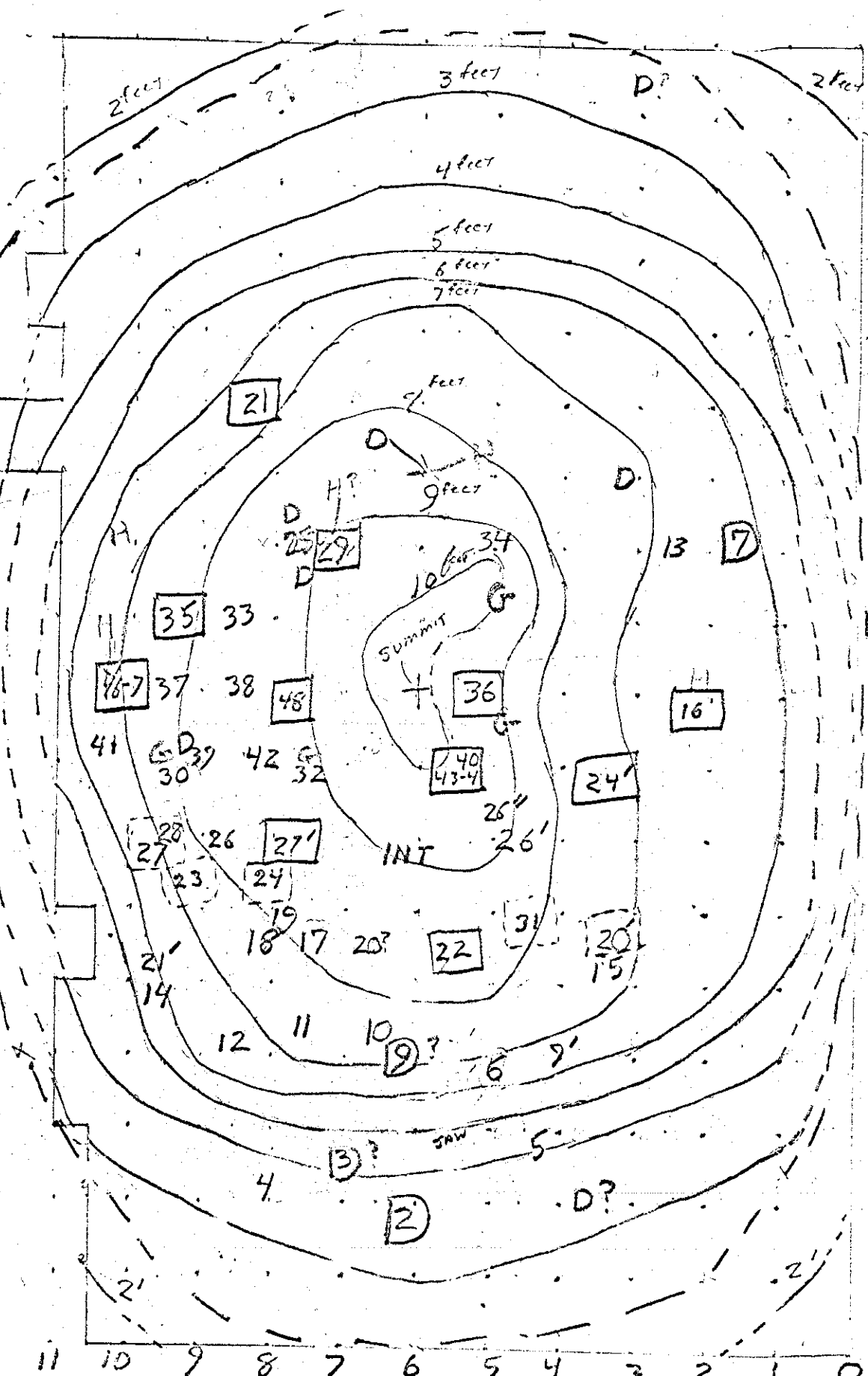
assoc with burial

H-29

artifact assoc with burial; probably "Hopewell"

OMITTED FROM MAP: 12 modern burials
(Peabody's count)

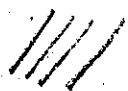
XVII
XVI
XV
XIV
XIII
XII
XI
X
IX
VIII
VII
VI
V
IV
III
II
I
0



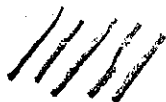
N
↑
0', or DATUM,
BOTTOM OF
EXCAVATION

SCALE 1 inch = 10 feet

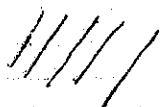
GENERAL KEY TO OLIVER MAPS



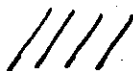
ASHES



BURNT CLAY



BUCKSHOT



SHELLS



POSTHOLES



ASH PITS



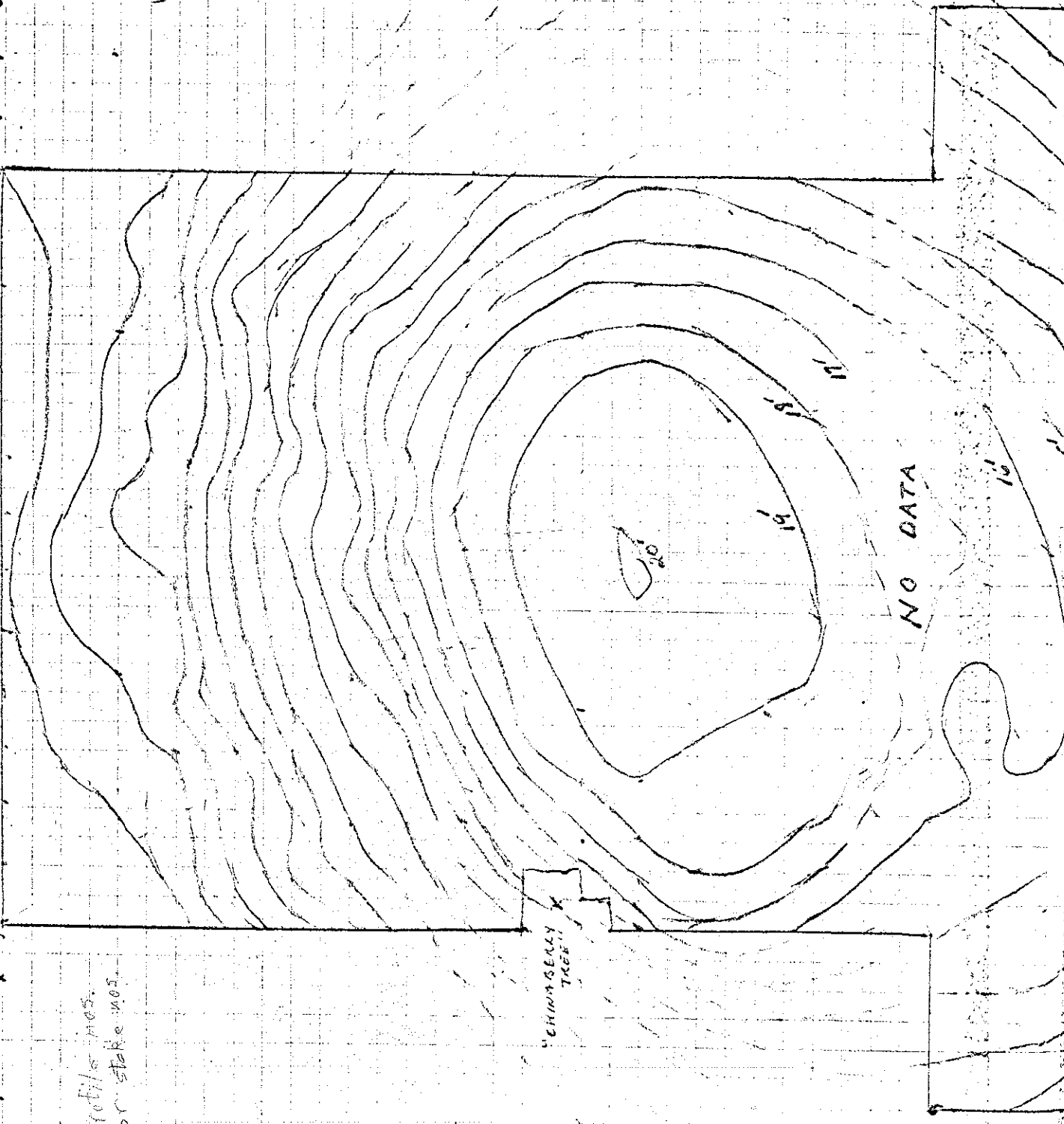
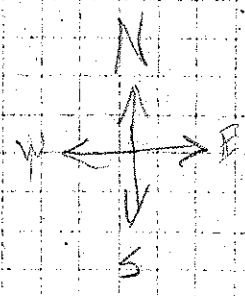
BURIALS



