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ARCHEOLOGICAL EXCAVATIONS AT THE NORTHWEST COMPANY'S
FUR TRADE POST, GRAND PORTAGE, MINNESOTA, IN 1936-1937

By the Minnesota Historical Society

By

Alan R. Woolworth

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INTRODUCTION

The purpose of this report is to describe the archeological remains found during the excavation of the Northwest Company's Post at Grand Portage, Minnesota by the Minnesota Historical Society in 1936-1937. These excavations were sponsored by the U. S. Indian Service as a Civilian Conservation Corps project for the purpose of providing work for local residents. Historical values were incidental, and funds were not provided for a full scale interpretation of these archeological excavations. A brief report was made on the 1936-37 excavations by Ralph D. Brown, who had supervised them, but his report was preliminary in nature and is not sufficient for present day interpretative needs. Brown's report is superseded by the present paper.

In the present report, the site is described, archeological field work summarized, structural remains described, and an analysis of the artifacts recovered is presented. A narrative form of presentation is used and conclusions are drawn when the data were adequate for this purpose. Throughout the present report, efforts were made to provide as complete an interpretation as possible. Obviously, all available information is highly important in terms of the planned reconstruction of the palisades in the near future, and other contemplated

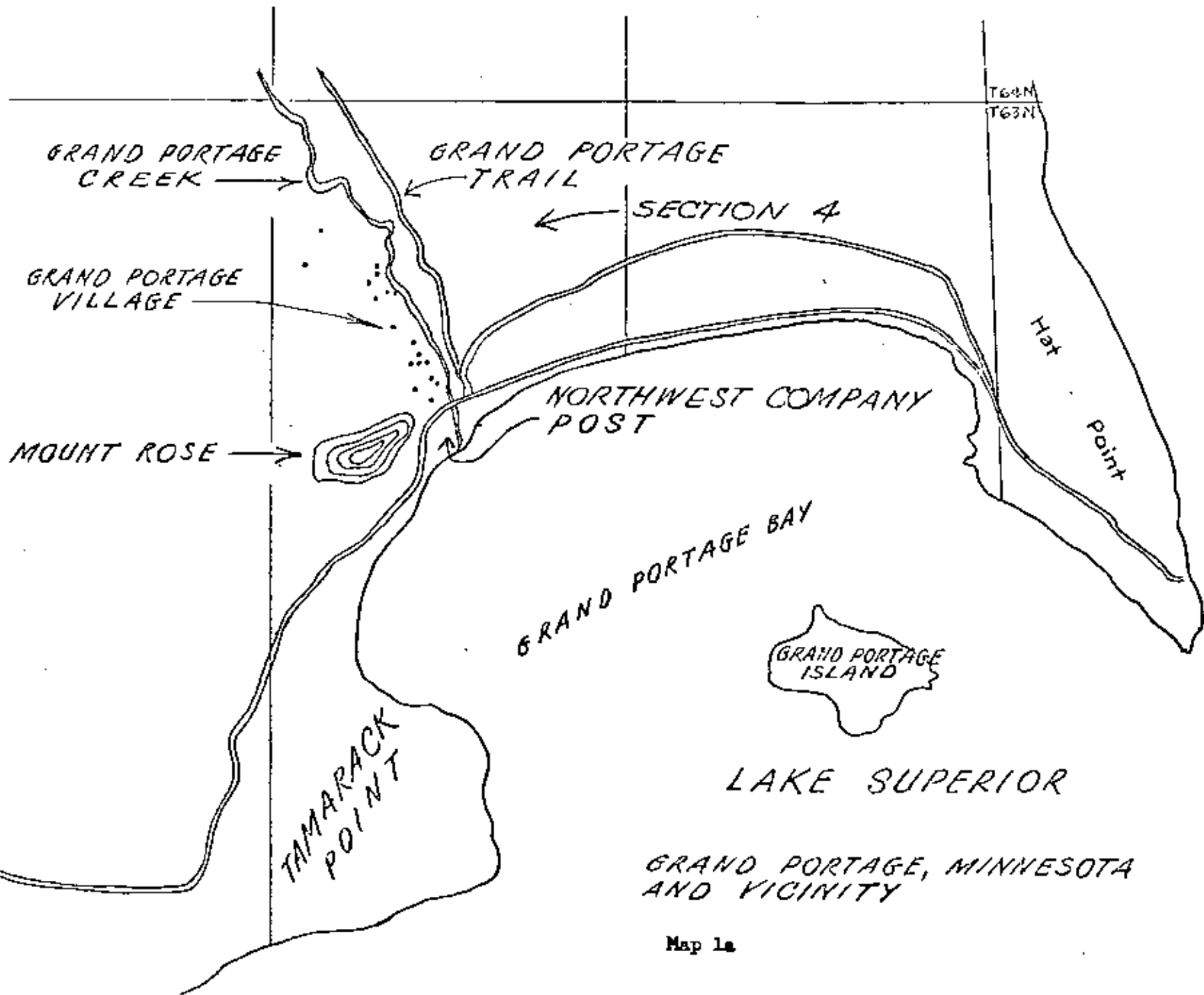
development of this unique historic site by the National Park Service.

During the preparation of this report, there have been many problems. The chief problem has been the incomplete nature of the available data. Some excavation notes are incomplete or missing, and the artifacts were in a disorderly condition. It was necessary to prepare an elaborate series of maps to interpret the variety of excavation controls used and the numerous excavations made during the two field seasons at the site.

Grand Portage was well known in its day, but there are no adequate written descriptions of it at hand today. No contemporary maps or illustrations of the site are available. Therefore, all possible archeological evidence becomes vital for interpretative purposes. Obviously, almost the full burden of interpretation of the structures at the site will fall upon archeology. ||

There remain many unexcavated areas within the stockade enclosure and there is also the possibility of re-excavating some structural sites to provide fuller data for a more complete interpretation of them, as well as the complex "east gate area".

