The PALIMPSEST

Turkey River Mound 37, headless skeleton surrounded by rocks.

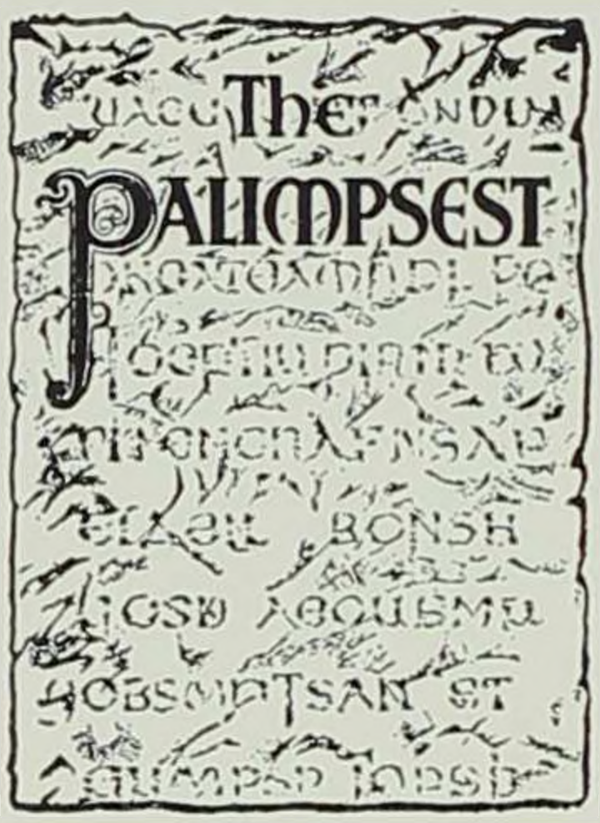
Prehistoric Man in Northeastern Iowa

Published Monthly by

The State Historical Society of Iowa

Iowa City, Iowa

DECEMBER, 1964



The Meaning of Palimpsest

In early times a palimpsest was a parchment or other material from which one or more writings had been erased to give room for later records. But the erasures were not always complete; and so it became the fascinating task of scholars not only to translate the later records but also to reconstruct the original writings by deciphering the dim fragments of letters partly erased and partly covered by subsequent texts.

The history of Iowa may be likened to a palimpsest which holds the record of successive generations. To decipher these records of the past, reconstruct them, and tell the stories which they contain is the task of those who write history.

Contents

Illustrations

Photographs for this issue of THE PALIMPSEST were taken by the author.

Author

Dr. Marshall McKusick is the State Archeologist of Iowa and Associate Professor of Anthropology at the University of Iowa. He holds his B.A. and M.A. degrees from the University of Minnesota and his Ph.D. in anthropology from Yale. Dr. McKusick is the author of a handsomely illustrated 260-page book — *Men of Ancient Iowa — As Revealed by Archeological Discoveries,* recently published by the Iowa State University Press of Ames. The first article in this issue of THE PALIMPSEST is a condensation of chapter one of his *Men of Ancient Iowa.*

THE PALIMPSEST is published monthly by the State Historical Society of Iowa in Iowa City, William J. Petersen, Editor. It is printed in Iowa City and distributed free to Society members, depositories, and exchanges. This is the December, 1964, issue and is Number 12 of Volume 45. Second class postage paid at Iowa City, Iowa.

PRICE — Included in Membership. Regular issues, 25¢; Special—50¢
MEMBERSHIP — By application. Annual Dues $3.00
ADDRESS — The State Historical Society, Iowa City, Iowa

THE PALIMPSEST

EDITED BY WILLIAM J. PETERSEN

VOL. XLV ISSUED IN DECEMBER 1964 No. 12

Ancient Indians of Iowa

Conflicts, migrations, and economic changes mark the sequence of events during the thousands of years of Indian development in Iowa. It is a complicated story and much of it remains buried in the ground waiting to be uncovered by the archeologist's trowel and screen. Viewed broadly, the details of life in these ancient times can be grouped into some general developments or turning points in the archeological record. In some situations the introduction of technological, economic, or religious ideas spread rapidly across the Midwest changing the Indians' way of life wherever they were encountered and accepted.

When were North America and South America first settled by the Indians? Archeologists are not yet certain because the evidence is not secure. Generally a date of somewhere around 20,000 years B.C. appears to be a reasonable estimate for the initial migrations of Indians into the American continents. Some migrations may have occurred even earlier.

Paleo-Indian Hunters

The earliest Indians and their descendants are termed Paleo-Indians. Many of these men hunted large animals which are now extinct such as horses, camels, giant bison, giant sloths, woolly elephants, and similar fauna in addition to smaller animals. The retreat of the continental ice changed the habitat and range of these large animals which had become specialized, probably oversized, and too dependent upon an ice age environment. One by one the great Pleistocene animal species became extinct for reasons not yet known. Changes in climate and fauna created a situation of transition in almost every aspect of the Indian's way of life. The great continental ice sheet retreated from northern Iowa around 11,000 B.C. The oldest known evidence of Paleo-Indians within our state probably dates from about 10,000 to 8,000 B.C.

Archaic Hunters and Gatherers

For thousands of years after even the memory of the ice age had been forgotten, men inhabiting the prairies and wooded river valleys of Iowa made their living by hunting bison and other animals, and supplemented it by collecting roots, seeds, and berries. Gradually more and more dependence was placed upon seed gathering in the basically hunting economy. The Archaic sequence in Iowa lasted from about 8,000 to 1,000 B.C. A number of interesting Archaic cultures flourished

within the state. In the western counties around 6,500 B.C., one ancient group hunted a species of bison now extinct. Excavations have revealed the details of how these bison were trapped and killed. More recent Archaic cultures in western Iowa hunted the modern species of bison and, judging from their seed grinders of stone, spent more time gathering food.

Woodland Mound Builders

Woodland cultures, characterized by the introduction of religious mound cults and pottery, continued to be primarily oriented towards a food technology consisting of hunting and gathering. There is some evidence that populations increased in Iowa during Middle Woodland times. Habitation sites are larger and burial mounds are large, complex, and very common. The increase in archeological remains, dating from Middle Woodland times, is a phenomenon present in archeological sequences throughout the Midwest. It is frequently suggested that the explanation for the increase in site size and complexity can be related to the introduction of primitive agriculture. Although this is a reasonable conjecture, clear-cut evidence is not available from Iowa.

Woodland religious cults spread widely through the Midwest and some of these seem related to a relatively secure subsistence economy. One group of related burial cults is termed Hopewell after a type site in Ohio where it was first discovered by

archeologists. Hopewell religion emphasized death and presumably life after death. Religious expression was concentrated in ceremonialism, elaborate burials, and rich ornamentation of the dead. Another major cult, which developed somewhat later in Wisconsin, is named Effigy Mound after the characteristic shape of large and elaborate mounds built to resemble bears, beavers, birds, and other objects. The spread of these two religions into Iowa marks a new orientation creating in the minds of the Indians a greater security and a greater emphasis upon ceremonial development.

Agricultural Tribes

Most of the local cultures were driven into refuge areas or absorbed by groups of numerous and well organized tribes. The domination of Iowa by these agricultural communities marks an important population increase.

The ultimate cultural origins of these invaders appear to be remotely derived from the independent civilizations in Mexico. Either by diffusion or direct settlements, some fundamental ideas of city life spread northward from Mexico into country adjacent to the Lower Mississippi River. Two major cultural traditions represented in Iowa are the Upper Mississippi and the Missouri patterns.

The Mississippi pattern developed its most complex cultural expression in the central Mississippi Valley. It is characterized in that area by

extremely large temple mounds, large fortified towns, and systematic agriculture. These Mississippi cultures were more successful than those around them. Eventually they expanded and occupied 2,000 miles of river territory as far north as St. Louis and beyond. These communities did not become initially established in eastern Iowa because the prairies formed an ecological barrier to their way of life. However, the adjustment of combining buffalo hunting with systematic agricultural practices was eventually made. It led to a spectacular cultural development around 1300 A.D. The archeological name for this culture is Oneota and includes a series of related tribes who spread over eight states in the upper Midwest.

The Missouri River was occupied by another branch of agriculturists. They settled in western Iowa and adjoining states without meeting effective opposition, and some of the local tribes may have eventually taken over the agricultural pattern of the plains Indians. The settlement of western Iowa by these groups began about 900 A.D. and lasted until about 1550 A.D. One major group, variously known as Glenwood or Nebraska culture, built pithouses in southwestern Iowa. A second group, termed Mill Creek culture, built villages in northwest Iowa, some of which may have been fortified.

Thus, along both major rivers forming the eastern and western boundaries of Iowa were gate-

ways to new cultural developments. The eastern Oneota Indians eventually expanded west and, in historic times, were known as the Ioway, giving their name, through the Iowa River, to the state.

Failure to Adjust to European Diseases

The dispersion and extinction of the Indians under the impact of western civilization marks the final turning point of the archeological sequence. On the whole the Indian tribes did not effectively resist the European penetration and occupation of North America. The military failure of the Indian tribes to hold off the European migrations is one of the most striking events in the history of western civilization. The victory was only partly due to the technological superiority of the European invaders. The Indian defeat was largely caused by social disintegration and their inadequate biological resistance to some common dieases.

Social disintegration in the face of growing European dominance was partly responsible for the ultimate aboriginal defeat. The Indians were in no mood to unite against a common foe. They were divided into a multitude of small tribes, having no common language, and bearing ancient grudges and hatreds of rival tribes.

The major tribes frequently became satellites of rival colonial powers, and with respect to the fur trade, one tribe fought another in an extension of European rivalries. Throughout the Americas, the Indians were divided and then conquered.

Subjugation does not imply population decline, and the startling fact of the elimination of one tribe after another must largely be attributed to the Indian's biological susceptibility to introduced diseases. During the long separation of the New World and Old World populations, subtle biological differences developed in resistance to certain diseases. In the Old World, smallpox, influenza, chicken pox, perhaps syphilis, and respiratory infections such as tuberculosis had long been present and the populations had developed relative immunity to the more deleterious effects of them. These diseases struck down the Indians with great violence, since they had developed no partial immunity. Desolate, deserted villages, as the result of smallpox or respiratory ailments, were not an uncommon sight to the early traders and explorers in North America. They, sometimes, reported whole villages of dead and dying with only a few recovered survivors.

The Number of Indians in Iowa

It is easy to gain a false impression of the ultimate population success of the agricultural tribes in Iowa. Although marked increases in population are evident, the final result did not create a really heavy concentration of Indians within the state. The French explorers noted the number of Indians and their estimates range from under 1,000 to 8,000 within the Ioway-Oto combined tribes. If these figures are representative for the

terminal prehistoric period for every seven to fifty-six square miles of land there was only one Indian. The answer to this remarkably low over-all density is that the Indians were never able to utilize the prairie except for occasional hunting trips, and the population clusters lay scattered along the major streams. The Indians never managed to effectively control and exploit all their environmental area within the state.

Dispersion of Iowa Tribes	1,700 to 1,850 A.D.
Prehistoric Oneota-Ioway	1,300 to 1,700 A.D.
Glenwood, Mill Creek Cultures	900 to 1,550 A.D.
Woodland Cultures	1,000 B.C. to 1,300 A.D.
Archaic Cultures	8,000 to 1,000 B.C.
Paleo-Indians	10,000 to 8,000 B.C.

Exploring Turkey River Mounds

In the spring of 1885, a hardy surveyor by the name of Theodore Lewis mapped Indian mounds near Guttenberg, Iowa. An account of the significant Lewis-Hill search for Iowa antiquities is told by Dr. Charles R. Keyes in the May 1930 issue of THE PALIMPSEST.