CONTOUR LINES

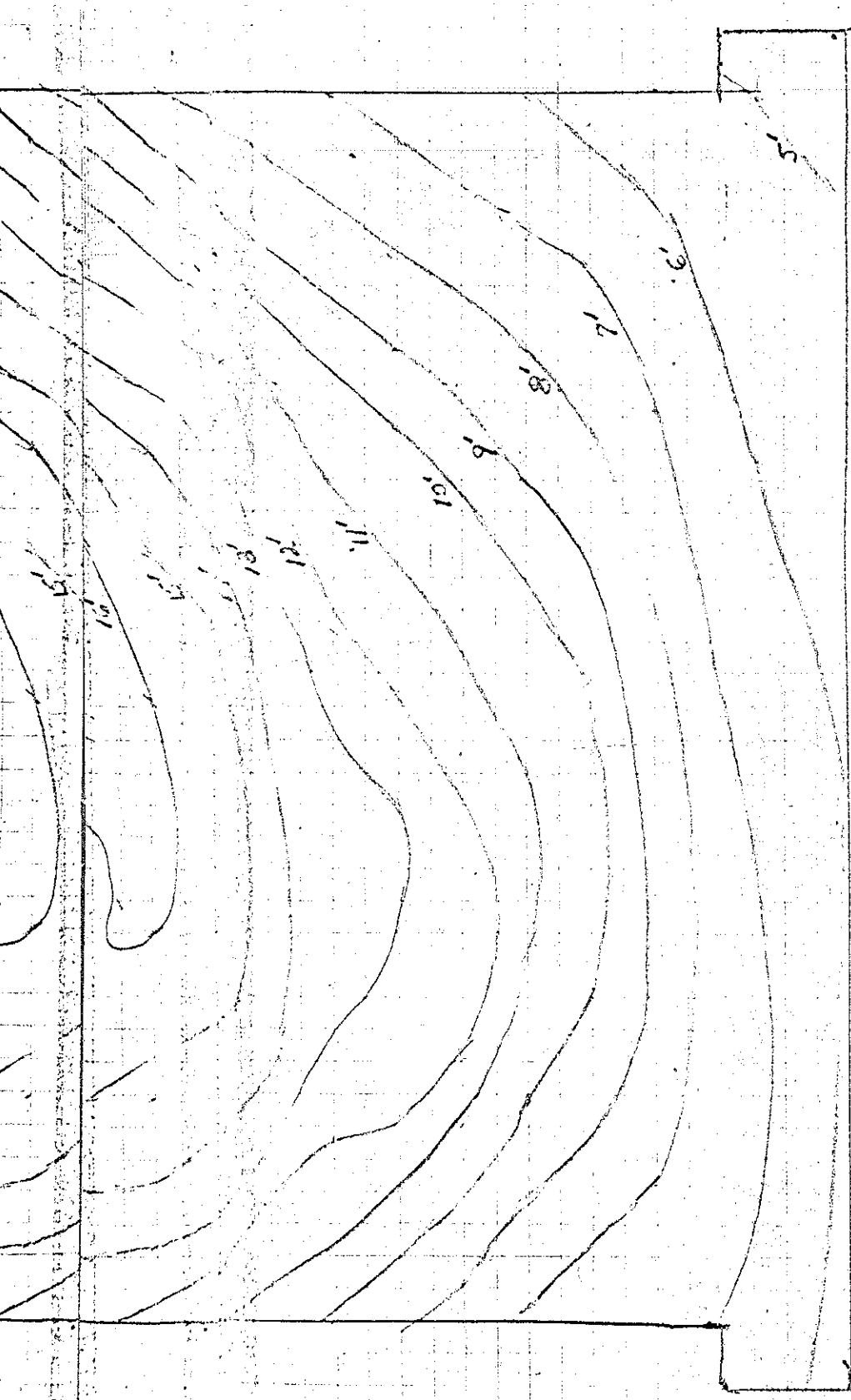
31 30 29 28 27 26 25 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1

Track nos. →
28 profiles nos.
29 ← or stake nos.



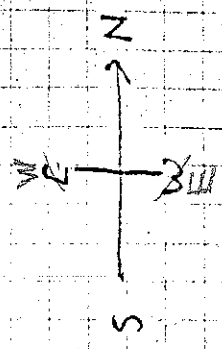
CHIMASELY TREE

NO DATA



U T S R Q P O N M L A B C D E F G H I J K

"NUMBERED STAKES"



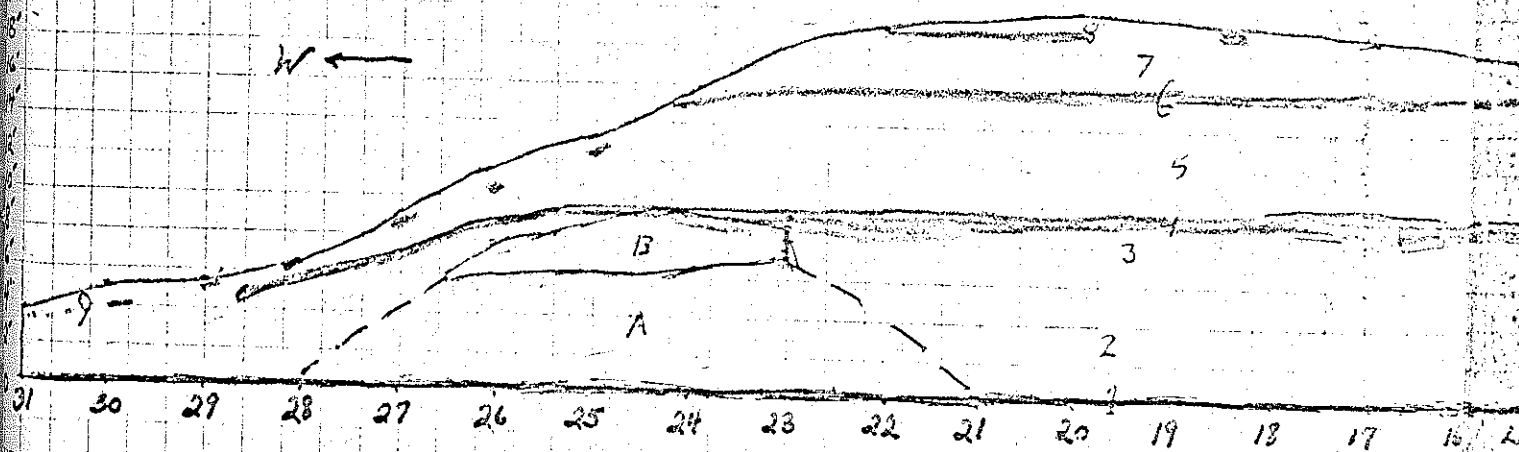
MAP 1

BIG MOUND - OLIVER SITE, 1901

SCALE: 1:54

MAP 2
SECTION THROUGH
MOUND AT NUMBERED STAKES

(STRATA A & B as seen at stake end.)