Funds for the preparation of this report were provided by the National Park Service under NPS Purchase orders 32-NPS-436



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GRAND PORTAGE, MINNESOTA AND VICINITY

Map 1a

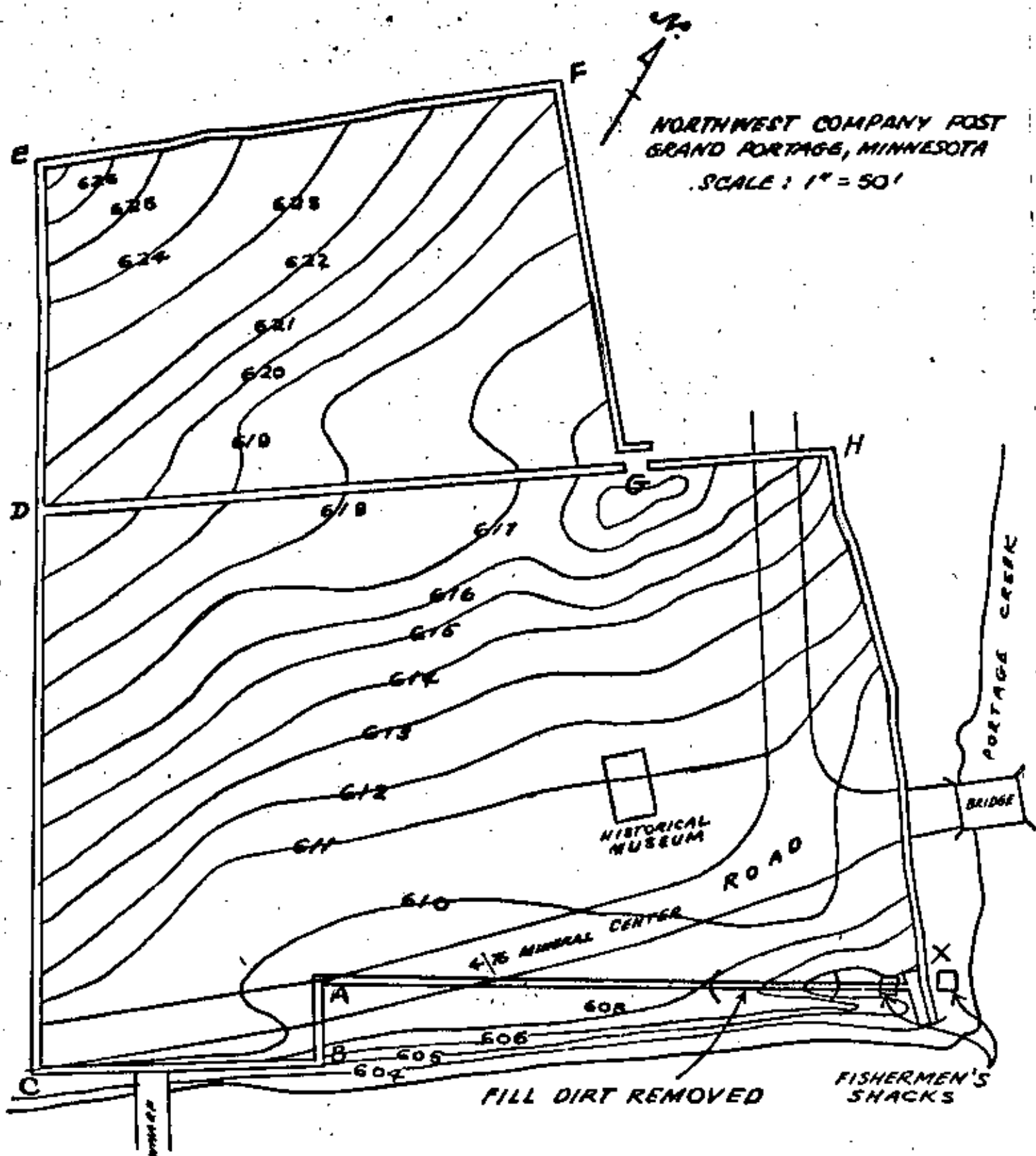
(May 11, 1962), and 32-NPS-430 (March 11, 1963).

THE SITE DESCRIBED

Location and Topography

The community of Grand Portage is located in Section 4, Township 63 North, Range 6 East, Cook County, extreme north-eastern Minnesota. The Northwest Company fur post is located in the Southwest 1/4 of Section 4, T. 63 N., R. 6 E., a few hundred yards to the south of the village of Grand Portage.

In geographical terms, Grand Portage is situated in the western portion of Grand Portage Bay which is one of the finest natural harbors on the northern shore of Lake Superior. The eastern portion of the bay is enclosed by Hat Point, a prominent elevated peninsula which juts out into Lake Superior. The western border of the bay is formed by Raspberry or Tamarack Point which rises only about 20 feet above the lake. In the center of the bay, about midway between these two points of land, is Grand Portage Island. It is approximately 1/2 mile in length and 705 feet in elevation or about 100 feet above lake level. The arms of the bay and Grand Portage Island act as buffers to prevent high waves from sweeping into shore. Thus the bay is quite sheltered and not much subject to severe



Map 1b

wave damage. The bay is approximately 1 3/4 miles across at its widest point, and more than a mile in depth. (Map 1a).

The Northwest Company post is situated in the western portion of the bay. The shoreline in front of the post is steep and rocky and about 5 feet above the lake level. It is on the western bank of Grand Portage Creek, at its mouth, and at the foot of Mount Rose, a local landmark which rises to a height of about 920 feet above sea level, or about 318 feet above the mean elevation of Lake Superior which is 602 feet above sea level. The post's enclosure has an elevation of 608 feet in its southeastern corner and slopes gradually upward toward Mount Rose to an elevation of 626 feet in its northwestern corner. The bulk of the stockade enclosure lies between elevations of 610-620 feet. A relatively prominent glacial beach runs east-west through the central portion of the southern section of the enclosure. The Great Hall is on this contour which has an elevation of 614 feet. (Map 1b).

Thus, the ground surface slopes upward gently from Lake Superior toward Mount Rose. It breaks off relatively sharply on the western bank of Grand Portage Creek which lies a few feet eastward of the stockade's eastern palisade. General surface drainage is relatively good within the enclosure except for its northeastern portion. A thin mantle of humus mixed

with sand and gravel overlies the entire enclosure. The subsurface soil near the lake is composed of fine beach sands for a distance of about 150 feet northward from the lake shore. A heavy brown clay thereafter extends northward for about 100 feet across the central portion of the enclosure. A layer of slate rises close to the ground surface and extends across most of the northwestern portion of the site. Large subsurface boulders are present over the entire area northward of the sandy area near the lake shore. They rise to the surface and above it in the northern portion of the site. The heavy clays and slate which underlie the central and northern sections of the enclosure retain water. Consequently, the northern part of the site is marshy in some spots and wet after rains.