As Lewis tramped across a great ridge north of the Turkey River, he encountered many mounds and saw a most spectacular view. A high, narrow, limestone ridge extends one full mile along the Mississippi River and forces the Turkey River to sweep around it. The ridge towers 200 feet above the two rivers and is rimmed with jagged, precipitous cliffs. On this vantage point one can see for miles across rugged bluffs and water, a view among the most beautiful in Iowa. Lewis spent two days mapping 45 mounds. Some were great circular shaped mounds 40 to 50 feet in diameter and four feet high. Others were long or linear mounds 120 feet in length. Some combined a row of round mounds with an earthwork forming a chain. This was a rare type. Near the cliff edge overlooking the Mississippi, he discovered an effigy mound built in the outline of a giant animal with a long tail.

Even before Lewis visited the site, vandals looking for relics had dug into a number of the mounds, and as time went on other mounds were disturbed and partially destroyed. In an effort to preserve this major site in the 1930's, a group of public spirited citizens from Dubuque purchased the ridge and gave it to the State of Iowa. The landowner not only cooperated but reduced his price substantially in order to make the transfer possible. The site is now officially known as the Turkey River Mound Preserve and is under the jurisdiction of the State Conservation Commission. It is protected by law which prevents digging, destroying, or disturbing of Indian sites on state property without written authorization from the State Conservation Commission. Violators of this law are subject to heavy fines. Relic hunters have destroyed much of Iowa's prehistoric heritage by their thoughtless digging.

The State Conservation Commission, lacking funds to open the park to the public, did the next best thing. It allowed the ridge to revert to a wilderness, which gave some protection to the mounds. The author's visit to the ridge during the spring of 1964 was almost 80 years to the day after the original survey. The ridge top was worth the visit in spite of the underbrush and poison ivy. The size, variety, and number of mounds clearly indicated the importance of this site in prehistoric times. The great mound is the largest now exist-

ing in Iowa. A broad, but shallow and irregular ditch encloses the great mound on three sides. Who built the mounds and ditch? For what purpose? How long ago? I decided to find out the answers.

In June 1964 a field party of ten University of Iowa students and I went to the ridge top and stayed five weeks excavating the mounds and the surrounding ditch. The first day and a half was spent clearing out underbrush. Before digging, the ground surface was carefully searched for clues about the builders of the mounds. Oftentimes sites are marked by a litter of flint chips struck off while making arrowheads and other stone tools. In some instances, just a few fragments of pottery can furnish a reasonably close identification of the cultural affiliations and time when the Indians lived at a site. However, nothing was found on the surface of the ground, not a single stone flake. The crew put in long hours digging great trenches but usually the entire day passed without finding a single artifact. Work in the large central mound proceeded slowly, the soil was so hard packed that our largest two-handed picks were in continual use. It rained almost every day. The trench bottoms often turned into a morass of mud and the farm lane to the top of the ridge became impassable. While these trenches were being dug other crew members excavated in two adjacent mounds but again nothing of interest

was found. A part of the crew began to work on a third mound. A typical entry in the author's expedition log reads:

June 12, Friday Made contour map of two mounds named Mound 37 and Mound 38 on Lewis map. Laid out trench across ditch adjacent to these mounds for soil profile. No chipping waste or other finds reported, and no features in this trench. . . .

Mound 37 had the remnants of a large irregular hole put down in its center. The hole had originally been dug by relic hunters more than 80 years previously since Lewis noted its occurrence on his 1885 map. It seemed that enough of the mound was left so that it would repay excavation.

June 14, Monday Rainy morning. Mound 37. Friday's excavation square shifted because rock feature extended in all directions beyond it. Limit of feature to be exposed first and then a string grid will be used for mapping. Four artifacts found in mound fill and positions noted; including side-notched arrowhead, hafted scraper, side scraper, and worked bone tube made from a human leg bone (tibia?). . . . Stones lay at different levels, are irregularly placed and are difficult to clean off and expose in position. It is slow work. Reddish burned soil mixed with brown soil. Red-burned limestone slabs present. Most rocks are unburned limestone slabs. . . .

With the finding of the rock slabs in Mound 37 luck began to change for the better. The adjacent mound also began to yield burials, rock features, and artifacts. Burials were found in the large mound as well. These finds provided encourage-

ment. The crew worked hard for the remainder of the month with the exception of one undergraduate student—who left without giving advance notice, to take a job digging sewers in Cedar Rapids.

The rest of the students ranged in field efforts from very good to excellent, and being a mature crew took responsibility well. Almost all of them were graduates of the University of Iowa 1964 class who were continuing graduate studies in various fields. They were: John Hanson, B. A., drama; Charles Ebel, B. A., history; Robert Alex, B. A., zoology; Dean Straffin, B. A., anthropology; Harry Neyens, B. A., journalism; Beryl Gillespie, B. A., anthropology; and Bert Pape, B. A., M.F.A., fine arts. The only undergraduates were Sally Patton and Charles Pyle. Marlyn and Arnold Brawner, undergraduate majors in anthropology, joined us for a week. They were a great help.

By early July most of the work was finished. On July 6 two students, Robert Alex and Dean Straffin, were left in charge of finishing the excavation of Mound 38. The remainder of the crew was shifted to Lansing in order to explore another site, the Hartley enclosure.

Two days later, Alex sent word about some new and surprising discoveries. A number of shell beads of exceptional interest had been found. Indians made the beads of marine shell from the Gulf of Mexico and traded them as far away as

Iowa. Meanwhile, Straffin, his wife, Marita, and Arnold Brawner remained at Turkey River to continue excavation and also to watch over the burials and artifacts. Word of the discoveries had become known and large numbers of visitors were coming to view the excavation.

A student and I rejoined the field crew at Turkey River at the earliest opportunity. By this time a series of burials had been uncovered. The log notes:

> *July 15, Wednesday* . . . The burials in Mound 38 seem to be in separate areas. The center of the mound contained a stone alignment consisting of a double row of limestone slabs which overlay a headless skeleton. In addition a child's skull, skeleton of an adolescent, and scattered human bones were found. The only associated artifacts were 32 shell beads found in the mouth of the adolescent. Beyond this, lying S. E. of the mound center, Alex and Straffin uncovered a cluster of six skeletons in a cramped burial pit. . . .

Four of the six skeletons were also headless. Several interesting artifacts were associated with the skeletons. One headless fellow had a limestone slab on his chest. Another had a very large ceremonial blade, beautifully flaked, in place of his missing skull. A third had a copper awl, or dagger, rammed into him from above and behind. It had cut into a neck vertebra, split a rib, and protruded out the chest underneath the right clavicle (collarbone). When this man was buried the

Indians apparently left a complete spear thrower with him. No trace of wood remained, but a very large and perfect spearhead rested on his chest and beside it, partly covered by his left arm, was the perfectly fashioned stone weight originally attached to the spear thrower handle. The fourth headless skeleton may have died a violent death. A crudely fashioned projectile point appeared in the man's rib cage; the tip just barely poking out beyond the ribs as if it had been shot into him from behind. The crude appearance of this projectile point was in marked contrast to the perfect forms of the other associated artifacts found with the burials. It suggests this projectile point was made for use rather than as a grave offering. No artifacts appeared with the other two skeletons in the pit that had their skulls intact. Red ocher or hemetite (a powdered iron mineral) was scattered among the burials.

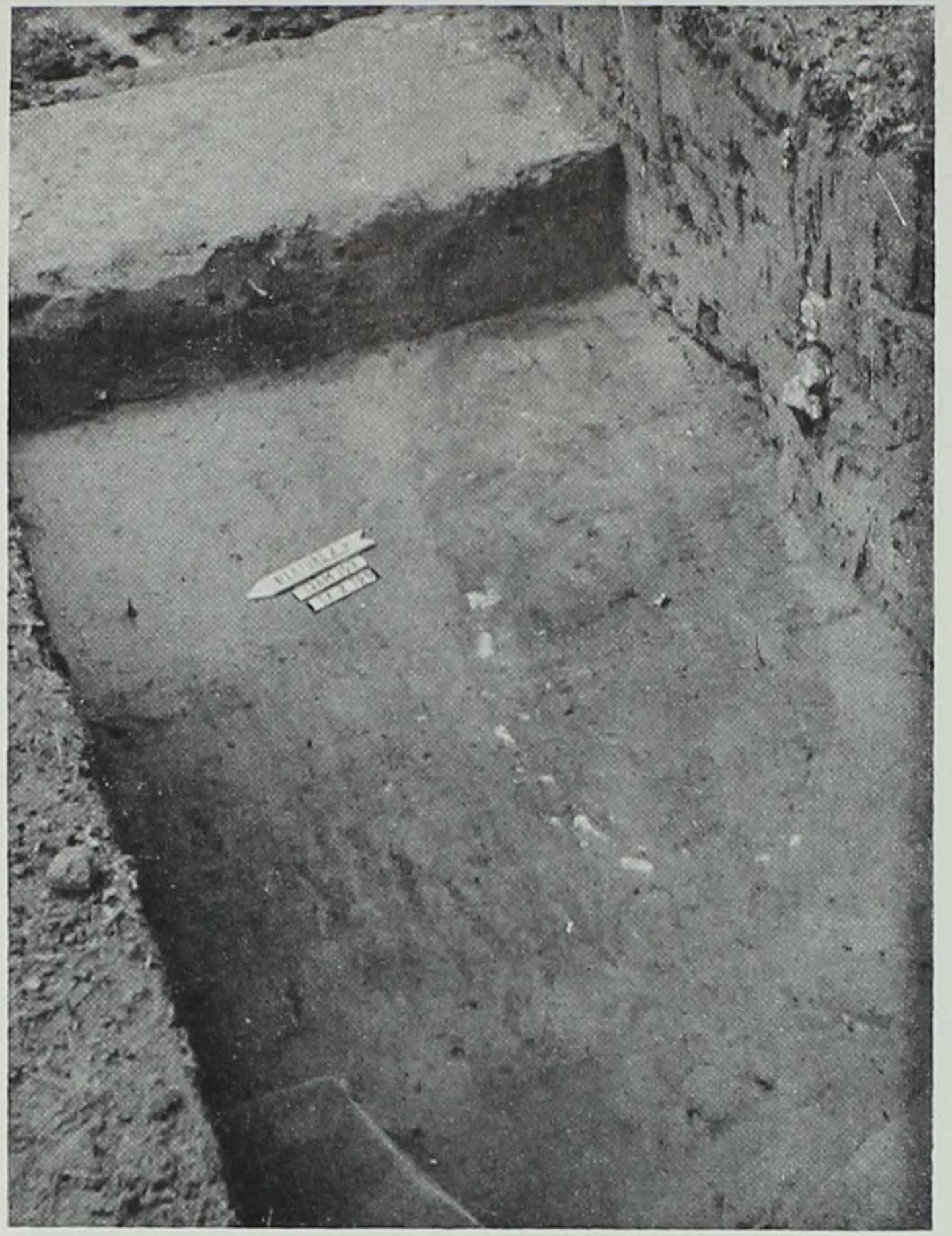
The two days, July 15 and 16, were hectic ones. They were spent in photographing burials, mapping and measuring the excavations. Fortunately, Professor Theodore Anderson of the University of Iowa sociology department arrived and he was pressed into service. The number of visitors to the mounds continued to increase. It was not uncommon to look up and see twenty visitors at the edge of the pit during the last days. This was surprising because Mr. Elmo Behrend's farm road, which led to the mounds, was barely passable for car

travel and this was followed by a hike across the ridge. The crew had become local celebrities.