KEY: STRATUM 10-HUSHPUCKENA FLOOR

9-HUSHPUCKENA FLOOR (P)

8-HUSHPUCKENA OF OLIVER

7-MOUND FILL
(HUSHPUCKENA PHASE)

6-HUSHPUCKENA FLOOR

5-MOUND ~~FLOOR~~ FILL
(HUSHPUCKENA PHASE)

"Critical Level" { 4-BUCKSHOT
(COANOMA PHASE) } M₁ FI

3-MIDDEN

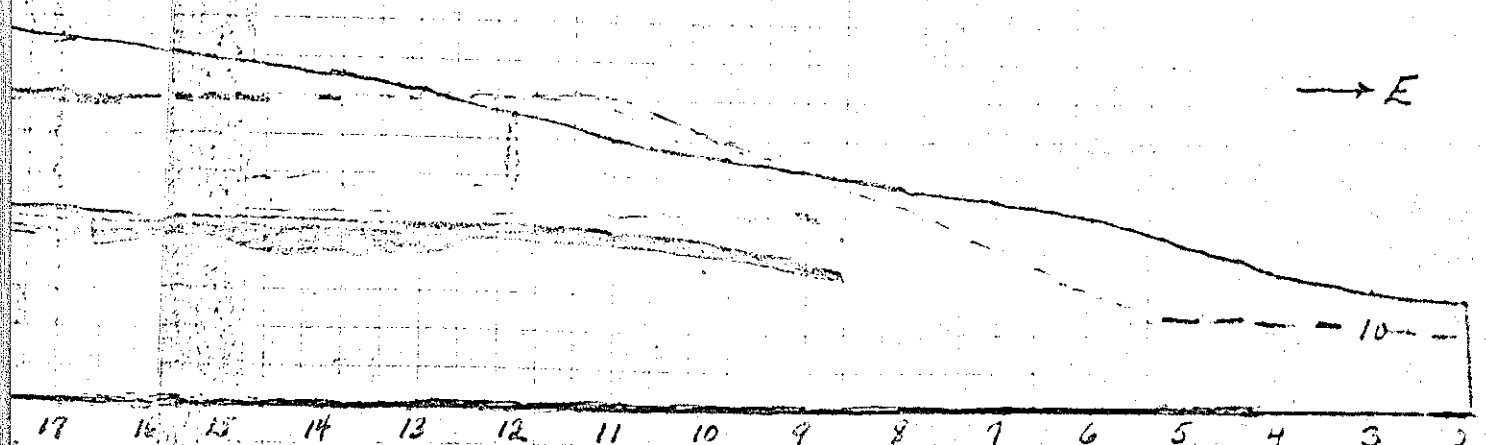
(COANOMA PHASE)

2-MOUND FILL
(COANOMA PHASE)

"Soil Layer" 1-MIDDEN
(COANOMA PHASE)

A-BURIAL MOUND-1ST ST
(COANOMA PHASE)

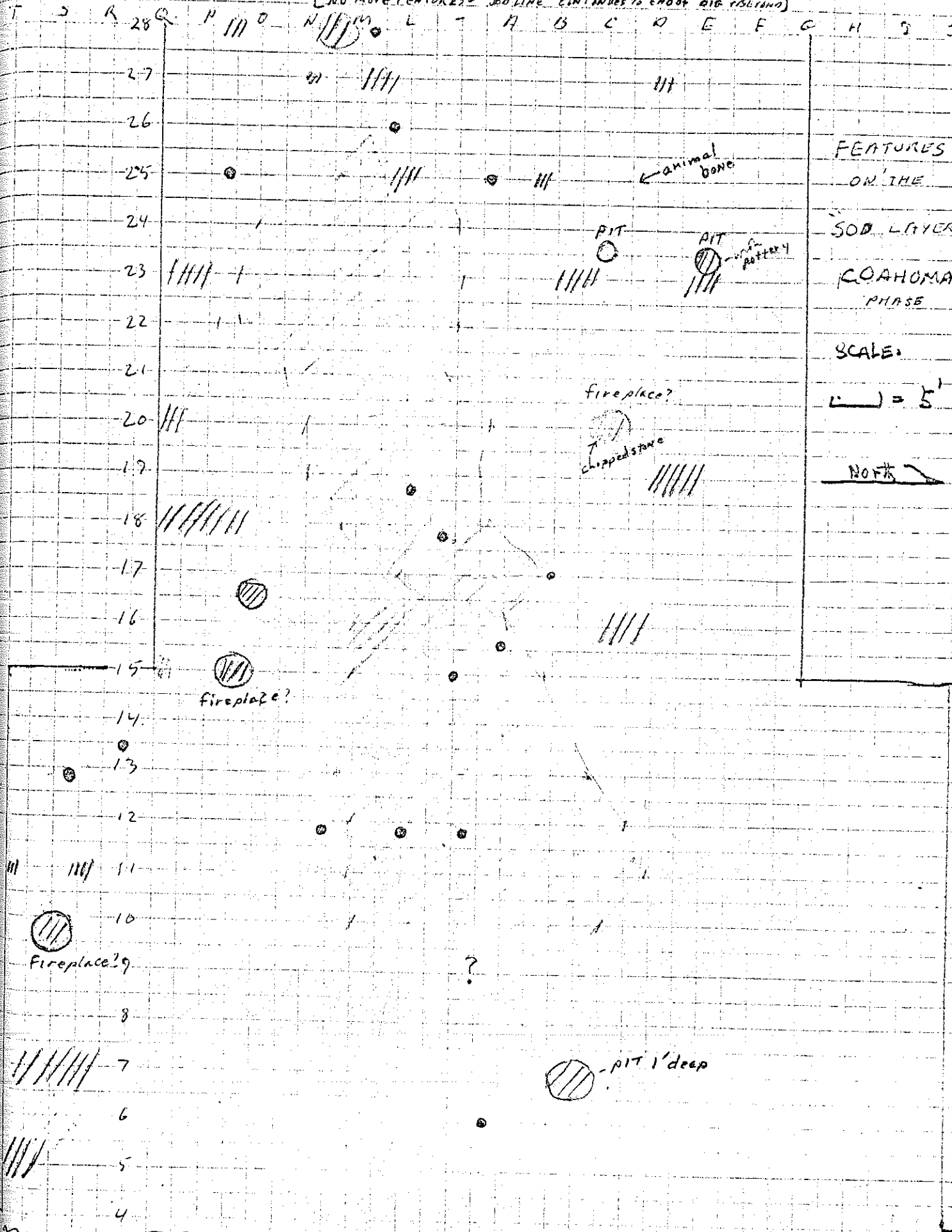
B-BURIAL MOUND-2ND ST
(COANOMA PHASE)