Most of the southern portion of the site was occupied intermittently by Indians from about 1840 to 1936. A one and a half story log structure belonging to the Cook County Historical Society stood in the southeastern portion of the enclosure. Two small wooden fishermen's shacks stood near the southeastern stockade corner (Corner X) at the mouth of Grand Portage Creek. A log cribbed wharf jutted out into the lake near the southwestern stockade corner. It had been reconstructed on the site of an old wharf in 1931, and was used by the local Indian population for docking commercial and sport

fishing boats. A gravel road, which was the main thoroughfare from Mineral Center and Grand Marais into Grand Portage, ran along the southern and eastern portions of the site. A section of it crossed the eastern palisade line about 100 feet north of the southeastern stockade corner, crossed Grand Portage Creek on a bridge, and continued eastward for a short distance before turning northward. This roadway was in use in 1936-37 and prevented extensive excavations in those portions of the site through which it ran. It was relocated north of the enclosure in 1938.

In the 1930's fill dirt had been scooped up from an area extending from about 30 to 80 feet west of the southeastern stockade corner. This had destroyed about 50 feet of the course of the southern palisade trench. Wave action had eroded much of the beach in front of Corners B-C, and the southeastern corner at the mouth of Grand Portage Creek. Consequently, it was not possible to make very satisfactory excavations in these areas. (Map 1b).

In the spring of 1936, two furrows, marking the course of the northern palisade trench and the northern section of the western palisade trench were visible. In the rear section of the enclosure lay a scattered pile of large boulders, and further south toward the lake were more piles of stones. The

northeastern section of the enclosure was overgrown with brush and small trees. (Plate 1).

History of the Site

The Grand Portage had undoubtedly been known to Indians and was used by them hundreds of years prior to the advent of white men on the northern shore of Lake Superior. The first definite mention of the Grand Portage route is in a letter dated October 27, 1722 (Margry, 6:516, 1886). La Verendrye is known to have landed here in the fall of 1731 (Burpee, 1927, p. 9), and to have used the Grand Portage trail, but it is doubtful that the French ever had much of an establishment at this location. With the fall of New France to the British in 1760, a new group of traders began a more extensive usage of the area.

There can be little doubt that the British fur traders who came to this region about 1762 utilized the site as a depot to a far greater extent than had the French. John Erskine or Askin appears to have cleared the site we are concerned with and to have erected an enclosure with a few buildings in about 1768 (Nute, 1940, p. 137). In about 1778 a merger of competing traders formed a concern called "The Northwest Company" and Grand Portage became the great entrepot for

the vast region to the north and west. It was probably at this date that a more elaborate post was commenced at the site. Thereafter, the establishment at Grand Portage grew in importance up to about 1800. It was abandoned in 1803 when the Northwest Company moved to Fort William on Canadian soil. The structures at this site in 1803 represented the accretion of years and had most probably been erected by many fur traders in a variety of construction styles over a span of about 30 years.

During its heyday from about 1785 to 1800 Grand Portage was the point at which all furs, all supplies, and hundreds of employees gathered for an annual rendezvous in the month of July. Thus there was a specialization of function in the buildings at this site. In 1793 the stockade enclosure had three gates in its palisades over which stood two guard houses. Sixteen buildings of slight construction stood within the enclosure. They were made of whipsawn cedar and spruce boards. Their roofs were covered with cedar and pine shingles. The doors, windows, and posts were painted with a Spanish brown paint. Of these buildings, six were storehouses, one a counting house, one a mess hall, and the remaining eight were dwellings and shops (Charles Gates, ed., Five Fur Traders of the Northwest, 1933, pp. 92-94). Another account of Grand

Portage dated 1803 mentions that "bastions" stood at the four corners of the stockade (M. M. Quaife, ed., War on the Detroit, 1940, pp. 10-12).

By 1822, the palisades along with the numerous structures had vanished and David Thompson found only red clover blooming where they had stood (Nute, Lake Superior, 1944, p. 307).

There are a number of references which relate to subsequent fur trading operations and a fishing station at Grand Portage after 1803, but they are beyond the scope of the present report.

History of excavations

The project for the investigation and reconstruction of the Northwest Company fur trade post at Grand Portage, Minnesota commenced unexpectedly with the insertion of a request for funds for this purpose in the 1935-36 proposals for relief work to be carried on by the Indian Division of the Civilian Conservation Corps within the Consolidated Chippewa Agency of Minnesota. In February of 1936 Agency officials were notified that \$6,200 had been allotted for palisade restoration work, and that the money must be expended by July 1, 1936. Lacking plans or cost estimates of any nature, the Agency officials appealed to the Minnesota Historical Society for assistance. A tentative agreement was made by which the Minnesota Historical Society would furnish technical supervision and assistance, and the Indian Service would furnish the labor.

Despite the apparent wealth of descriptive material about the Northwest Company post at Grand Portage, it soon became apparent that there was a dearth of accurate, detailed information on which construction plans could be based. The Minnesota Historical Society therefore insisted upon surface excavation of at least a portion of the site, although Indian Service

officials demanded immediate action towards building. A timber cutting crew was sent out into the Grand Portage Indian Reservation forests about mid-February, and logged cedar trees from fifteen to twenty inches in diameter and about twenty feet in length. Logging operations ceased about the end of March because of climatic conditions, and the project languished until June 1936.

With the cooperation of the Works Progress Administration, Ralph D. Brown, an experienced archeologist, was released from the W.P.A. Historical Records Survey to supervise the excavations at Grand Portage.

On May 8-9, 1936, Willoughby M. Babcock, Museum Curator and Archeologist, Minnesota Historical Society, and Ralph D. Brown made a reconnaissance trip to Grand Portage for the purpose of surveying the situation, and to lay out excavation plans which would define the stockade outline and give clues to the sites of structures within the enclosure.

A late spring made it impossible to commence excavations before June 10, 1936. Small crews of local Indians were used spasmodically in excavations throughout the summer of this year. Unfortunately, that season brought many forest fires in the region, and only elderly or incapacitated men were available for excavation work. Younger men were taken for fire

fighting duties. Arrangements were made by which the appropriation could be used past the July 1, 1936 deadline. Despite these difficulties, enough excavation was done to establish the location of the palisade trenches which outlined the stockade enclosure, and to establish the correctness of the site identification. The utter inadequacy of the available historical information regarding the site became even more apparent. It was obvious that an extended study of the site by archeological methods would be necessary before a historical reconstruction could be attempted.

Ralph D. Brown remained in the field supervising excavations from June 10 - June 18, 1936; he resumed operations on August 10 - August 21, 1936. Work was again resumed at the site on September 5, 1936, with G. Hubert Smith and Allen Holmberg as excavation supervisors; they continued in this capacity until September 22, 1936, when labor was no longer available. Smith and Holmberg apparently continued in the field alone until October 8, 1936. Smith returned to Grand Portage on October 18, 1936, and resumed the excavations, continuing until October 29, 1936. Rains made work difficult through much of this later period.