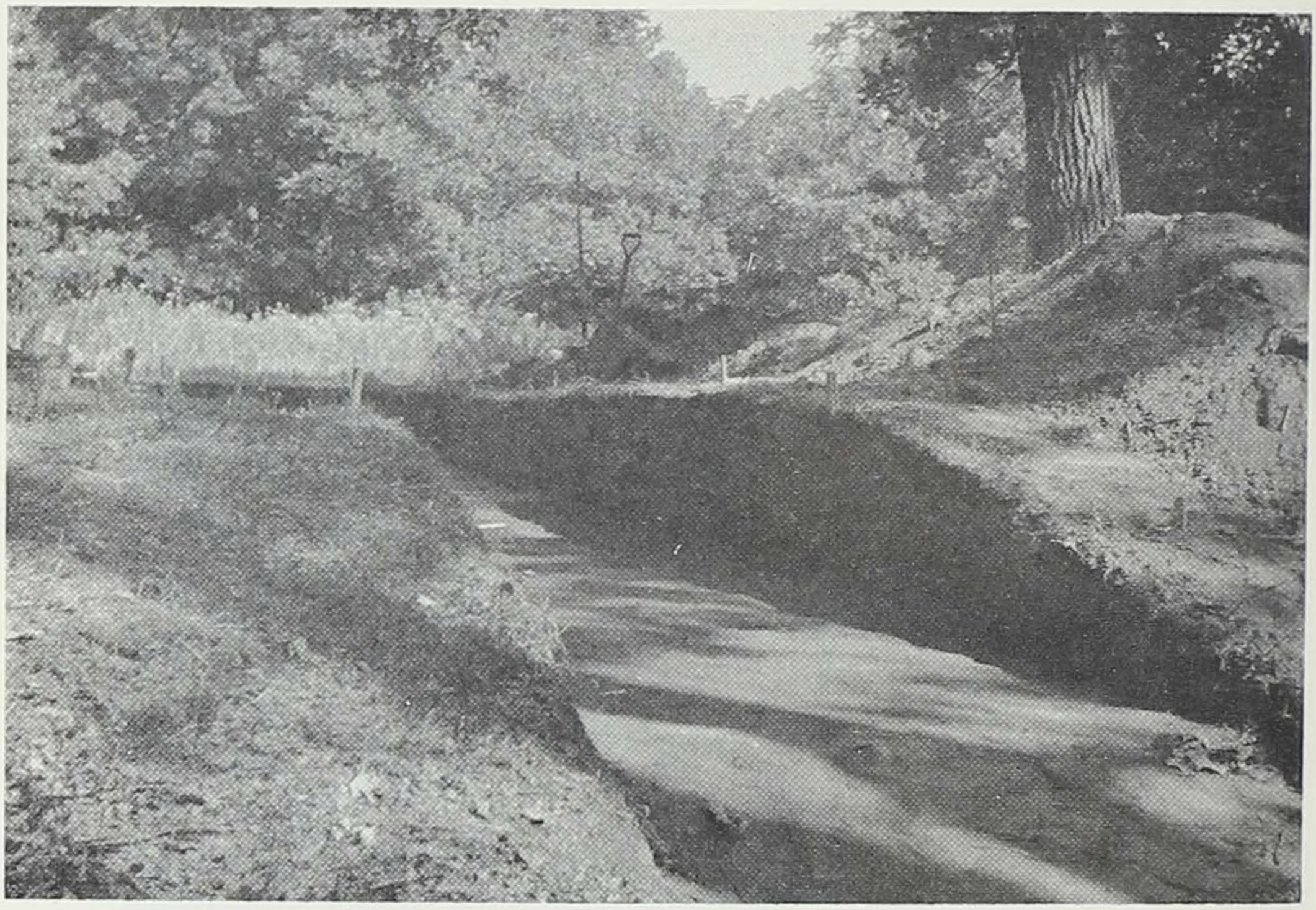
By mid-afternoon, all measurements were completed and the skeletons were carefully removed bone by bone, to be added to the permanent study collections of the University of Iowa Archeological Laboratory. It was an unexpectedly slow job because the soil which had hardened in the sun had become almost rock hard and the bones were soft and very fragile. It took three hours to carry all the equipment, specimens, tent, and personal gear to the road. Just at dusk, we left for Lansing. It had been a long day, but an interesting one, and little did anyone suspect that a major discovery at the Lansing site was to be made soon.

Significance of the Turkey River Excavations

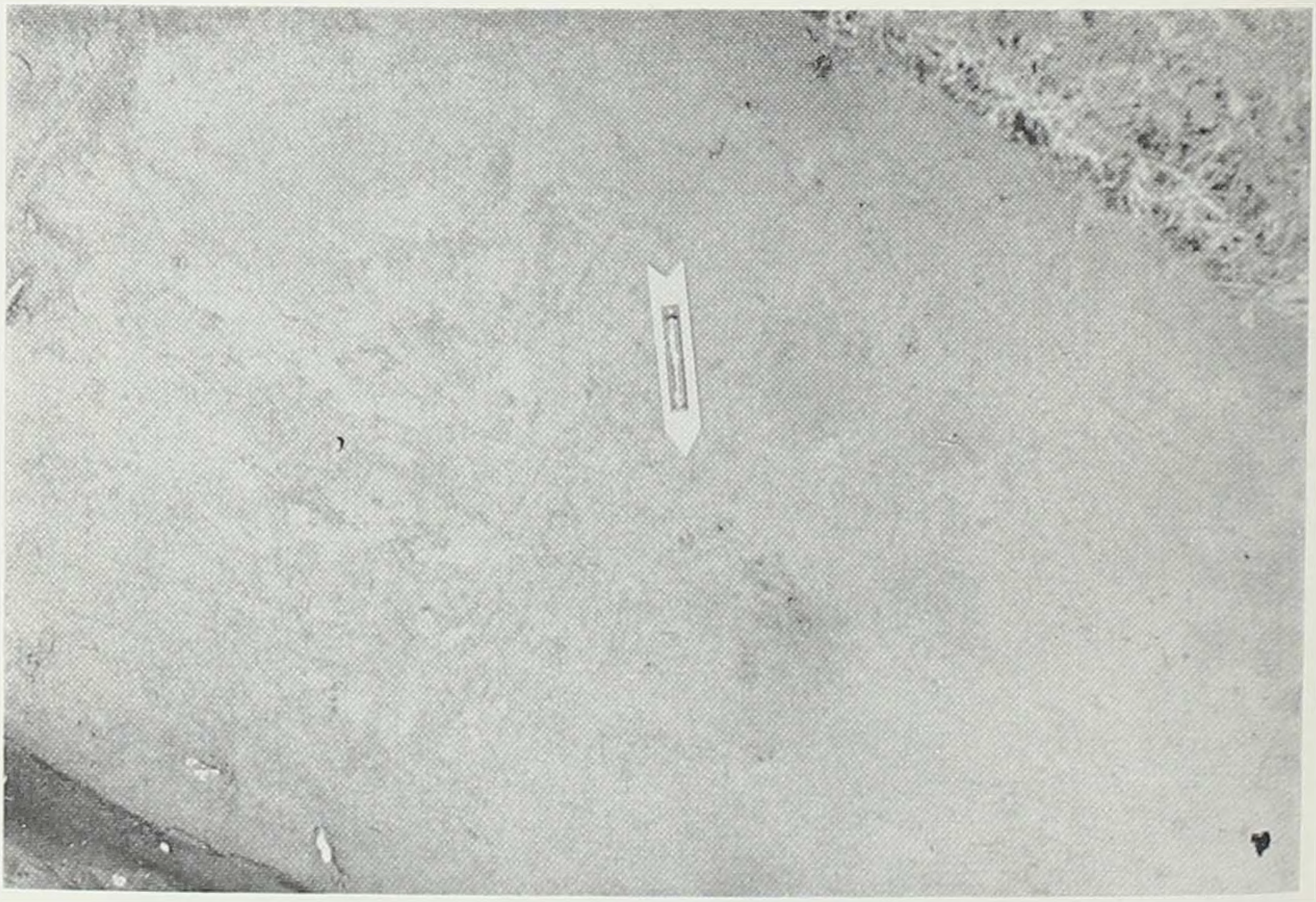
The complex mechanics of running a field expedition often make it difficult to reach valid scientific conclusions while the digging is underway. Continual attention must be given during this time to equipment, payroll, photographing, mapping, excavation procedure, and visitors — to name a few. After the excavation the specimens need to be cleaned, catalogued, and safely stored. Samples require analysis and specimens need identification. Specialized technical publications and professional colleagues need to be consulted before an evaluation can be made of the expedition. Most of an archeologist's time is spent in a laboratory and library rather than out digging.



Hartley fort grave before and after excavation. This Oneota Indian child was buried hundreds of years after the fort was abandoned by an earlier tribe.



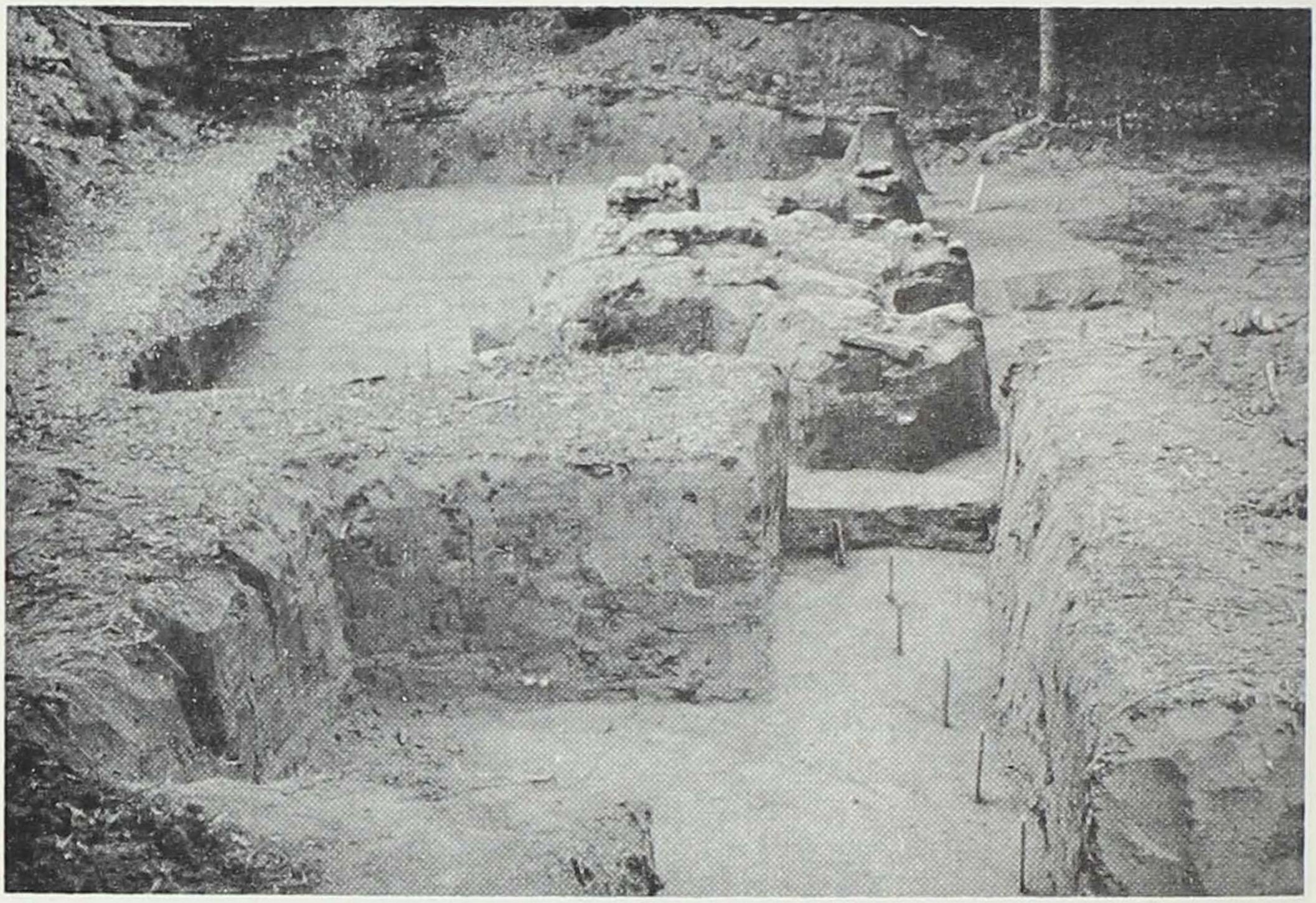
Hartley fort excavation explores east rampart.