SCALE: 1" = 10'

STAKES

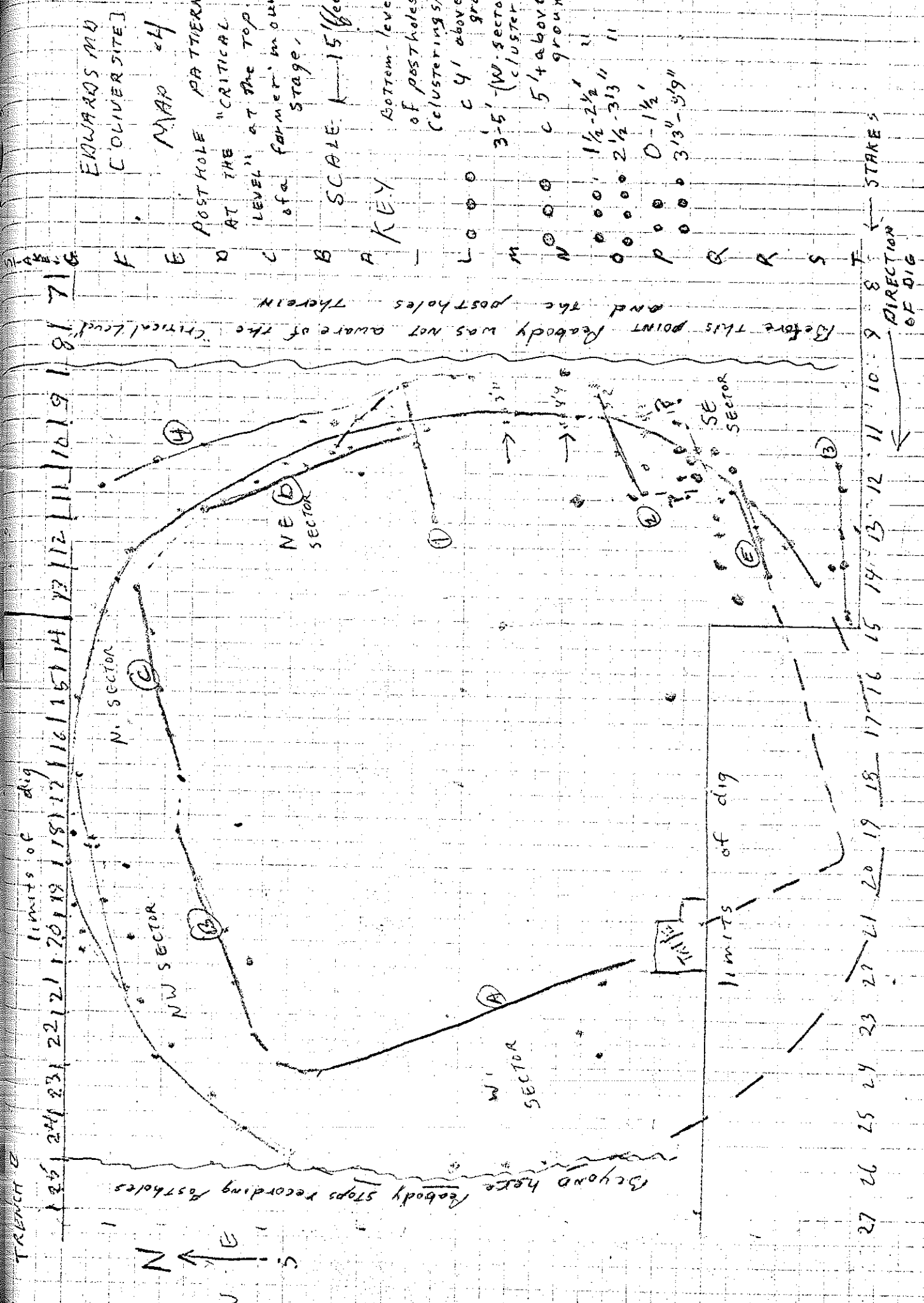
[NO MORE FEATURES - "SOIL LINE" CONTINUES TO END OF DIG (SLIND)]



FEATURES
ON THE
"SOIL LAYER"
COAHUATAN
PHASE

SCALE:
1" = 5'
North

STRATUM NOT NOTICED AT STAKES 382, beginning of the dig



EDWARDS M.D.
[COLIVER SITE]
MAP #4

POSTHOLE PATTERNS
AT THE "CRITICAL
LEVEL" AT THE TOP
of a farmer's own
stage.

SCALE 15 feet

A KEY

Bottom level
of postholes
(clustering)
C 4' above
ground
3-5' (W-sector /
cluster)
C 5' 4" above
ground
1 1/2 - 2 1/2'
2 1/2 - 3 1/3"
0 - 1 1/2'
3' 3" - 3' 9"

TRENCH B

limits of dig

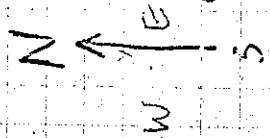
limits of dig

Beyond here Rebody stops recording Postholes

Before this point Rebody was not aware of the "critical level" and the postholes therein