During the 1936 field season the entire course of the stockade outline was delimited, and the location of one gate

("East gate") established. The presence of a palisade wall running roughly East-West through the center of the stockade enclosure, was established. Still another stockade line was discovered which ran roughly North-South, and between points A and Y on the excavation map. The remains of two possible structures were also discovered.

Thus the achievements of the 1936 explorations were primarily exploratory in nature. The outline of the stockade had been delimited; one gate had been discovered, and two interior stockade walls found. The locations of two structures within the enclosure had also been found. The stockade enclosure had also been mapped in detail by a surveyor. Much data concerning the actual stockade construction had also been determined. The measurements of the palisade trench had also been established as had the probable forms of the individual pickets, and the sub surface structure of the palisade. Identification of the species of wood used in the palisade construction was also determined.

The 1936 season's work had demonstrated the soundness of the archeological program and the real scope of the Grand Portage reconstruction. The U. S. Indian Service and the Minnesota Historical Society therefore entered into an agreement in the winter of 1936-37 for a continuation of the Grand Portage project

with a budget which was more nearly adequate to the real needs of the site.

Summary of the 1937 Field Season

A considerable number of budgetary problems and other factors prevented the second field season at this site from commencing until September 3, 1937, under the direction of Willoughby M. Babcock and Ralph D. Brown. The major objectives of this season were to find the site of the "main hall" and to conduct exploratory excavations on the stockade interior whereby structural remains would be found. Some attention was also to be given to the "east gate area" in an effort to explain the complex structural remains at this location.

Most of the first week of this field season was devoted to cutting grass and weeds from the stockade enclosure and to draining the water filled palisade trenches which had been left open at the close of the preceding season. Eight exploratory trenches were excavated in the area west of the O E-W baseline from September 3 - September 20th. Brown discovered and delimited the site of the Great Hall during this same period. Fifteen other trenches and areas were excavated between September 20th and October 27th. The bulk of these latter excavations were east of the O E-W baseline and south of the O N-S baseline.

During this same period, Brown excavated an area of about 50 feet by 70 feet in the southwestern corner of the stockade enclosure as this location had been designated as the future site for the Cook County Historical Society museum building which then stood in the southeastern part of the site. Some work was also done in cleaning the palisade trenches in the belief that the stockade restoration would begin shortly. All of the 1937 excavations were made within the stockade enclosure.

Willoughby M. Babcock spent only about ten days at the site during the early part of the field season. Ralph D. Brown supervised the remaining excavations by himself without any field assistants other than local crew foremen.

Listed below are the achievements of the 1937 field season:

- (1) A large portion of the site was explored by trenching.
- (2) The remains of 13 structures and probable structures were found.
- (3) Further complex structural features were found in the "east gate area".
- (4) It was demonstrated that at least four distinct building methods had been used in erecting structures at this site.
- (5) Large quantities of artifacts relating^{to} the fur trade era were recovered.

These two field seasons of archeological work provided enough information so that the stockade could be reconstructed on its original location in 1938. Construction of a replica

of the Great Hall on its original foundations was begun in 1938 and completed about 1940. Some questions of interpretation concerning the gates, defensive features, and the respective dates of construction of portions of the palisades are still unanswered.

Acknowledgements

It is with pleasure and appreciation that I acknowledge the great contributions made by the following individuals toward the preparation of this archeological report. My wife, Nancy L. Woolworth, worked patiently for long hours at our home in cleaning and marking the artifacts recovered in 1936. She also prepared the initial draft of a catalog of these specimens, and sacrificed many weekends of family recreation while her husband was at his office absorbed in the details of excavations made more than 25 years before by two friends, G. Hubert Smith, and Ralph D. Brown.

Loren C. Johnson, Assistant Archeologist, processed the 1937 specimens; prepared a catalog of them; drew maps; prepared the plates of artifacts; and made a major contribution toward the analysis of the artifacts found at this site.

Marjorie J. Towson, Museum Tour Guide-Registrar, typed the artifact descriptions through a number of drafts and proof

read the seemingly endless artifact catalogs.

Janis K. Obst, Museum Curator of Collections, wrote the descriptions of ceramics and glassware, and typed the plate captions.

Paul Waller, Museum Artist, drew many sketches and traced the numerous maps.

Chester J. Kozlak, Museum Curator of Exhibits, patiently mounted photographs to prepare the forty odd plates which accompany this report.

Vivian Swanson, a Secretary in the Society's Administration office, bore the burden of typing the copy for this report.

Eugene G. Becker, Curator of Pictures, retained his sense of humor throughout my continual demands for pictures and still more pictures to illustrate this report.

Obviously, it would have been impossible to complete this project in the allotted time span, without the continued cooperation of these friends.

The funds for the preparation of this report were provided by the National Park Service under Purchase Order 32-NPS-436, May 11, 1962, and Purchase Order 32-NPS-430, March 11, 1963.

Alan R. Woolworth

Museum Curator, MHS

October 25, 1963

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22. Building hardware. Shutter fastener.
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Plate

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ARCHEOLOGICAL FIELD WORK

Reconnaissance of the site.