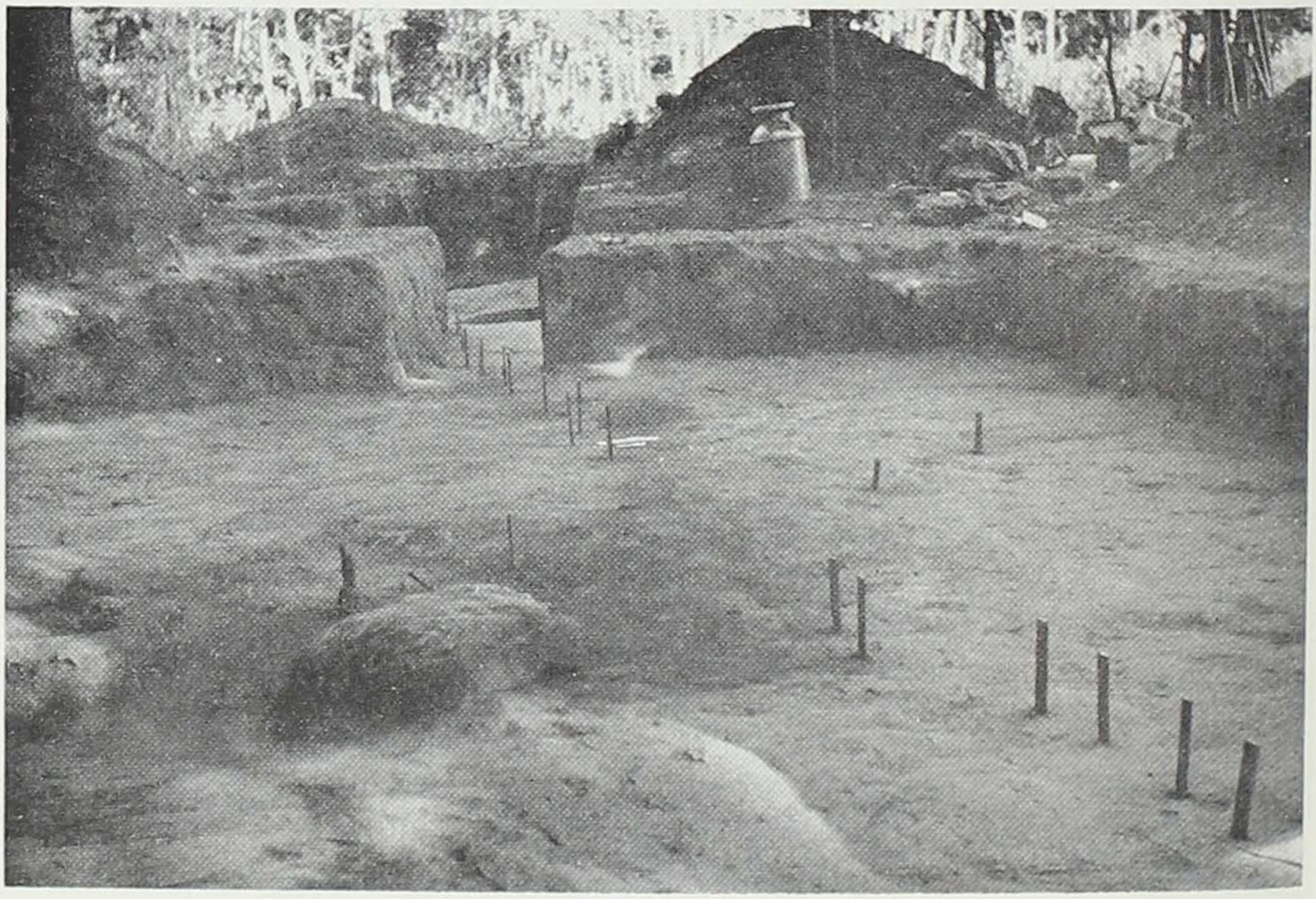
Three Hartley fort post holes reveal ancient stockade.

Glen Hartley excavates inside stockade wall.

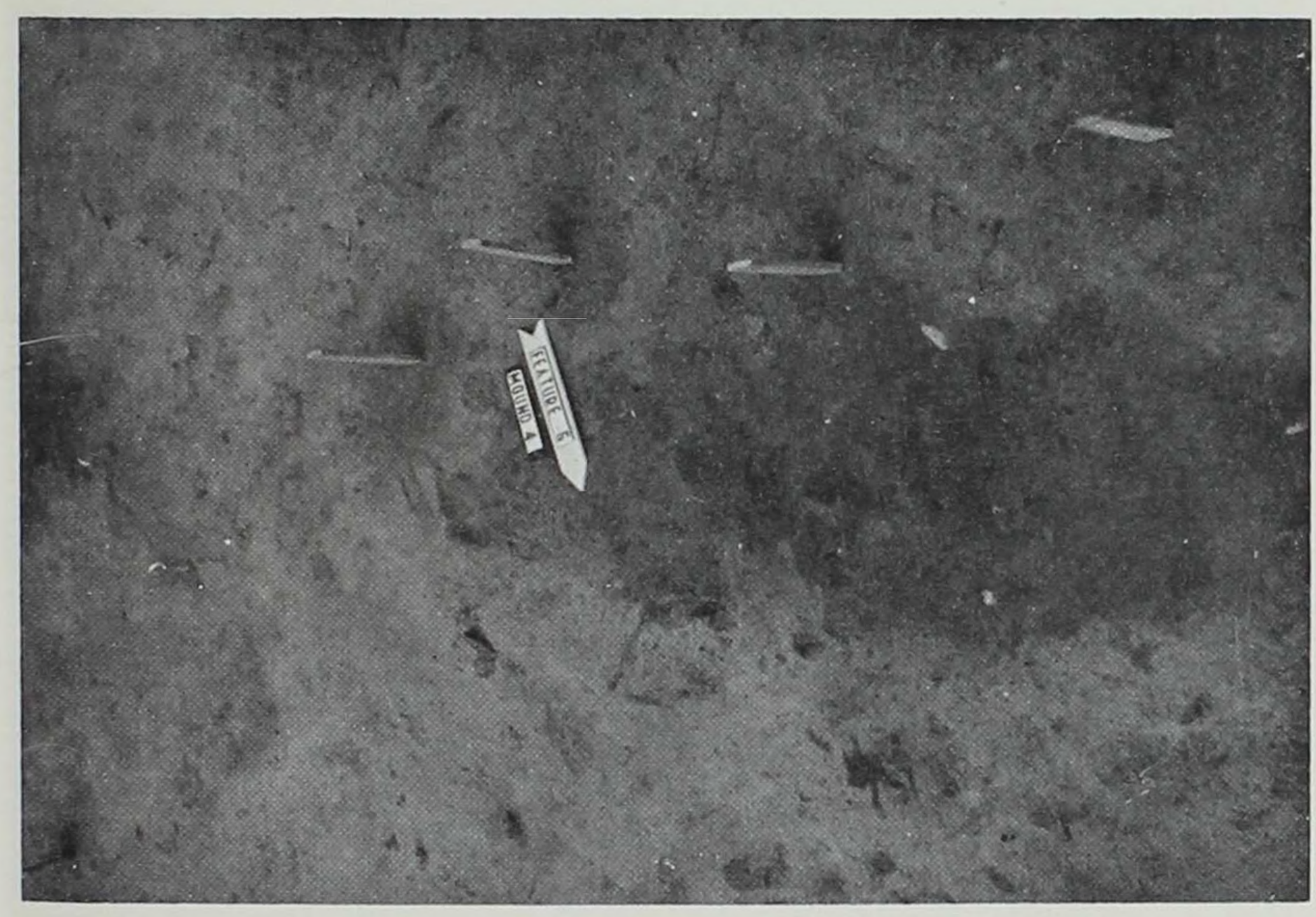
Inked arrows show post holes of main gate.



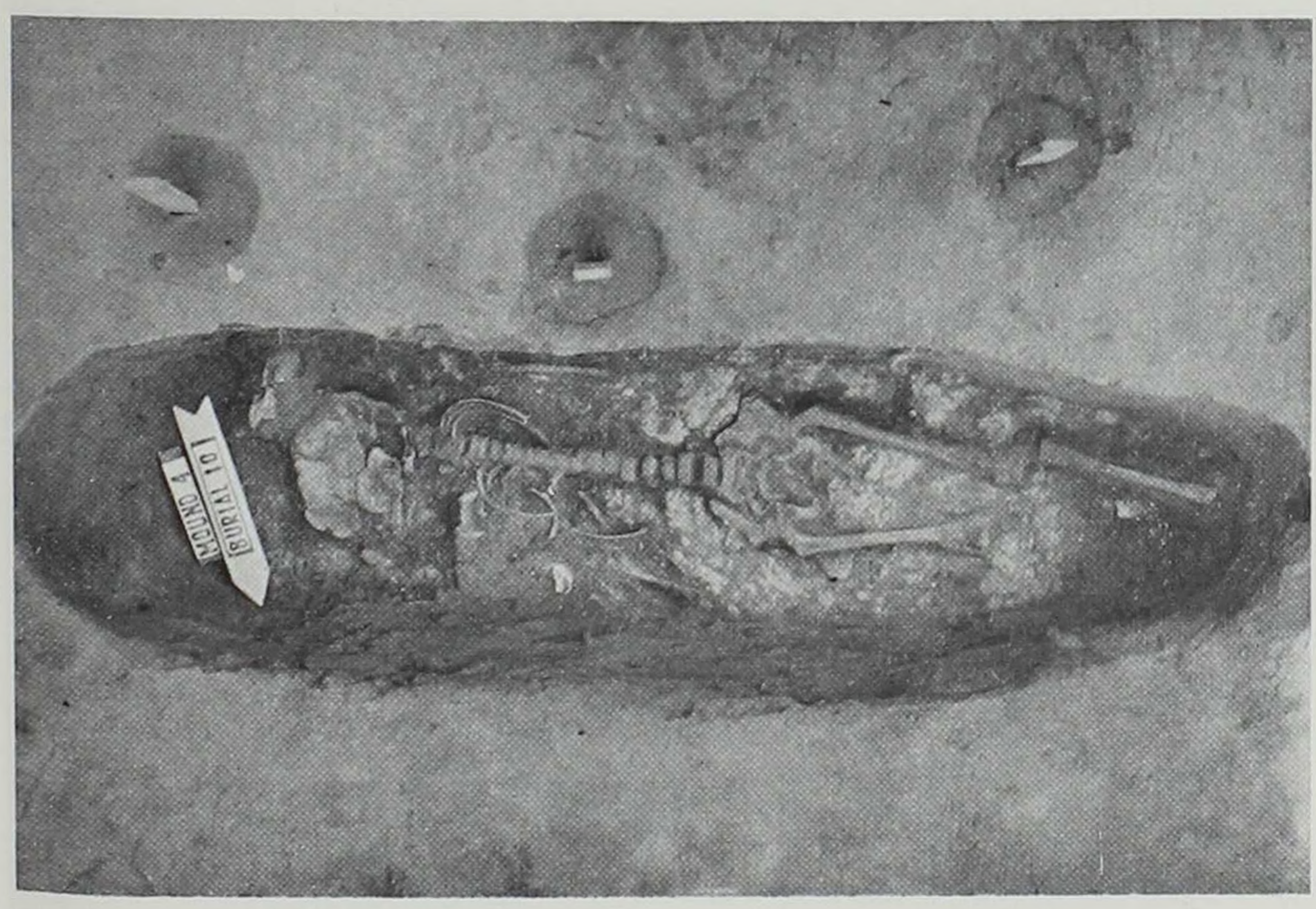
Hartley fort south stockade line and rock pile.