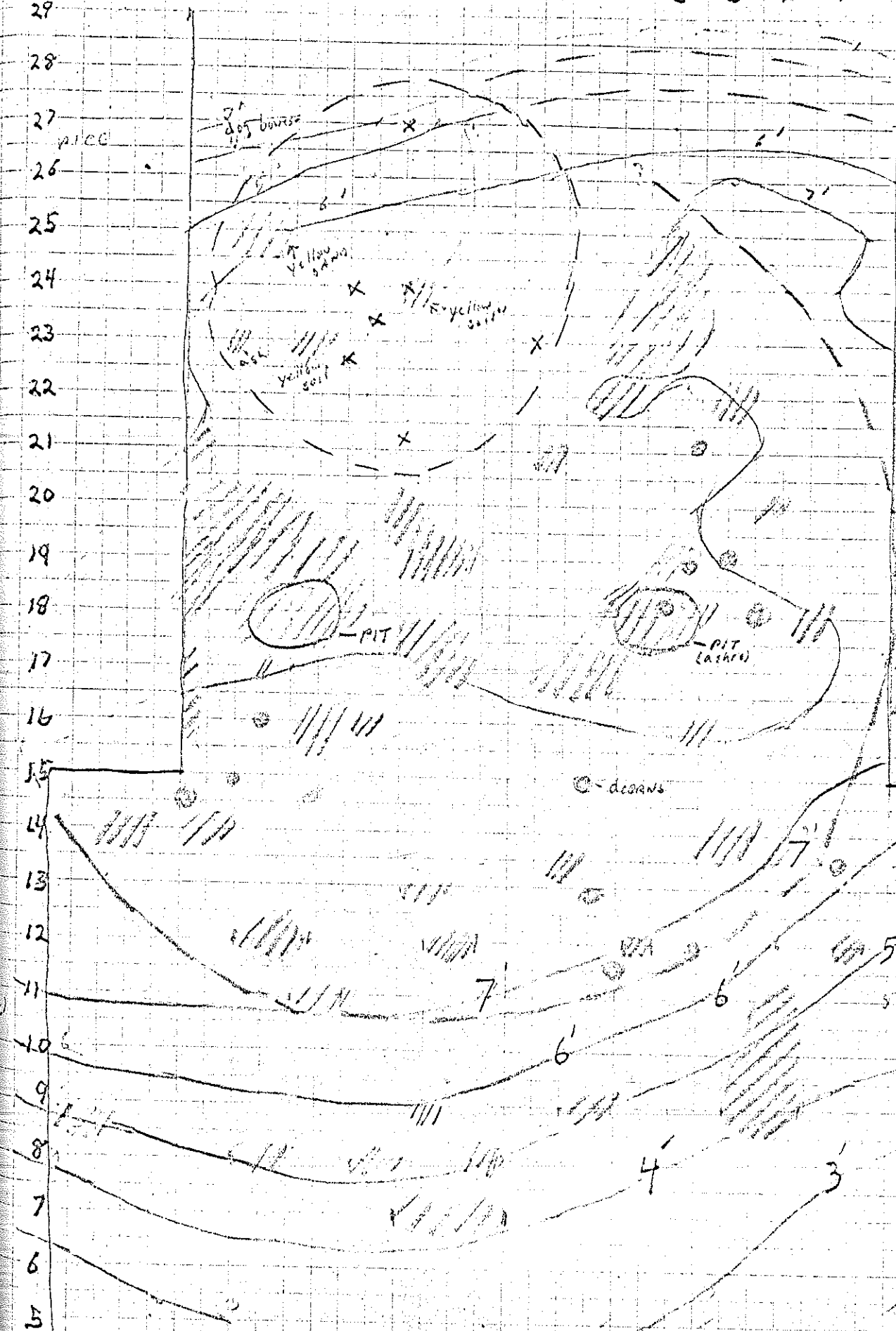
STAKES

DIRECTION OF DIG



STAKES

PROFILE Q P O N M L - A B C D E F G



MAP 5

FEATURES
ON FLOOR
ABOVE
STRATUM 2
KOHOMA
PHASE

SCALE: 1" = 3'

NORTH →

KEY

- STRATUM A LIMITS
- CIRCULAR STRUCTURE (SEE MAP 4)
- /// ASHES WITHIN STRATUM 2

STAKES

Q P O N M L - A B C D E F G

NO FILE
29
28
27
26
25
24
23
22
21
20
19
18
17
16
15
14
13
12
11
10
9
8
7
6

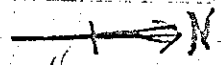
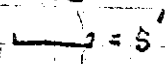


MAP 6

FEATURES
ABOVE
STRATUM 4

COAHOMA
PHASE

scale:



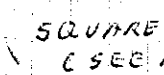
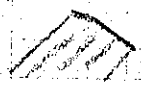
KEY

STRATUM 3

STRATUM 4
(BUCKSHOT)

STRATUM 3
(MIDDEN)

SQUARE STRUCTURE
(SEE MAP 4)