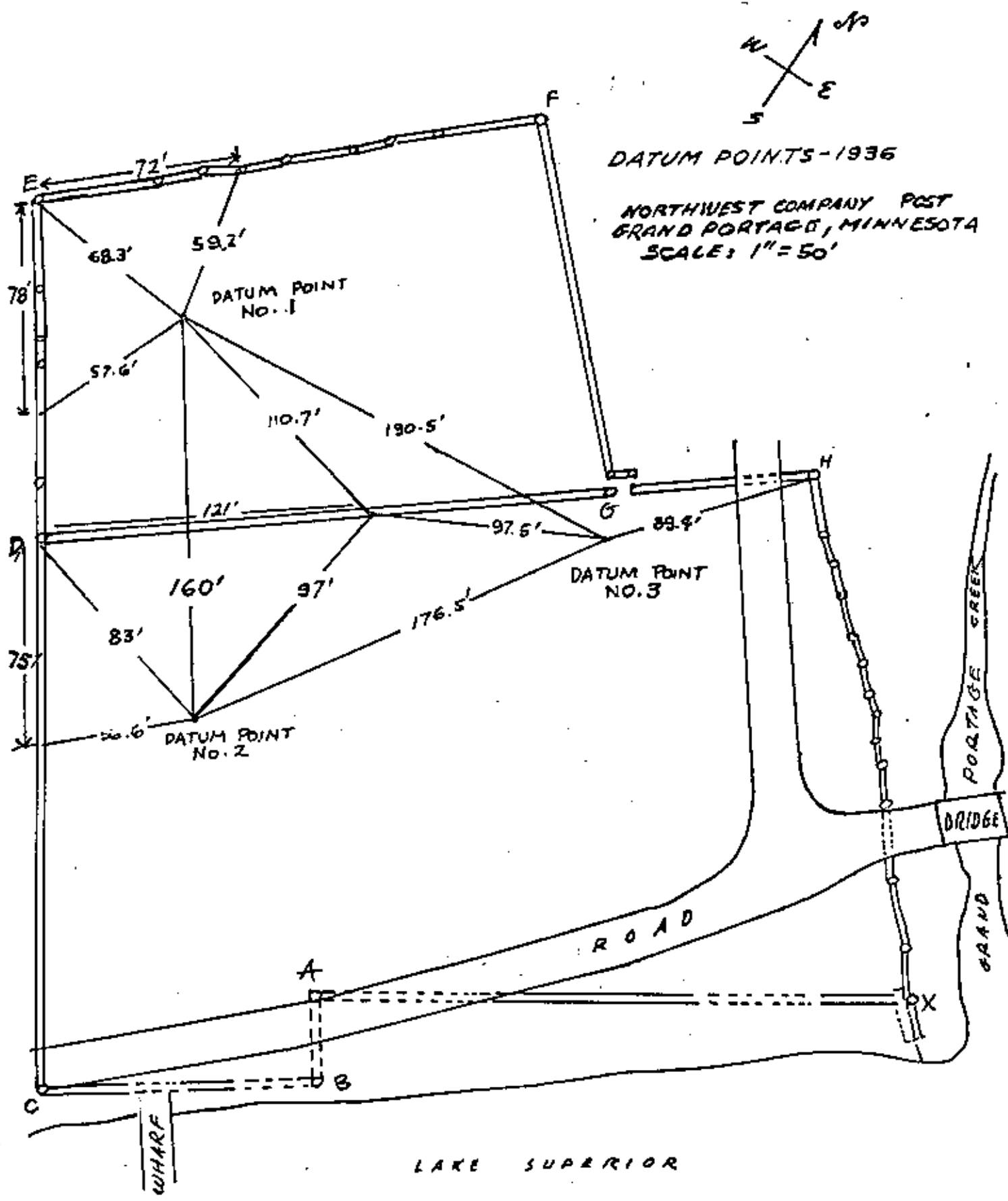
Willoughby M. Babcock and Ralph D. Brown visited the site on May 8-9, 1936 for the purpose of making an on-the-spot investigation of the traditional location of the Northwest Company post at Grand Portage, and to lay out excavation plans which would define the stockade outline and give clues to building locations within the stockade enclosure. Let us see how Brown describes it at that time:

" . . . At that time the grass had not begun to grow, and the contours of the ground surface were quite apparent. Furrows, marking stretches of the rear, or north, and west stockade walls were easily visible. The rear depression measured 204 feet in length; while the western furrow faded out about 250 feet (south) from the northwest corner. Aside from the two corners, (northwest and northeast corners) which remained to be proved as corners, and the two lines of wall, no other boundaries of the enclosure could be determined from the surface markings. Midway along the inside of the rear wall lay a scattered pile of large boulders, and, further toward the lake, several other heaps of stone, within the enclosure. About 1500 square yards of the northeast corner of the enclosure was overgrown with brush and small trees. A small excavation was made on the site, but the ground was found to be frozen below the depth of a foot; above it, water in the topsoil welled up so rapidly that work was almost impossible.

Five pictures were taken showing the palisade furrows and the enclosure from several angles." (Brown MS., 1936d, pp. 4-5).

Surveying Methods and Excavation Controls

The Datum Points and the 1936 Baselines



DATUM POINTS-1936

NORTHWEST COMPANY POST
 GRAND PORTAGE, MINNESOTA
 SCALE: 1" = 50'

LAKE SUPERIOR

Brown apparently did not establish any reference points which he was occupied with determining the major outlines of the stockade from June 10-June 18, 1936. The need for permanent reference points probably became evident only after work was begun in the "East gate area" (Corner G) about August 10-21, 1936. Here, Brown found it necessary to establish a small grid system which was not tied into an overall grid system of the site.

Three datum points were established between August 10-21, 1936. Datum Point 1 was situated in the northwestern portion of the stockade enclosure. It can be relocated by the following measurements. A line is drawn 78' south of the Northwest stockade corner (Corner E), along the line of the western palisade wall. A line is then drawn northeast for 57.6' to Datum Point 1. A line drawn on a southeastern diagonal 68' from the inside corner of the Northwest stockade corner (Corner E), intersects this point. (Map 2).

Datum Point 2 was located in the south central portion of the stockade enclosure. It was approximately 160' south of Datum Point 1. It can be relocated by drawing a line 75' south along the western palisade line from Corner D. Thereafter, an approximate right angle is drawn eastward 56.6' to Datum Point 2. A further reference is provided by measuring 83' diagonally

southeastward from Corner D to Datum Point 2. (Map 2).

Datum Point 3 was situated to the rear and westward of the Northeastern corner of the Great Hall. It was 89.4' southwest from the interior of the Northeastern Stockade corner (Corner H). It was 12.5' south of the central palisade line, and 176.5' diagonally northeast from Datum Point 2. (Map 2).

The locations of these three Datum Points in reference to the general stockade outline will be readily understood by examining Map 2.

Triangulations from these three Datum Points all coincided at one location on the central palisade line. This location is 121' eastward along the central palisade line from the outer face of the outer face of the western palisade line adjacent to Corner D. This central point apparently was designated as O N-S / O E-W during September, 1936, although it was established by August 22, 1936.

In late June of 1936, Edward A. Hummel, Assistant Historian, Region II, N.P.S., visited Brown's excavations at Grand Portage. Hummel recommended that the method of archeological investigation at the site be changed from that of following palisade trench lines and depressions to one whereby the entire stockade area would be excavated on a grid system (Brown, 1936e).

A North-South exploratory trench 4' in width was excavated through the western one-half of the enclosure in the period from September 8 - 22, 1936. Another exploratory trench of the same width, which intersected the N-S trench at a right angle, was made during the same time period. Brown's field notes and some incidental designations on soil profiles indicate that these two trenches were laid out in reference to this O N-S/O E-W point.