South stockade line after stones removed.



Grave found under rock pile at south stockade line.

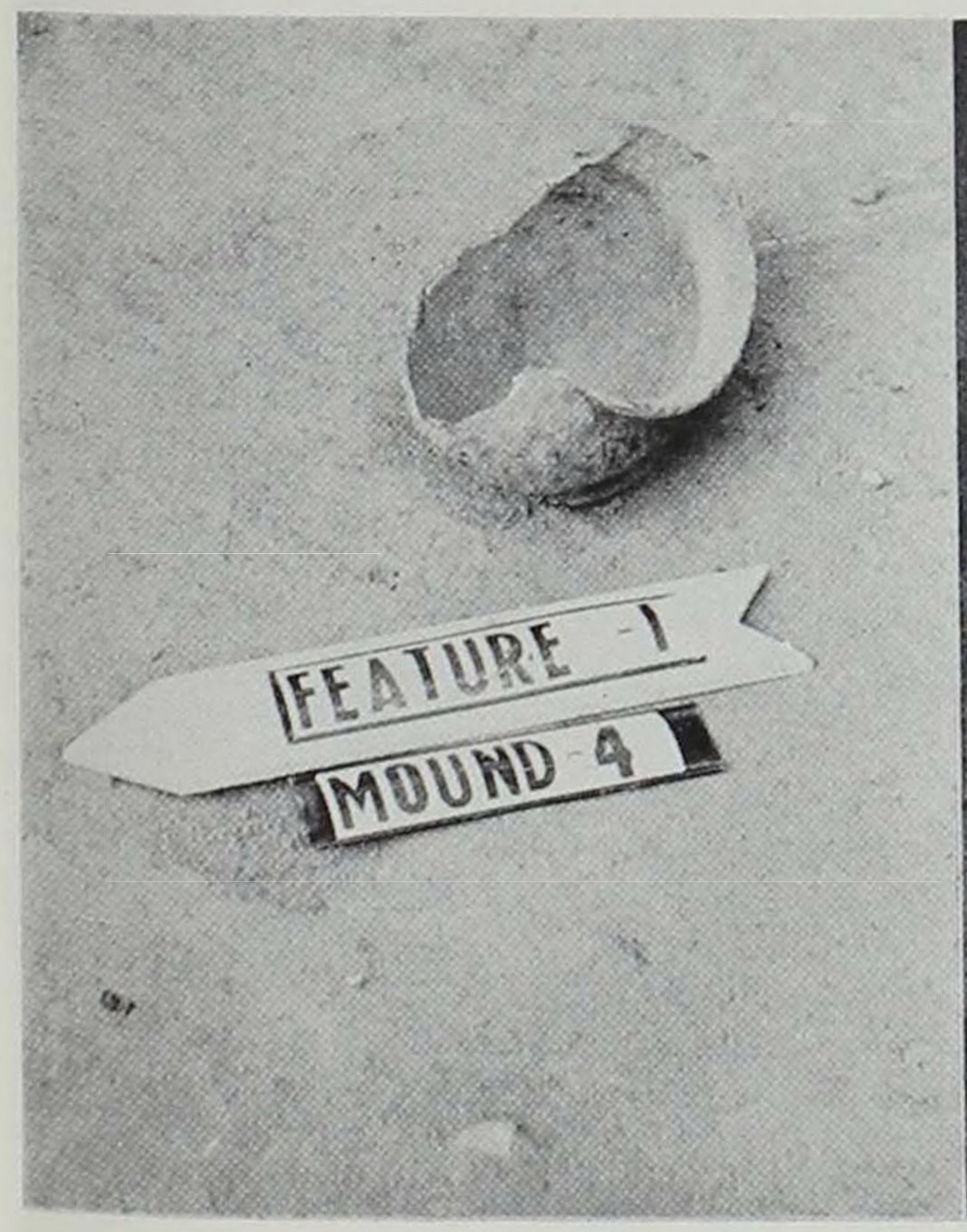


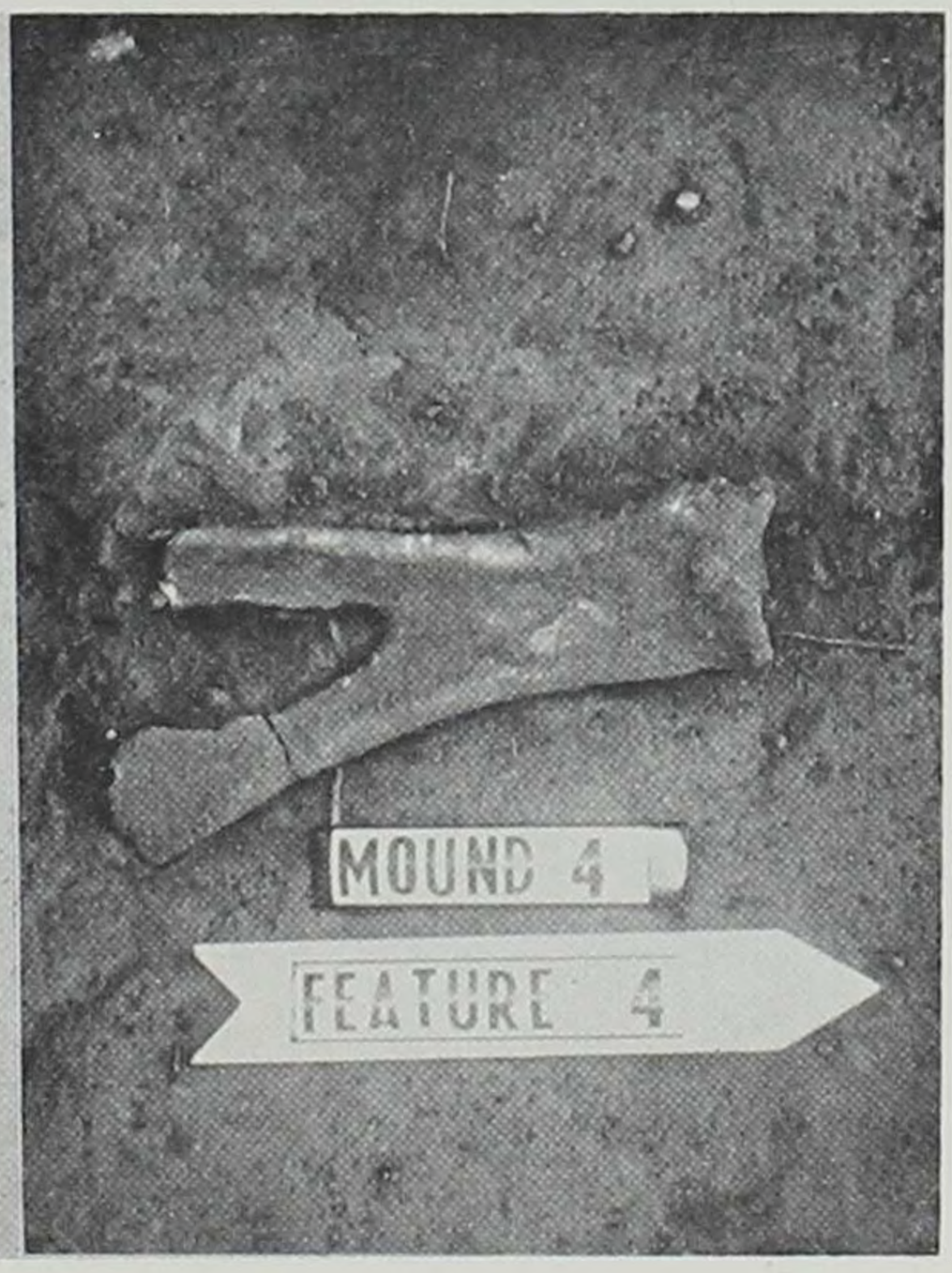
Excavation of grave uncovers skeleton of Oneota child.

Another rock pile in the south stockade rampart.

Skeleton of adult Oneota Indian found beneath rocks.

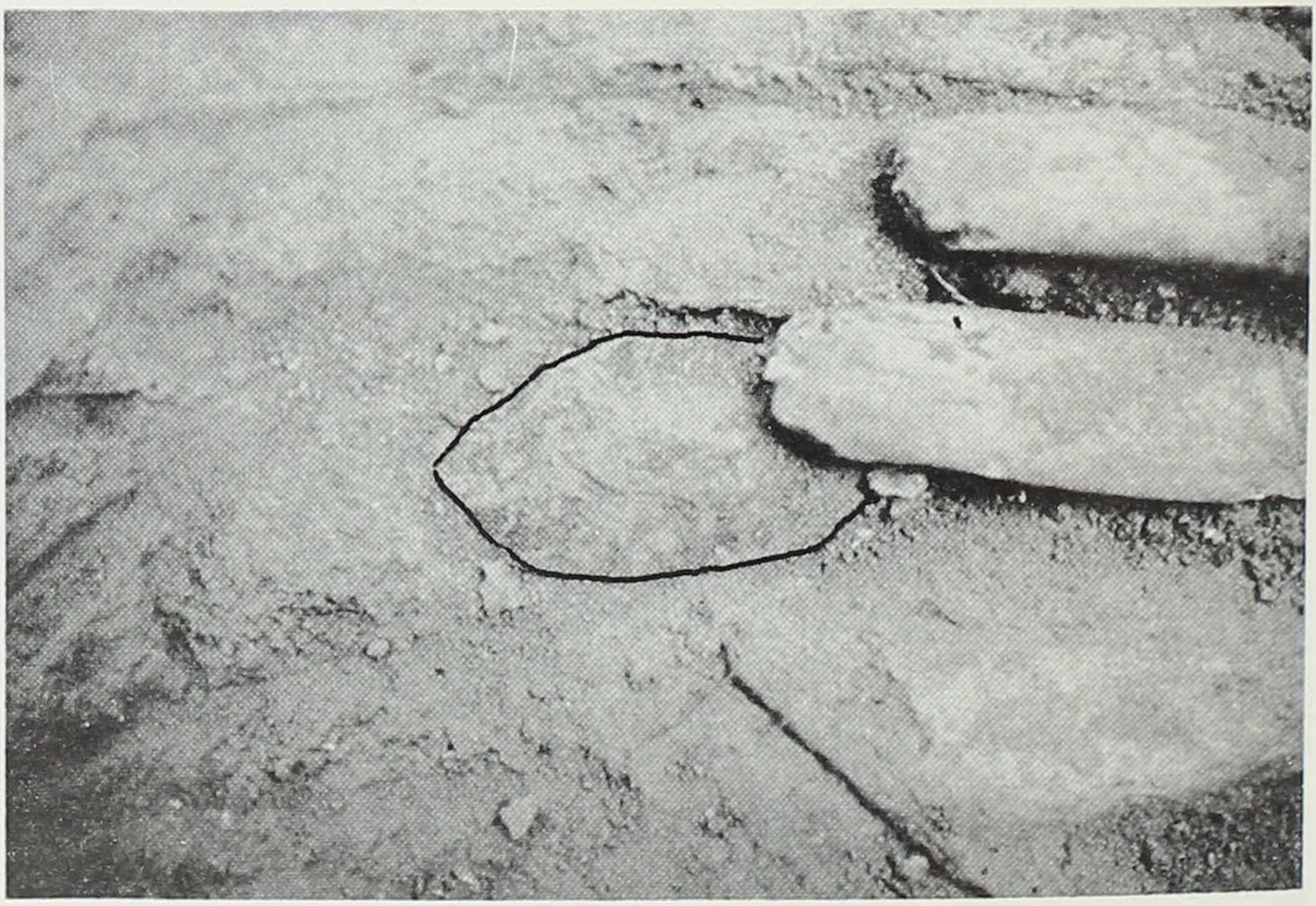
Hartley fort partial skeleton of Oneota Indian.