STAKES

U T S R Q P O N M L - A B C D E F G H I J K

PROFILE 31

30

29

28

27

26

25

24

23

22

21

20

19

18

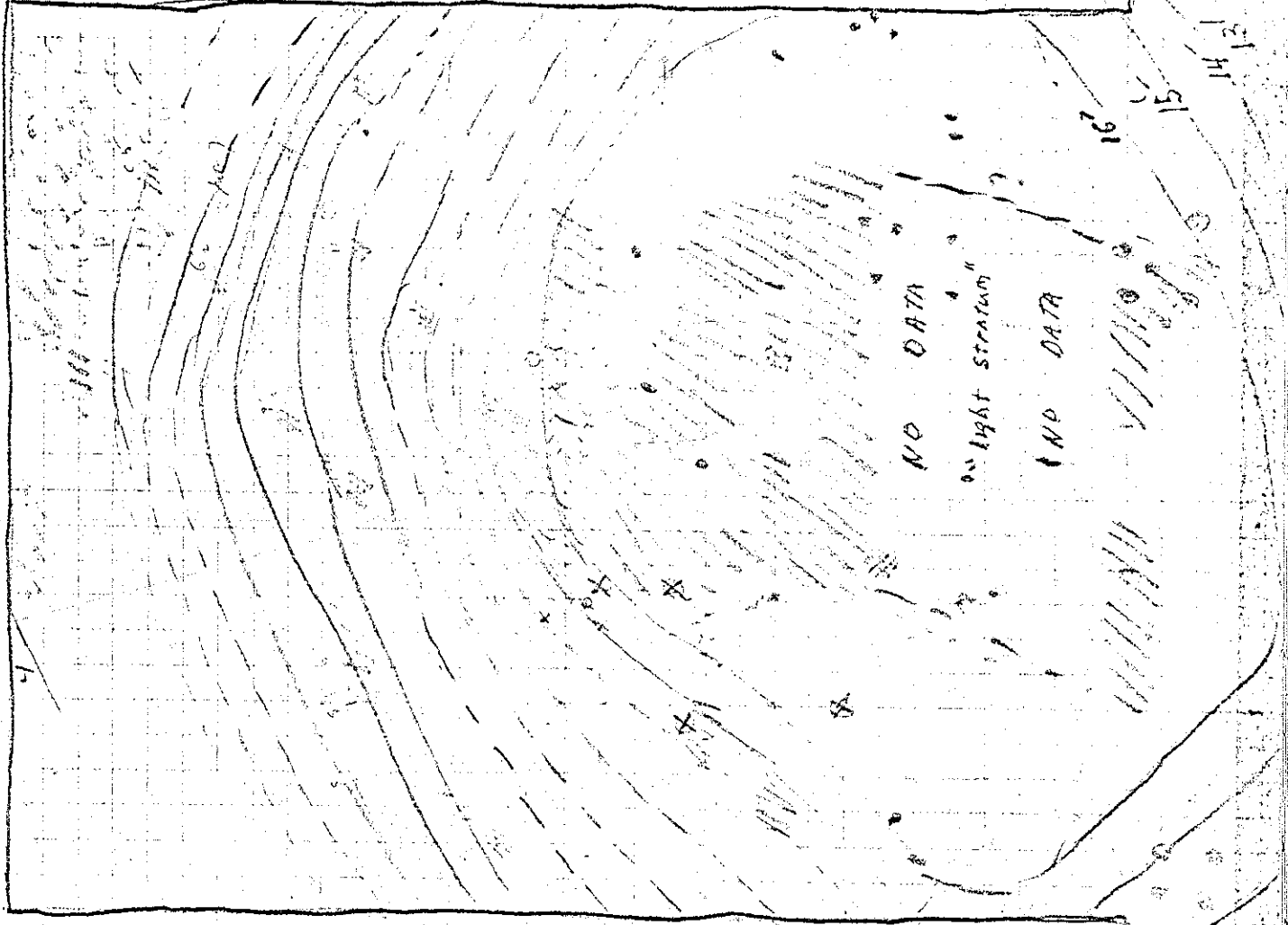
17

16

15

14

13

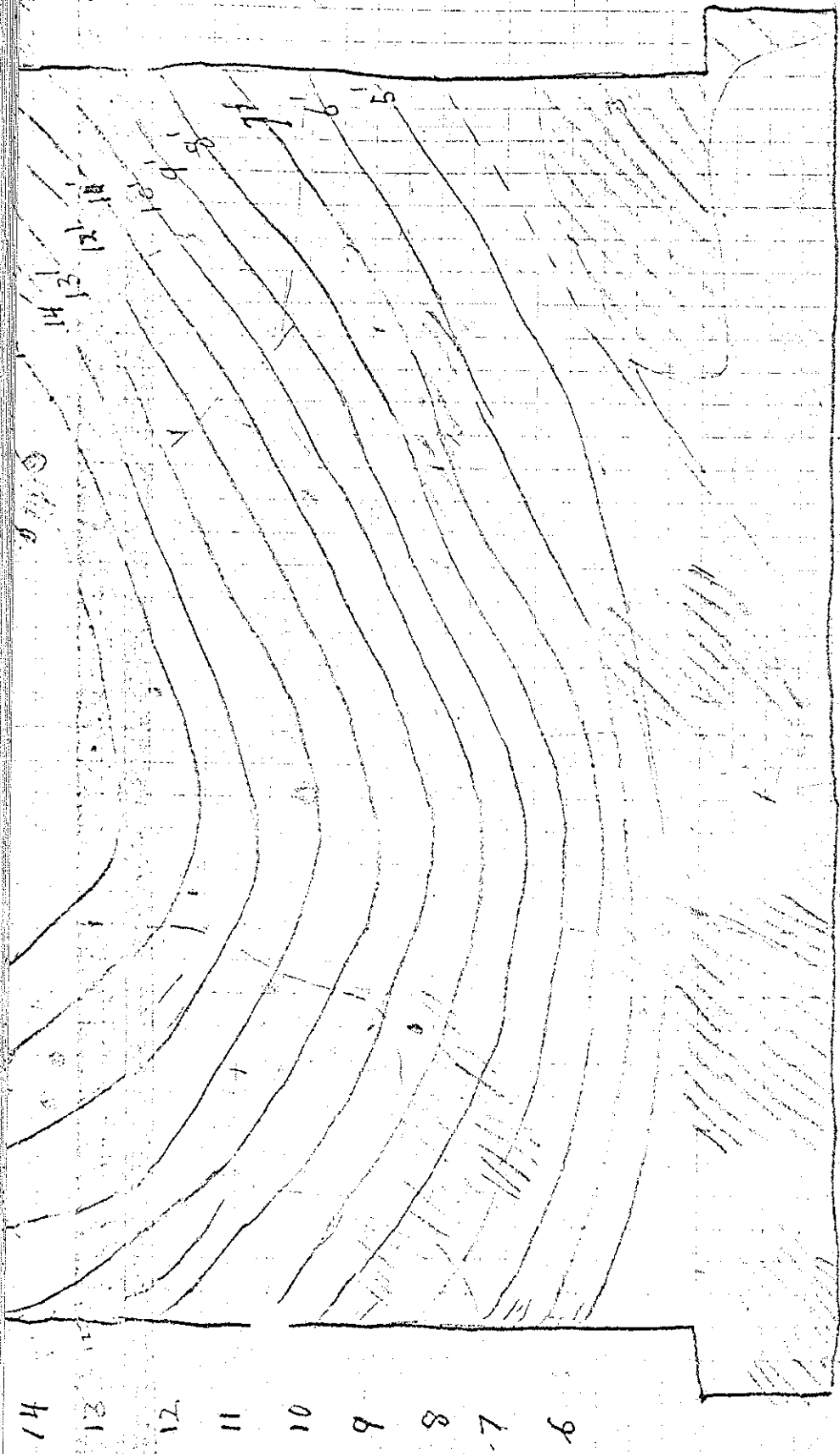


NO DATA

"light stratum"