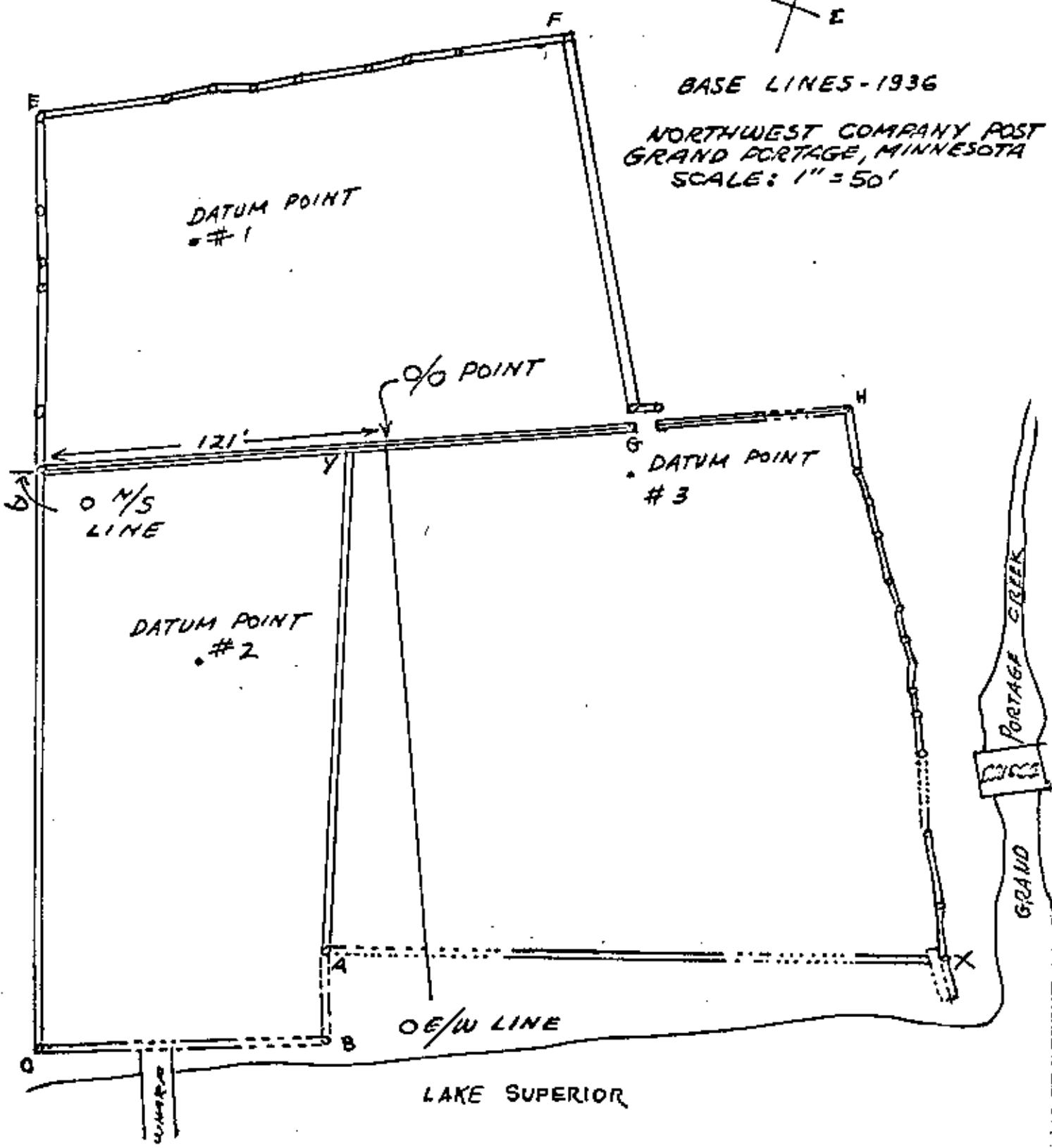
It is very probable that G. Hubert Smith and Allan Holmberg began the use of this highly important reference point as they commenced supervision of excavations at the site about September 5, 1936. Smith established a small grid system based on 5' squares, at the junctions of the N-S and E-W exploratory trenches which were excavated in September, 1936. This method was used in the excavation of a small structure (C-1) which was found at this spot. This grid was oriented with N-S/E-W baselines which intersected at the O-O point discussed above, and could be relocated without much trouble. (Map 10.)

Smith used another small grid system in conjunction with his excavations at Corner X, the troublesome Southeastern stockade corner. This grid was based on 5' squares too, and was adequate for its purpose (Map 11).



BASE LINES-1936

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SCALE: 1" = 50'



Brown continued to use a trenching method of excavation along the outlines of the stockade until he began working in the "east gate area" near the Northeastern corner of the Great Hall (Corner G). At this point, he laid out a section measuring 25' x 30' on a 5' series of squares. The orientation was on a true N-S line. In 1937 Brown correlated this grid with the grid which encompassed the site (Brown, 1937a, p. 100).

In August of 1936, elevation readings were taken at 10 foot intervals both at the ground surface and in the excavated trench bottoms along the course of the northern palisade trench line between Corners E and F. These readings were taken from Datum Point No. 1. Similar readings were taken of the western palisade trench line between Corners D and E, and on the northeastern palisade trench line between Corners F and G. These latter elevations were presumably taken from Datum Point No. 1 (Brown, 1936e).

In September of 1936, elevation readings were taken at 10 foot intervals, both at the ground surface and in the excavated trench bottoms, along the courses of Smith's two large exploratory trenches. The reference used was Datum Point No. 2 (Brown, 1936e).

The evidence thus far discussed demonstrates that Brown, logically enough, followed the courses of the palisade trench

lines around the stockade enclosure without recourse to a grid system. Either Brown or Smith adopted a 0 N-S/0 E-W point and two base lines which passed through its center at right angles to each other. The two exploratory trenches which were excavated in September, 1936 through the western one-half of the enclosure were oriented in accordance with N-S/E-W base lines. These base lines were also used during the 1937 field season at this site.

Three small but critical areas; the "east gate area" at Corner G, the site of Structure C-1 at the junction of the N-S and E-W exploratory trenches, and Corner X at the Southeastern corner of the stockade, were excavated by means of 5' grid systems. None of these three grids were parts of a larger grid system which embraced the entire stockade enclosure, but fortunately all of them can be correlated with the 1937 grid system which was extended over the entire site.