Oneota clay pot and bison bone hoe with skeletons.

Turkey River Mound 38, ceremonial blade at neck of headless skeleton.



Mound 38, arrowhead (outlined) protrudes from ribs of another burial.

For this reason, the significance of the Turkey River excavations is still in doubt. There are two possibilities. Either the Turkey River excavations were successful in a routine sort of way, or the finds may have striking significance for the interpretation of Midwestern archeology, filling a key gap in the prehistoric sequence.

It is quite clear that the site was a ceremonial center. The absence of trash, such as broken artifacts, stone flakes, and fragmentary animal bones, means that the Indians never had established a village on the end of the ridge we excavated. They only used the ridge to bury their dead. The puzzle of the wide ditch now seems to be explained. It apparently was a borrow pit from which the Indians obtained dirt to build the great central mound. Preliminary findings suggest that the Indians for some reason abandoned the mound and ditch before they completed it.

The extent of trade among these ancient Indians is remarkable. From Mound 38 the source of artifacts is extremely diverse: shell beads from the Gulf of Mexico, copper from Lake Superior, Knife River flint from South Dakota, and banded slate possibly from as far away as Ohio.

One possible interpretation is that the ceremonial center is about 2,000 years old. It fits within the Hopewell Mound horizon and fills an interesting gap in our knowledge about the ceremonial and political organization of the local tribes during

this period. If this first possibility is true, a solid, but not unexpected, scientific contribution was made to our knowledge of ancient Iowa. The site is of major importance because of its size and may eventually be developed into a public archeological park. It is extremely useful to have some information about its origin, cultural affiliation, and use. This provides some excellent examples of the religious cults which supplements earlier findings at other sites.

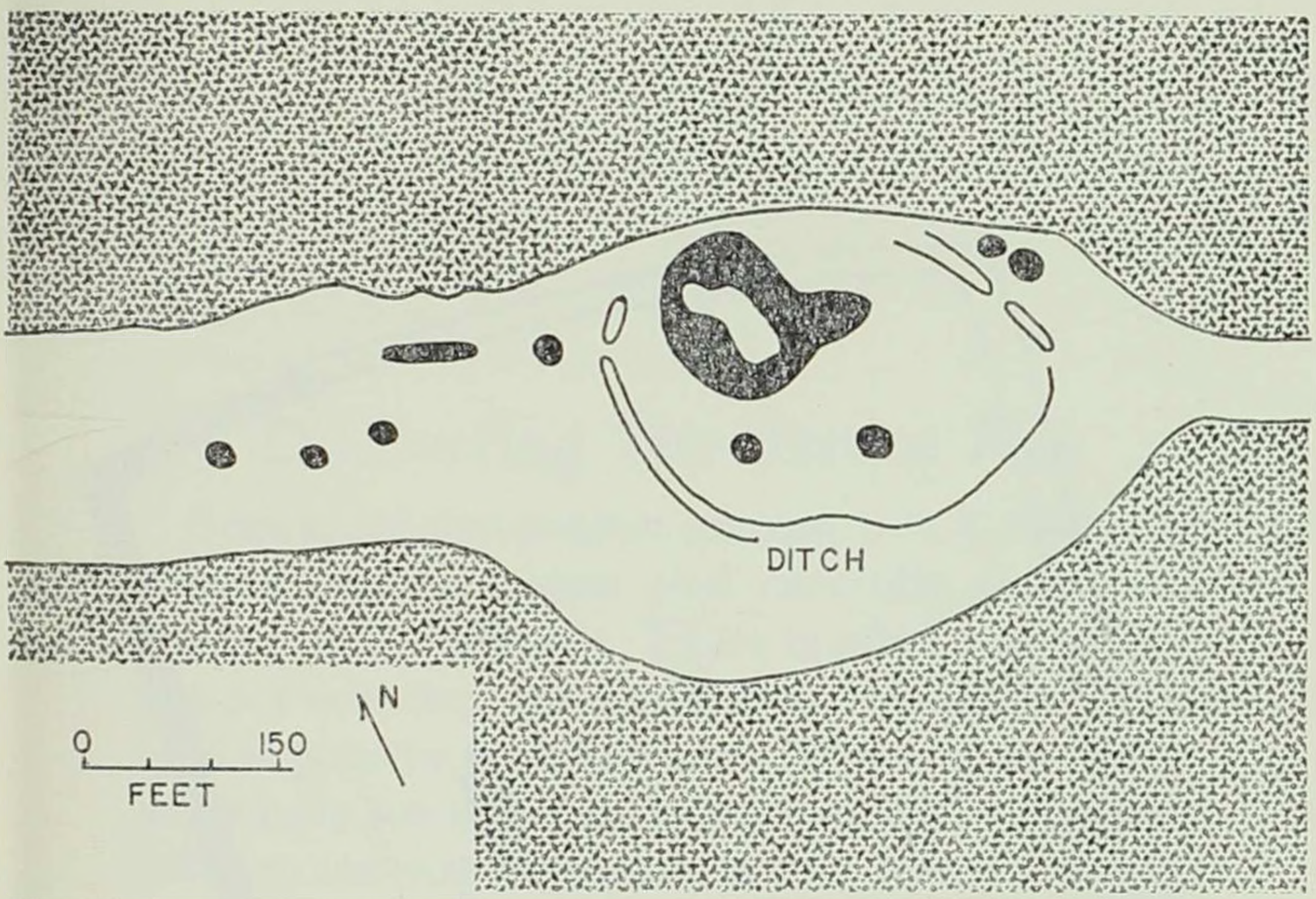
There is, however, a second possibility. If this second interpretation is correct then the results of the expedition are not only successful — they will be spectacular. The second alternative is very intriguing.

At the Midwest Archeological Conference held in the fall of 1964 at the University of Illinois, the author presented a brief illustrated report of this excavation. He suggested in his preliminary appraisal that this was a Hopewell mound center, about 2,000 years old. This was followed by a few slides of the great circle of stones from Mound 37 and the burial pit from Mound 38. When close-up views of the burials with the red ocher, the great ceremonial blade, the spear thrower weight, and the other artifacts were shown, a most unusual thing occurred. Several members of the audience began to call out "Archaic," "Archaic." A heated but good-natured controversy developed.

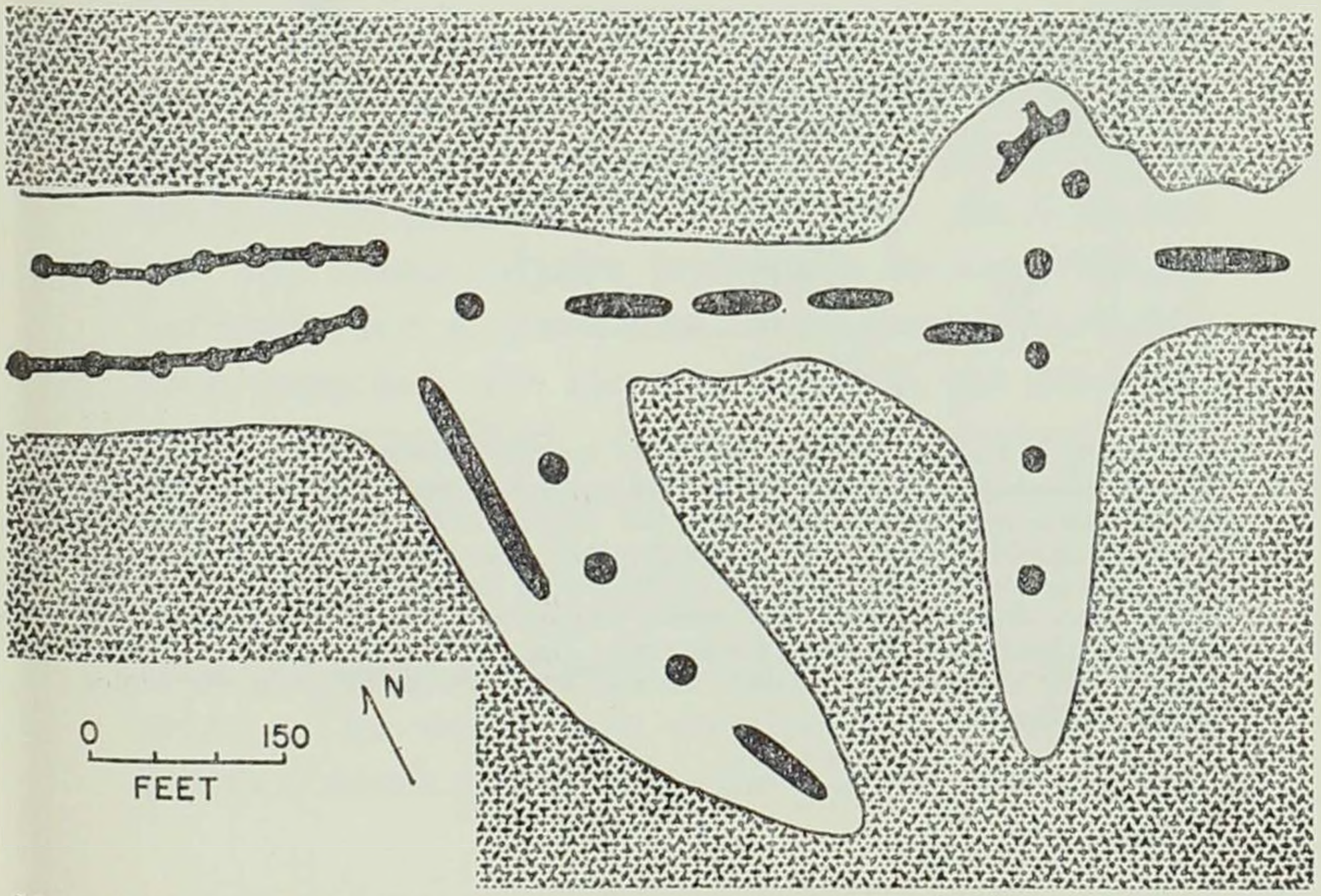
What was the controversy about? These archeologists thought the mound cults were not of Woodland cultural origin but were Archaic, possibly dating 3,000 years ago. If this were true, they would be among the earliest known burial mounds in the Midwest! This suggestion was put forward by a number of archeologists among them Wesley Hurt of the University of Indiana, Carl Chapman of the University of Missouri, and Louis Binford of the University of Chicago. The significance of this interpretation is that we still do not know very much about the Archaic to Woodland cultural transition. Turkey River has a complex series of burial sites and stone structures implying a highly organized political and religious organization. If built by the late Archaic Indians, an important new dimension has been added to our knowledge about these early times. Late Archaic culture was much more highly developed than previously suspected.

Scientific exploration of this huge ceremonial center is still very incomplete. Eventually it will require many summers with large crews to carefully excavate the numerous large mounds on the Turkey River ridge. Fortunately these mounds are protected by State law. The author feels certain that additional explorations will uncover spectacular discoveries about the ancient Indians. It is hard to predict what these discoveries will be, which is part of the fascination of archeology.