NO DATA

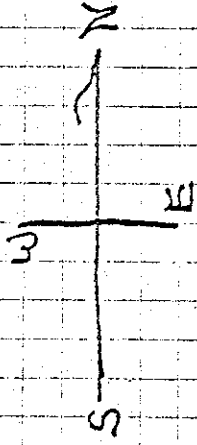
13
14
15
16
17
18



MAP # 7

The Big Mound
During

THE HUSHPUCKENA PHASE



Key

- o o Shallow post Holes
- o o Deep post Holes

STAKES

V T S R Q P O N M L - A B C D E F G H I J K

PROFILES

30

29

28

27

26

25

24

23

22

21

20

19

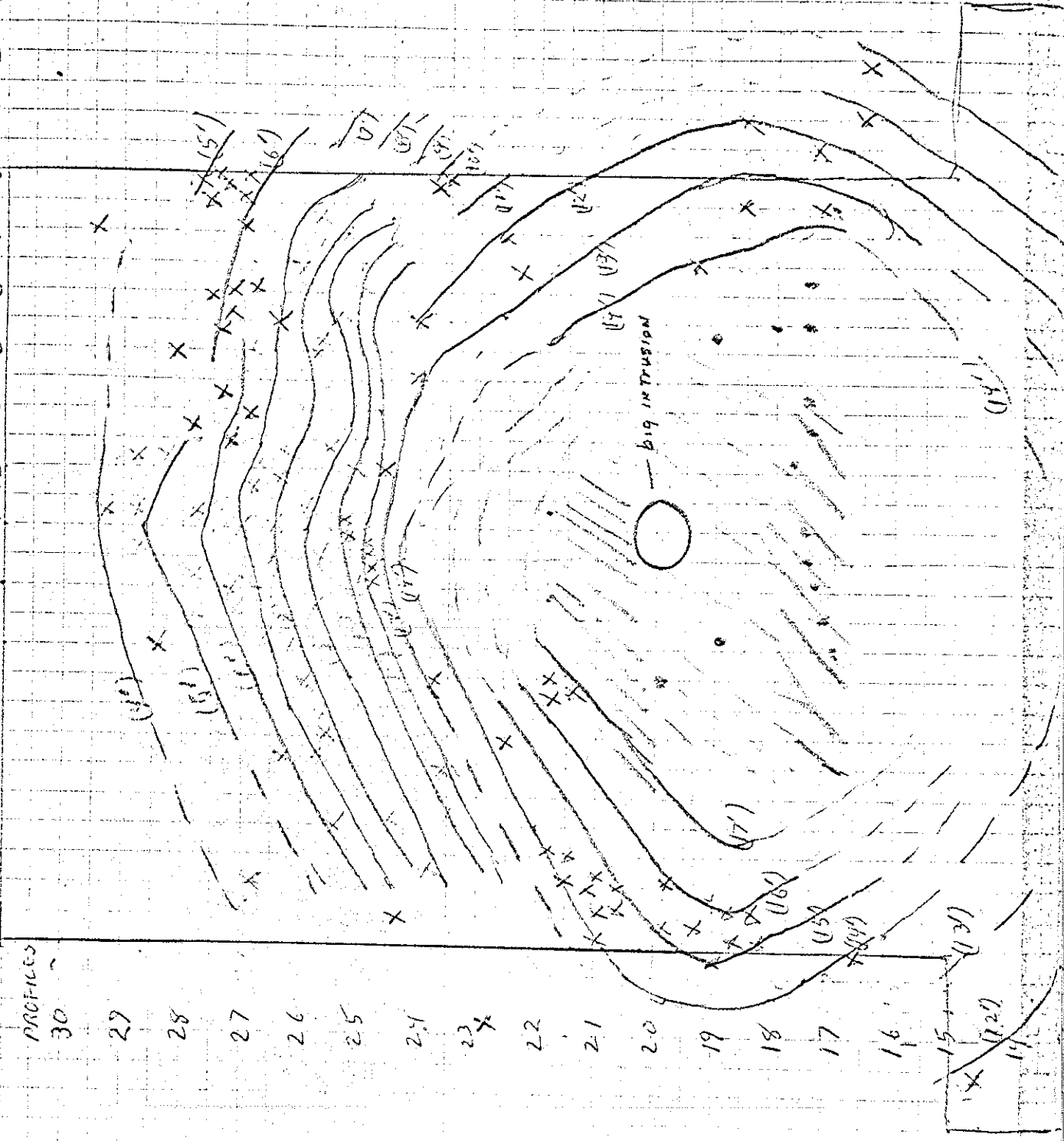
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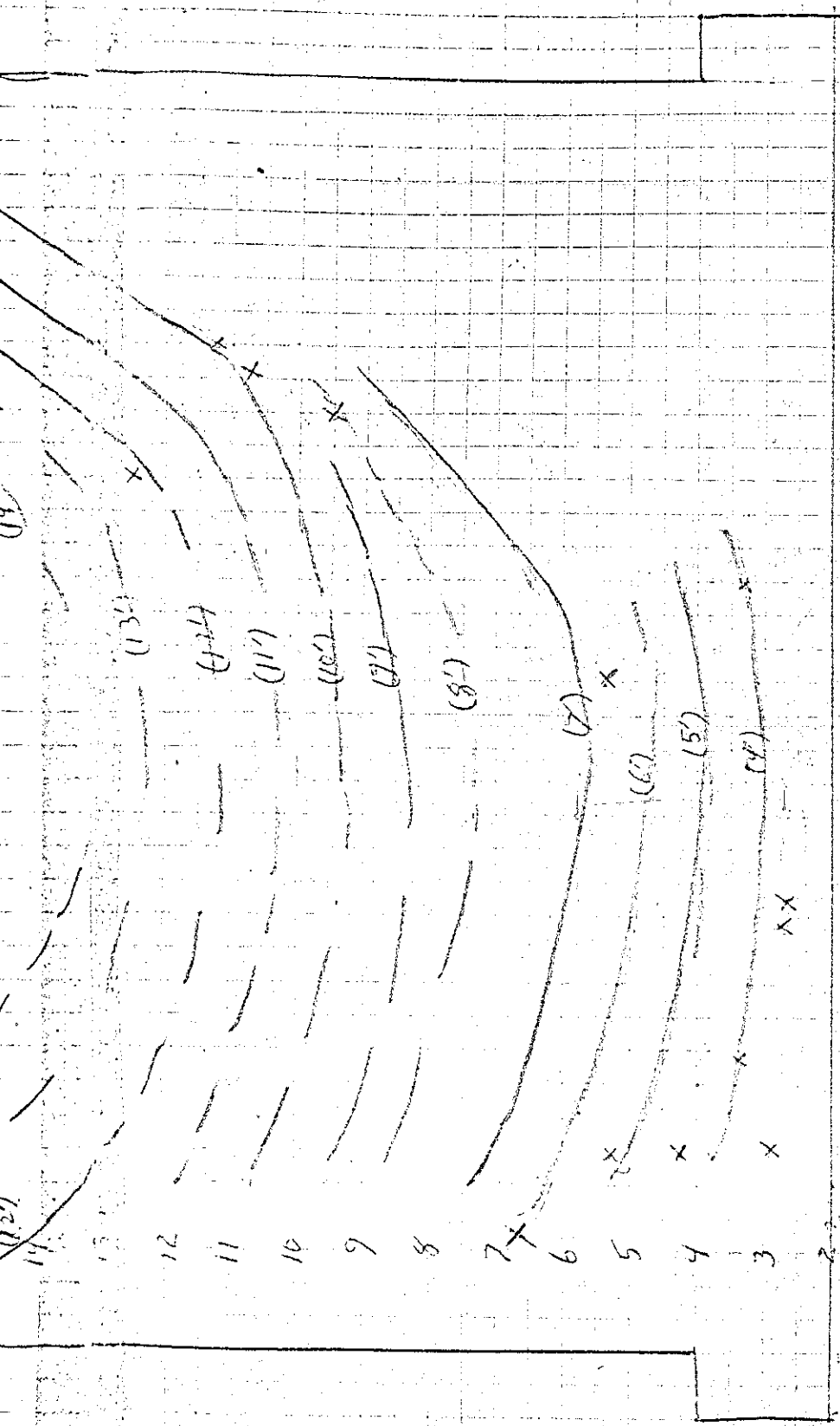
17

16

15

14



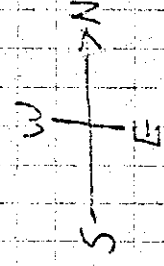


(W.P. 1/24) (Inventory)

MAP 8
 THE BIG MOUND
 during the OLIVER PHASE

KEY

- xx LATE OLIVER BURIAL
- x EARLY OLIVER BURIAL
- (7) LATE OLIVER CONTOUR
- (3) EARLY OLIVER CONTOUR
- POST HOLES



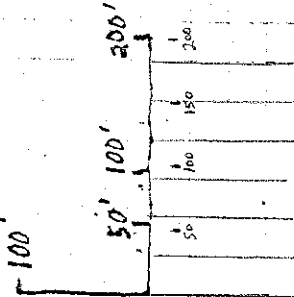
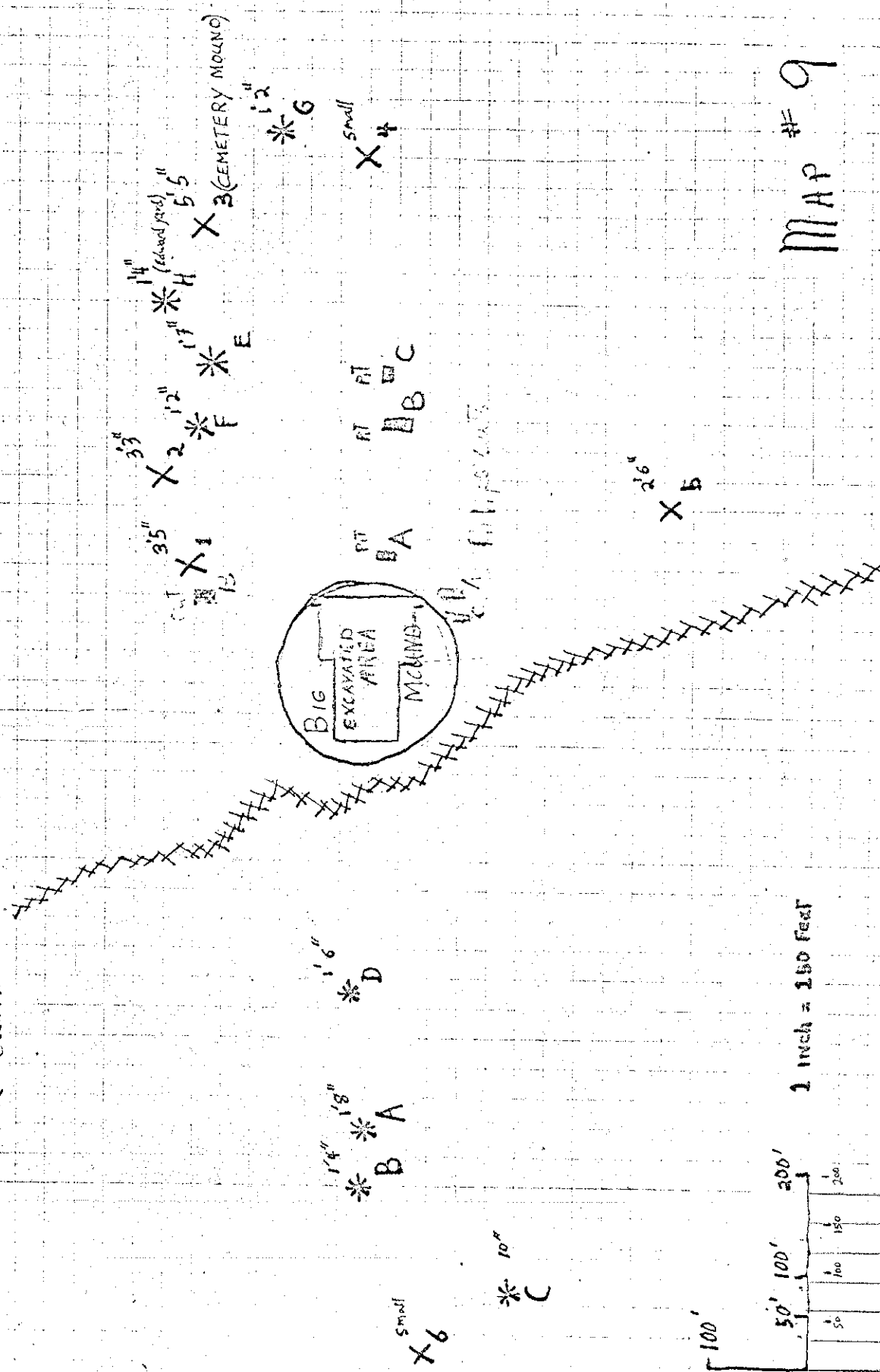
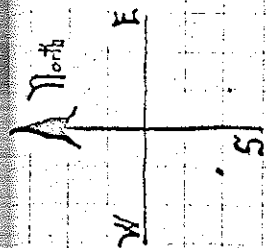
SCALE