The System of Corner Designations for the Stockade Enclosure

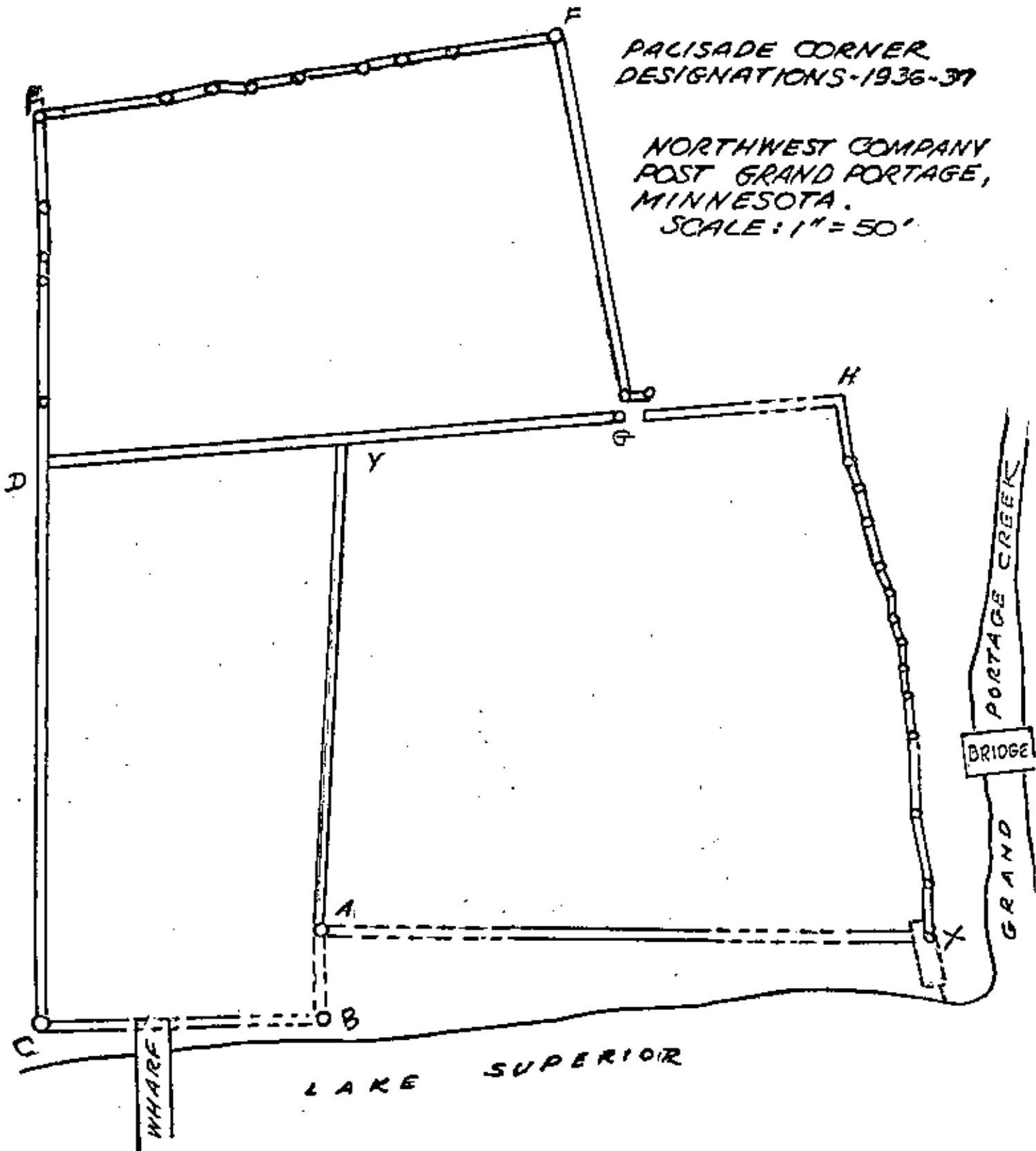
By September, 1936 the numerous stockade corners made it essential to adopt some means of precise identification for them. A method of letter designations was chosen. It commences at an interior corner on the southern palisade line and thereafter runs in a clockwise fashion around the western, northern, northeastern, eastern and southern palisade lines back to the



PALISADE CORNER
DESIGNATIONS-1936-37

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SCALE: 1" = 50'



point of origin.

Stockade Corner Designations

Corner A is an interior corner situated along the Southern palisade line. It is at a point of intersection with a portion of the Southern palisade line which intersects with an interior North-South palisade line which runs northward about 195' where it intersects with the "central palisade wall" at Corner Y.

Corner B is 35.5' south of Corner A. This corner was located by projection from Corners A and C.

Corner C is the Southwestern corner of the stockade; it is roughly 110' west of Corner B, and is the juncture of the western and southern palisades.

Corner D is about 227' northward along the course of the western palisade line from Corner C. It is the point of intersection of the western palisade line with the "central palisade wall" which runs East-West from Corner G to Corner D.

Corner E is the Northwestern stockade corner; it is the junction of the western and northern palisade lines. It is about 140' north of Corner D.

Corner F is the Northeastern corner of the stockade; it is the junction of the northern and northeastern palisade lines. It is about 204' northeast of Corner E.

Corner G is at the intersection of a palisade line running southward from Corner F, and an East-West palisade line which runs westward from Corner H to Corner G. The Northeastern blockhouse is in this same location.

Corner H is the Northeastern corner of the stockade abutting on Grand Portage Creek. It is at the intersection of a palisade line running eastward about 70' from Corner G, and a palisade line running northward about 220' from Corner X, the Southeastern stockade corner.

Corner X is the Southeastern corner of the stockade; it is on the western bank of Grand Portage Creek at its mouth. It is at the intersection of a palisade line running south about 220' from Corner H, and a palisade line running East-West about 240' from Corner A.

Corner Y is an interior corner situated along the "central palisade line," about 120' west of Corner G. It is at the intersection of the "central palisade line" and the North-South palisade line which runs north from Corner A.

This system of designation for the stockade corners was adopted by September 13, 1936, prior to S. S. Walker's map of October 6 - 8, 1936 (Brown, 1936e, p. 1).

The Area Designation System, 1936-37

A system of area designations for different parts of the

stockade enclosure was used to some extent in 1936, and was made more elaborate in 1937. Its first appearance is on G. Hubert Smith's detail map of Structure C-1 which was drawn on October 28, 1936 (Map No. 10).