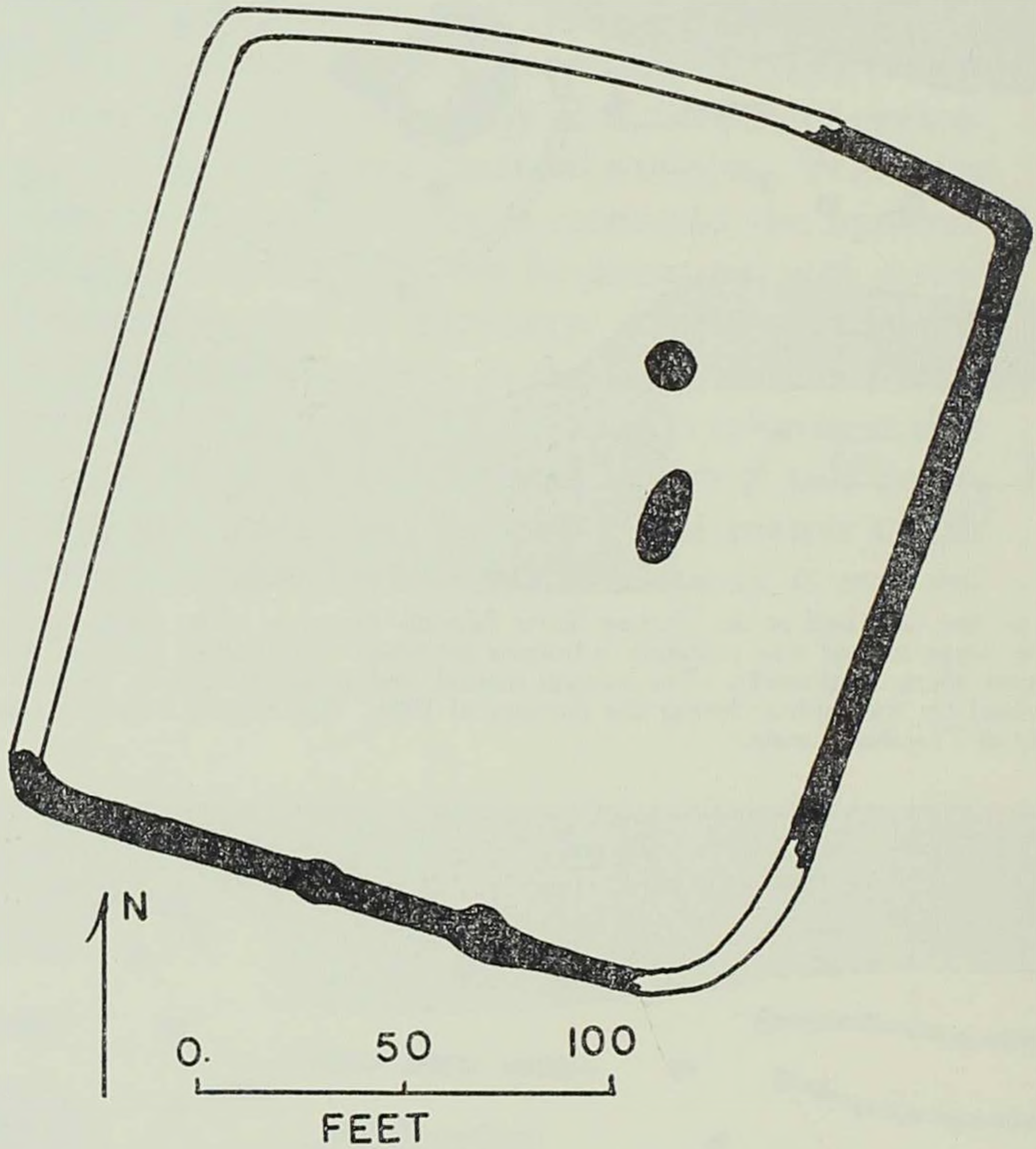
Are they Archaic or Hopewell Woodland? To a large extent, the issue can only be resolved by radiocarbon measurements of radioactivity present in the skeletons and charcoal samples. When the amount of radioactivity is measured the approximate age of the finds can be computed with a reasonable degree of accuracy. Unfortunately the radiocarbon laboratory at the University of Michigan has such a backlog of samples to process that it will be about nine months before it can determine the age of our samples. The answer to the puzzle of the Turkey River Mounds is not yet known.



Map of the east half at the Turkey River Mound Preserve. The ditch around the central, large mound was probably a borrow pit where the Indians obtained earth to construct these earthworks. The central mound and adjacent smaller mounds were excavated by the author during the summer of 1964. This map is redrawn from the survey of Theodore Lewis.



Map of the west half of the Turkey River Mound Preserve. This mound group is situated on a very high limestone ridge overlooking the junction where the Turkey River flows into the Mississippi River. Note the numerous linear and chain mounds. The small irregular mound is probably in the shape of a tailed animal. This map is redrawn from the survey of Theodore Lewis.



The Hartley fortified village was built by the Indians about 1,200 A.D. The fortification is strategically located upon the crest of a hill overlooking the entrance of French Creek into the Upper Iowa River in Allamakee County, northeastern Iowa. Archeological excavations in 1964 revealed the fort was built by a previously undiscovered prehistoric tribe now named the Hartley Culture. This map shows the earth rampart where post holes of the ancient stockade were discovered. The solid outline indicates where the rampart is poorly preserved. Several low mounds occur in the center of the fortification.

Discovering The Hartley Fort

Successful discoveries are not just a matter of chance. Archeologists plan carefully ahead and choose sites with care. There is often a good reason for selecting one site instead of another. It is very expensive to field a crew for five or six weeks at a single site and it is the archeologist's responsibility to see that the money is well spent. By money well spent, the explorations must add measurably to the knowledge about ancient times. Yet, in spite of planning, luck sometimes does play a part.

Excavations at the Hartley site provide a good illustration of archeological luck. Exploration of the site was needed to settle an archeological controversy about prehistoric fortifications. As it turned out, the choice of site proved to be exceedingly fortunate for a great deal more was discovered than expected. An important gap in the scientific evidence was filled. As luck would have it, we discovered this evidence in the first excavation.

The Hartley enclosed site does not look at all spectacular. In appearance, it is simply a low ridge of earth enclosing an acre of land on three sides. The open side overlooks a steep bank where French Creek joins the Upper Iowa River.

The first impression of the site was discouraging. Crossing through the woods with the crew I announced, "Here we are, what do you think of the site?" Disappointment and disbelief could be read on every face. Was this the site? This weedy pasture? The crew had worked hard at Turkey River and very little had been found up to that time. Would the Hartley site prove to be similarly difficult?

By chance this site had not been plowed since the 1870's and not a single potsherd or flint chip lay on the ground surface. To raise the spirits of the crew I pointed to a barely perceptible ridge of earth saying, "The rampart is clearest here." The crew stood remarkably silent at the next remark, "I am not at all sure but I think those small rises of ground in the center are mounds." It did not seem to help matters to say, "Now on this west side I can't trace the enclosure at all."

Although comparatively little had been found at Turkey River, the enclosure was very clear and the mounds were conspicuous. The surface evidence at the Hartley site was not at all certain. Were we making a mistake in excavating at this site? Fortunately the earth screened from the first trench contained a few flint chips, potsherds and artifacts. Interest began to rise. This was the first pottery found during the summer.

After two days I returned to Turkey River leaving Charles Ebel temporarily in charge of the

main crew at the Hartley site. This choice was a good one and he became the mainstay of the expedition. Mr. Ebel had been a carpenter before coming to the University to study history, and he learned mapping rapidly and directed excavations with great neatness and precision. Glen Hartley, son of the owner of the site, was hired on the crew. Although still in high school, he was accustomed to working outside and soon developed into one of the strongest diggers.

The work at the various excavations progressed well during the next ten days turning up minor finds of pottery and artifacts. Solid scientific conclusions could be drawn from the material. After looking at the specimens in a most preliminary way, it was clear that the Hartley enclosure had been built around the year 1200 A.D., give or take a hundred years or so. The pottery indicated a settlement of Late Woodland Indians. Although Excavation 1 was largely completed no evidence of fortifications was found. But when the last mixed earth overlying subsoil was finally cleared away a major discovery was made. The expedition's log has this record:

July 20, Monday Excavation 1 showed four large post holes in orange sandy clay spanning the trench in a northerly line. This is the first evidence of an ancient palisade found in Iowa and is of great interest. The palisade line lies just outside the centerline of the main embankment (east). Three excavations are put in along the east-

ern embankment and one along the south, plus extensions (Excavation 1). . . .

July 21, Tuesday Work progressed on palisade row in Excavation 1. Other excavations having very great difficulty in locating meaningful post holes. The Excavation 1 post hole pattern is an overlap of two distinct rows which suggest a main gateway. Many photographs taken. . . .

Finding the main gateway and adjacent post holes of the ancient stockade wall proved to be the key to the rest of the excavations. With some difficulty the post line was located in the eastern, southern, and northern ramparts. Although no rampart could be easily traced across the west side overlooking the steep slope down to French Creek, the presence of post holes clearly demonstrated that the stockade completely enclosed the west side of the village.

Locating the evidence of the stockade wall on all four sides of the village was no easy task. The posts themselves had completely decayed and no trace of the actual wood was left in the ground. Nevertheless post molds were present, and these had been formed in the following way. The Indians drove substantial posts, up to eight inches in diameter, into the subsoil. After the Indians erected a long line or wall of stout posts, they carried in basket loads of earth and piled it around the base of the post line. A large pit over one hundred feet across and about six feet deep lies near the southeastern corner of the enclosure. Apparently

the Indians obtained the earth by digging this pit.

It was this earth around the posts that formed a low ridge marking the outlines of the fort. As the wood decayed the topsoil sifted into the holes where the posts had been. By excavating with great care and neatness, it was possible to locate the posts' position. The holes, which were filled with black topsoil, formed a contrast with the surrounding light colored subsoil. While some crew members worked out the fortifications, others uncovered burials and charred corn kernels.

The miniature shell-tempered pot found with the child was a puzzle that required a solution. Typical Woodland pottery has small bits of stone mixed in the clay, providing a temper to the finished pot. If temper is absent the pot breaks when heated. Oneota pottery, which was introduced into Eastern Iowa after the Woodland period, contains bits of fragmentary shell as tempering material in the clay. Why was a shell-tempered Oneota pot in a Woodland culture site? As additional burials were found another shell-tempered pot was found. The answer to this puzzle seemed to be that the late Woodland Indians built the stockade for defense. Long after they abandoned it, Oneota Indians used the site as a place to bury their dead. Demonstrating the correctness of this interpretation took two weeks of excavation.

An interesting small mound appeared to be built over a section of the earth ridge forming the south

rampart. Evidently the stockade had been built first and the mound was subsequently added. If this were true, a continuous row of post holes would be found except where they were disturbed by later Oneota burials. On the other hand, if the interpretation were incorrect, it would be possible to confirm this fact by finding post holes in a line crossing and disturbing the burials. This mound was to be the demonstration that two different tribes occupied the site. As the crew members finished their various excavations, they were shifted to the mound.

Working out the burials found elsewhere at the site took several days, for five had been located and they lay in burial pits. It took a good deal of time to neatly clear them for photographs. Professor A. K. Fisher, of the University of Iowa, College of Dentistry, spent a day helping to excavate one of the burials. Marvin Koeper of Baxter, Iowa, spent two days at the excavations. Help from members of the Iowa Archeological Society at this time was appreciated for both time and money were getting short.

Work on the mound proved to be most interesting. The line of post holes which passed straight through the mound was located. The conditions for determining the stratigraphy were going to be excellent. Several great clusters of rocks which were grave markers within the mound itself were exposed. These were mapped and photographed.