THE OLIVER SITE

AFTER Peabody

← Sunflower River ←



MAP #9

TABLE 1
WALLACE INCISED
at Menard and Wallace

MODES	Wallace Surface	Menard SURFACE	Menard CUT A			CUT B				CUT C	TOTAL
			LEVEL 1	LEVEL 2	LEVEL 6	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 1	
1. ON EVERTED BOWLS	3										
a. Rect. on rims	31	43	2			5	4	3	3		91
(1) W. NOTCHED RIMS		2									2
(2) HORIZ. VERT DESIGN		1						1			2
(3) WITH PUNCTATES		1	1			1		1		1	5
b. CURVI. ON BODY	10	15	1	2			1	4	3	1	37
(1) With brushing		2			1						3
(2) With punctates								1			1
c. CURVI. ON RIMS		4				1					5
d. RECT. ON BODY	3	2					1		1		7
2. ON SIMPLE BOWLS - RIMS, RECT. OR CURVI.								3			3
3. ON JARS							4				1
a. rectilinear(?) on body							1	1			1
b. rect. on rim											
4. Questionable	7	27	2	2		4	1	1	7	3	54
TOTALS	51	97	6	2	1	12	7	14	14	5	

GRAND TOTAL 212

TABLE 2

	COAHUILA		POTTERY - OLIVER SITE		REASBY COLLECTIONS	
	PHILLIPS SURFACE	%	PHILLIPS CUTS	%		%
MULBERRY CRK. C-M.	3440	78.0%	6292	70.4	376	72.0
BAYTOWN PLAIN	819	18.6	62408	27.0	68	13.0
LARTO REA-FILMED	105	2.4	96	1.0	57	11.3
MAZIQUE INCISED	28		63		5	
ORBOW INCISED	9		30		3	
WOODVILLE + FRENCH FORK	5	1.0	23	1.7	4	
QUAKALORMA + LANDON			4		3	
UNCLASSIFIED INC. + PUNCT.	7		32		3	
CHEVALIER STAMPED	1		5		1	
RHINEHART PUNCT.	—		1		1	
TOTAL	4414	100%	8944	100%	524	100%

GRAND TOTAL 13,887

RELATIVE % ages OF DECORATED TYPES

LARTO	52.2
MAZIQUE	20.1
ORBOW	8.8
UNCLASS.	8.8
F.F.-WOODVILLE	6.7
QUAKALORMA	1.5
CHEVALIER	1.5
RHINEHART	.4
	<u>100</u>

IF the CUTS are a good random sample decorated types are c. 4% of the complex.

PEABODY MUSEUM
LOWER MISSISSIPPI SURVEY

SITE

QUAD.

1



COAHOMA PHASE MULBERRY CREEK CORD-MARKED

[64278]

SITE

QUAD



2

64298

TYPICAL LATE OLIVER NEELEY'S FERRY PLAIN POT



3

6183

HUSHUCKENA PHASE BARTON BARTON - CROSSHATCH

SITE

QUAD



4

[64261]

LATE OLIVER PHASE DEGENERATE EFFIGY BOWL



5

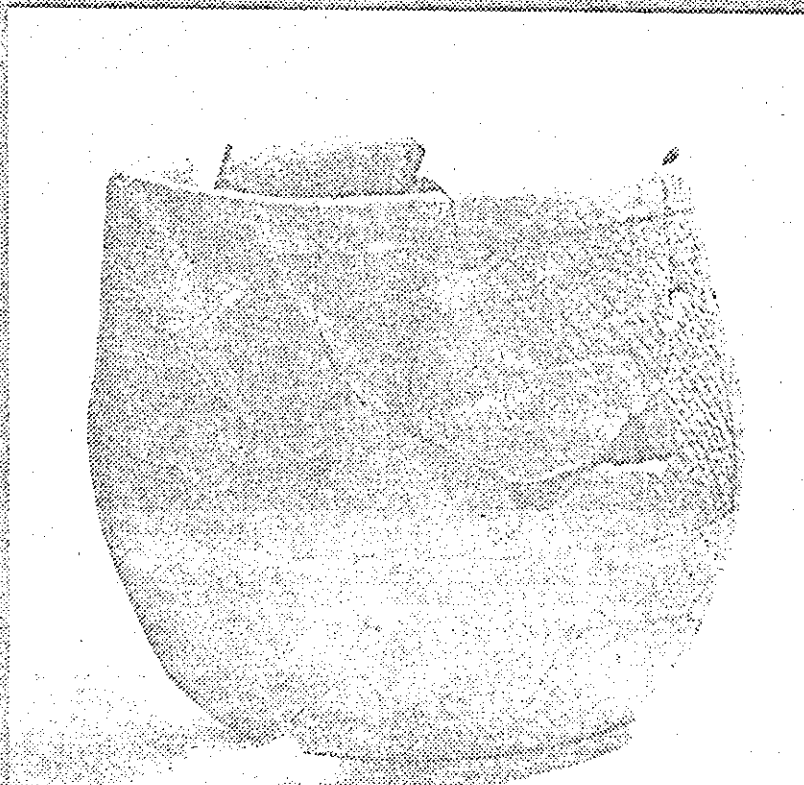
LATE OLIVER PHASE POOR QUALITY BOWL



6

64379

LELAND W. TRADE VESSEL FROM LATE OLIVER BURIAL



7

{ See pp. 129 }
129

POT FROM THE GLASS SITE, MISS.