When the grave markers were removed and the soil beneath them was cleared away, it could be seen that the post line had been obliterated by two Oneota burials. A third Oneota burial was lying parallel to the ancient post line. Its burial marker of large rock slabs had covered the post holes. This showed beyond a doubt that the fort had completely disappeared by the time the Oneota graves were dug. Exactly the right kind of information had been obtained. It had been a most rewarding summer.

Significance of the Hartley Excavations

The Hartley enclosure excavations reveal a new chapter in the life of Iowa's ancient Indians. Previously, it had been clear to archeologists that the Late Woodland Indians were eventually overwhelmed in eastern Iowa about 1300 A.D. by prosperous agricultural tribes termed Oneota who migrated across the Mississippi River. Among these Oneota tribes was one group named the Ioway.

Yet, there had been some speculation as to the actual cause of the Late Woodland Indians' defeat. Were they declining in numbers? Did they simply abandon northeastern Iowa in the face of the threatened invasion? It now appears from this summer's work that the Late Woodland Indians of northeastern Iowa were vigorous and fairly numerous. They had wide trade relationships with surrounding groups such as the Cambria cul-

ture of southern Minnesota which is evidenced by the pottery. They did not give up Iowa without a struggle. Their fortified village covered about an acre in extent. It is doubtful if it was ever taken in combat, because the log stockade had never been burned.

Corn agriculture may have been present, indicating an important food source not previously reported for Late Woodland Indians in Iowa. However, there is a stratigraphic problem which requires laboratory study, for the corn finds may only be associated with Oneota remains at this site.

The actual details of life in the fortified village have yet to be worked out. There are, possibly, remains of houses and these can be uncovered by subsequent field parties. At present enough is known about the material remains to define a new culture in Iowa, the Hartley Focus, named after the landowner and the site.

The period around 1200 A.D. was a time of troubles for the local Indian groups in the upper Midwest. This same summer of 1964, fortified villages were discovered in Wisconsin and Michigan dating from about the same time period as the Hartley site. Great invasions by Mississippian agriculturalists pushed northward and dislocated the local tribesmen who fought back and fortified their villages. We now know that these troubled times around 1200 A.D. extended into Iowa.

Some Select PALIMPSEST Readings

Compiled by WILLIAM J. PETERSEN

Keyes, Charles Reuben, *Antiquities of the Upper Iowa,* PALIMPSEST, 15:321-354, Oct., 1934.

Keyes, Charles Reuben, *Minott's Rock Shelter,* PALIMPSEST, 24:1-40, Jan., 1943.

Keyes, Charles Reuben, *Prehistoric Indians of Iowa,* PALIMPSEST, 32:285-344, Aug., 1951.

Keyes, Charles Reuben, *A Unique Survey* (Lewis-Hill), PALIMPSEST, 11:214-226, May, 1930.

Logan-Ingmanson, *Effigy Mound National Monument,* PALIMPSEST, 42:145-176, April, 1961.

Wedel, Mildred Mott, *Indian Villages on the Upper Iowa River,* PALIMPSEST, 42:561-592, Dec., 1961.

Jackson-Petersen, *The Black Hawk War,* PALIMPSEST, 43:65-112, Feb., 1962.

Petersen, William J., *The Spirit Lake Massacre,* PALIMPSEST, 43:433-496, Oct., 1962.

Several Authors, *The Indians of Iowa,* PALIMPSEST, 38:33-96, Feb., 1957.

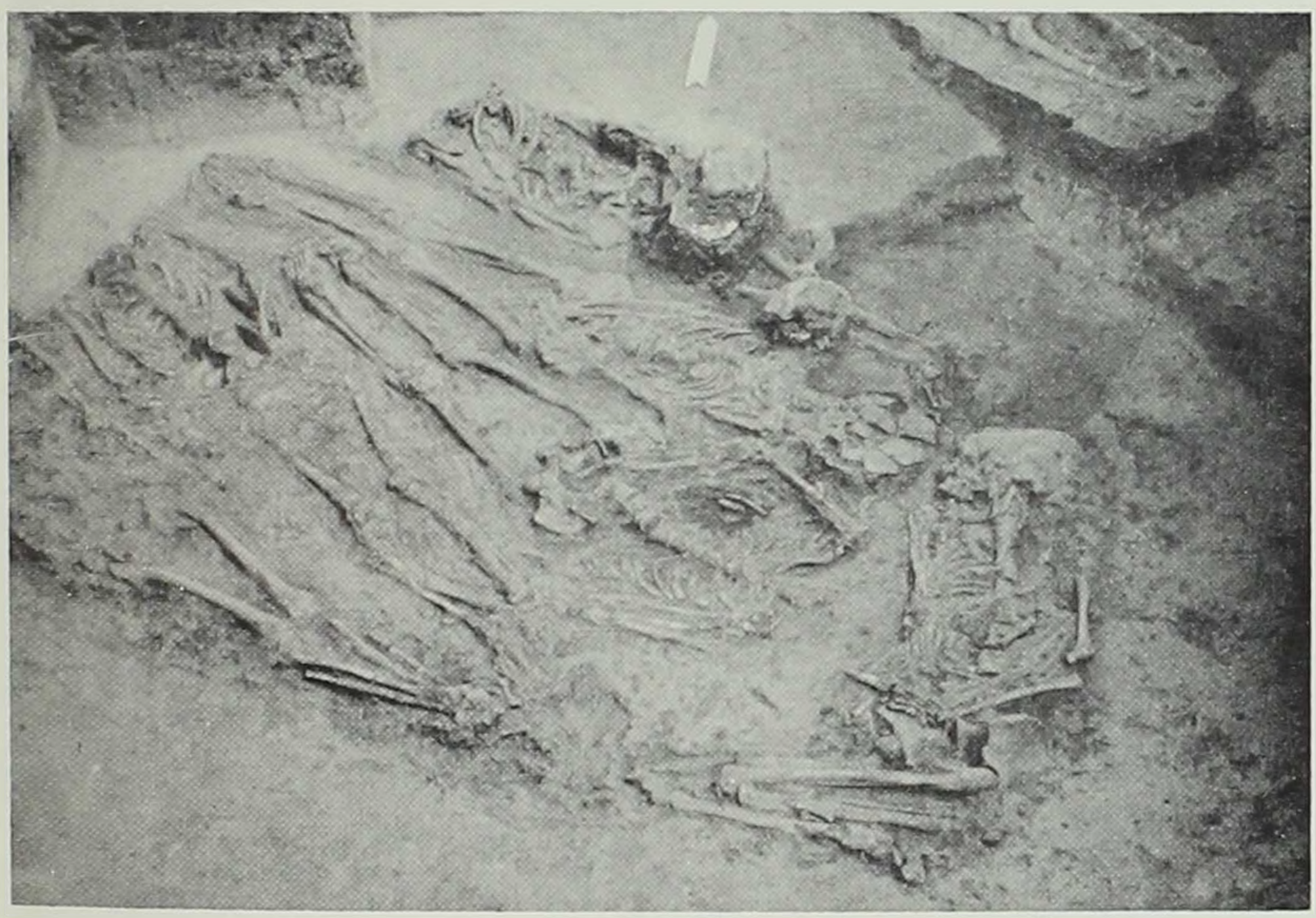
Gallaher-Spencer, *The Tama Powwow,* PALIMPSEST, 38:305-336, Aug., 1957.

Petersen, William J., *The Ioway Indians,* PALIMPSEST, 41:261-292, May, 1960.

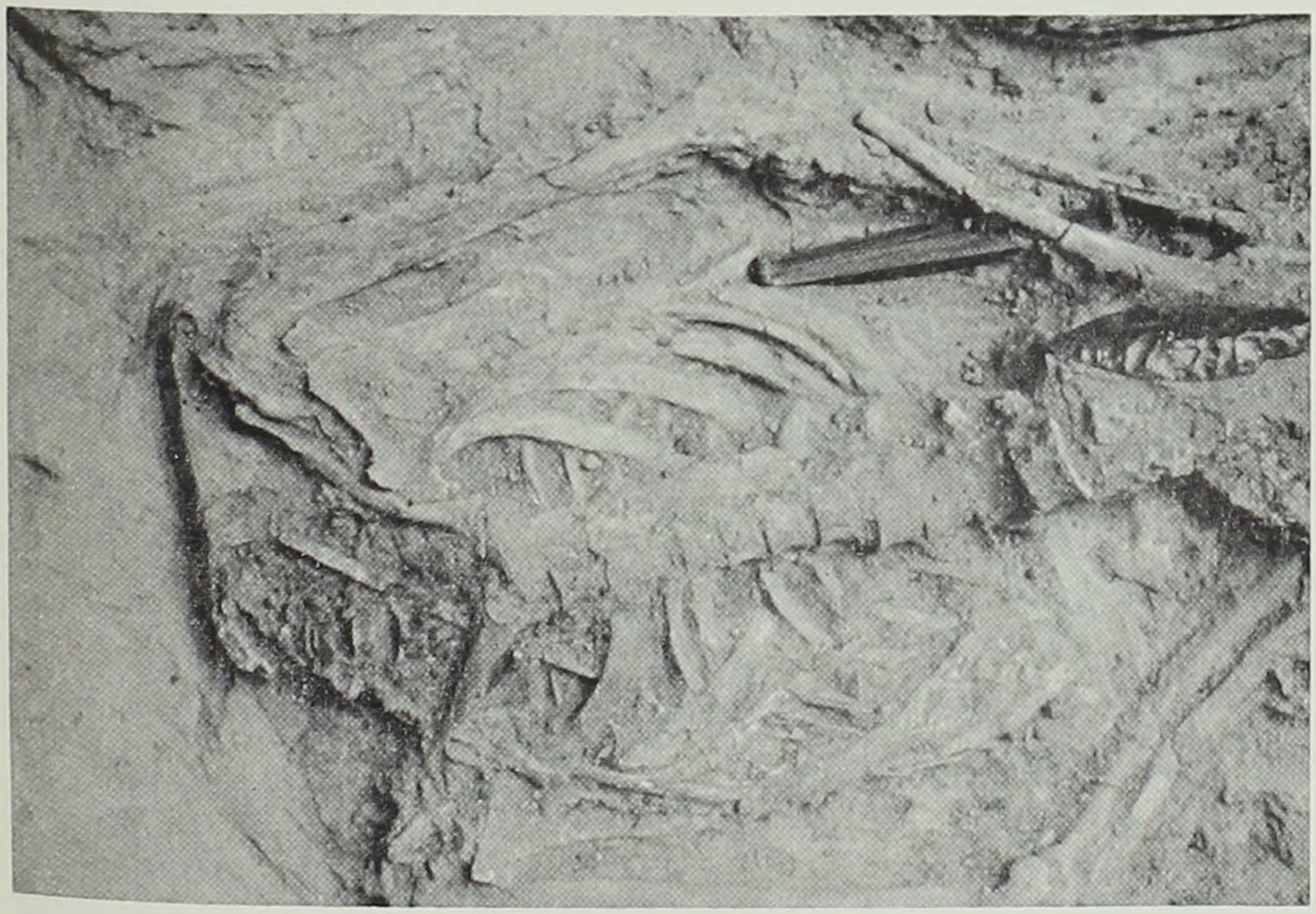
Petersen, William J., *The Winnebago Indians,* PALIMPSEST, 41:325-356, July, 1960.

For a comprehensive survey read Dr. Marshall McKusick's new book — *Men of Ancient Iowa* — published by the Iowa State University Press at Ames.

For additional readings on Prehistoric Man and Indians of Iowa consult Petersen's *Iowa History Reference Guide* (1952), pp. 22-31.



Turkey River Mound 38, burial pit with 6 skeletons.



Mound 38, headless burial with copper and stone artifacts.

Turkey River Mound 38, spearhead and stone weight with burial.

Mound 38, copper dagger jammed into neck of headless skeleton.