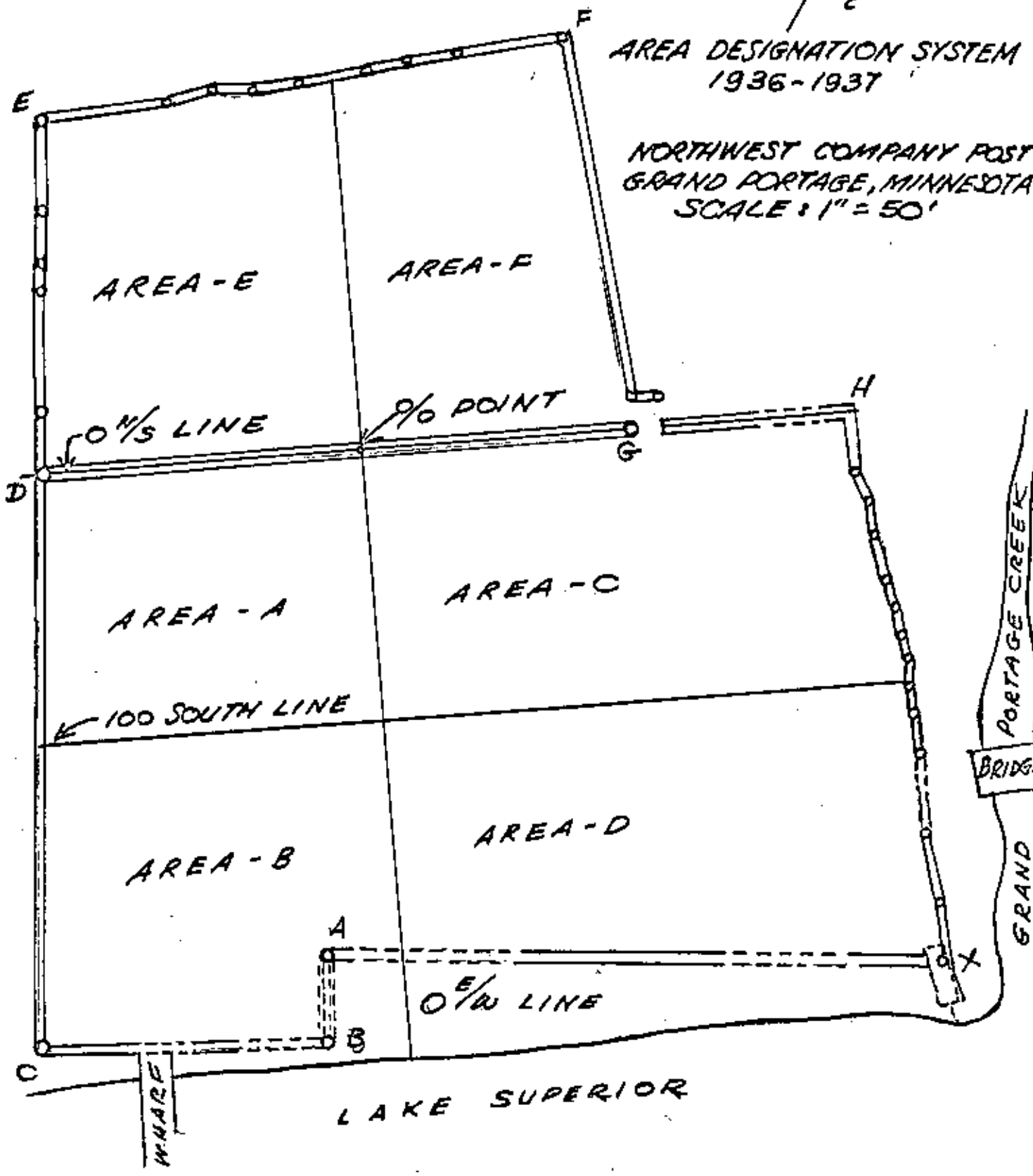
Brown or Smith apparently divided the stockade enclosure into areas along the lines of baselines which extended North-south and East-West through the O N-S/O E-W point. On October 28, 1936, Smith applied the designation, "Section A" to an area located south of the N-S baseline and west of the E-W baseline. The designation, "Section C" was applied to an area south of the N-S baseline and east of the E-W baseline.

Brown's map of September 20, 1937 shows that this system was still in operation, although in an altered form (Map No. 12). His final map of October 27, 1937, shows some changes in designations from Smith's map of 1936. (Map No. 13). Brown had by now adopted a system whereby "Section A" lay in the western portion of the site. It was south of the N-S baseline and west of the E-W baseline in an area bounded by grid coordinates, O N-S/100S and O E-W/130W. "Section B" lay south of the 100S line and west of the O E-W line. Its grid coordinates were: 100S-230S and O E-W/140W. "Section C" lay south of the O N-S line and east of the O E-W line. Its grid coordinates were: O N-S/100S and O E-W/200E. "Section D" lay



AREA DESIGNATION SYSTEM
1936-1937

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south of the 100S line and east of the O E-W line. Its grid coordinates were: 100S/200S and O E-W/200E. "Section E" lay north of the O N-S line and west of the O E-W line. Its grid coordinates were: O N-S/80N and O E-W/120W. "Section F" lay east of the O E-W line and north of the O N-S line. Its grid coordinates were: O N-S/80N and O E-W/110E. (See Map 5 for a graphic explanation of this system of area designation).

Presumably this method of sectional designation for different portions of the stockade enclosure was an effort to retain control of excavations without using grid designations. When it proved unworkable, Brown adopted a conventional grid system.

The 1937 Grid System

Brown casts some light on his surveying methods by stating that he laid out the "east gate area" in 1936 on a 5' grid oriented to a true N-S baseline with the intention of later staking out the entire site on a projection of it (Brown, 1938a, p. 6).

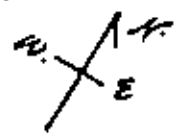
At the start of the 1937 field season, he re-established the 1936 baselines which had apparently been placed by G. Hubert Smith; they roughly divide the site into four quadrants. His O North-South baseline ran East-West along the center line of the "center wall" which runs between corners D and H. It lies about 20' north of and parallel to the northern wall of the

Great Hall, and is roughly parallel to the shoreline of Lake Superior. This North-South baseline had a course which lay about 45 degrees east of a true North-South line or approximate Magnetic North.

His O East-West baseline ran North-South at right angles to the O North-South baseline through the western one-third of the stockade enclosure. It was parallel to and about 23.7' west of the western wall of the Great Hall. These two baselines intersected each other at a steel pin which was set into the center line of the "center wall", 121' east of the exterior face of the western palisade trench line, near Corner D (map 3).

Most of the stockade enclosure was then staked out into 20' squares from these baselines. As the need arose, these squares were divided into 10' squares. A study of Brown's field maps of the 1937 season demonstrates conclusively that he used this method of horizontal grid controls. (See MHS MS, Dept. Maps A-6, A-9, and A-10. In this report, these maps are given the designations, Map Nos. 14, 15, and 16).

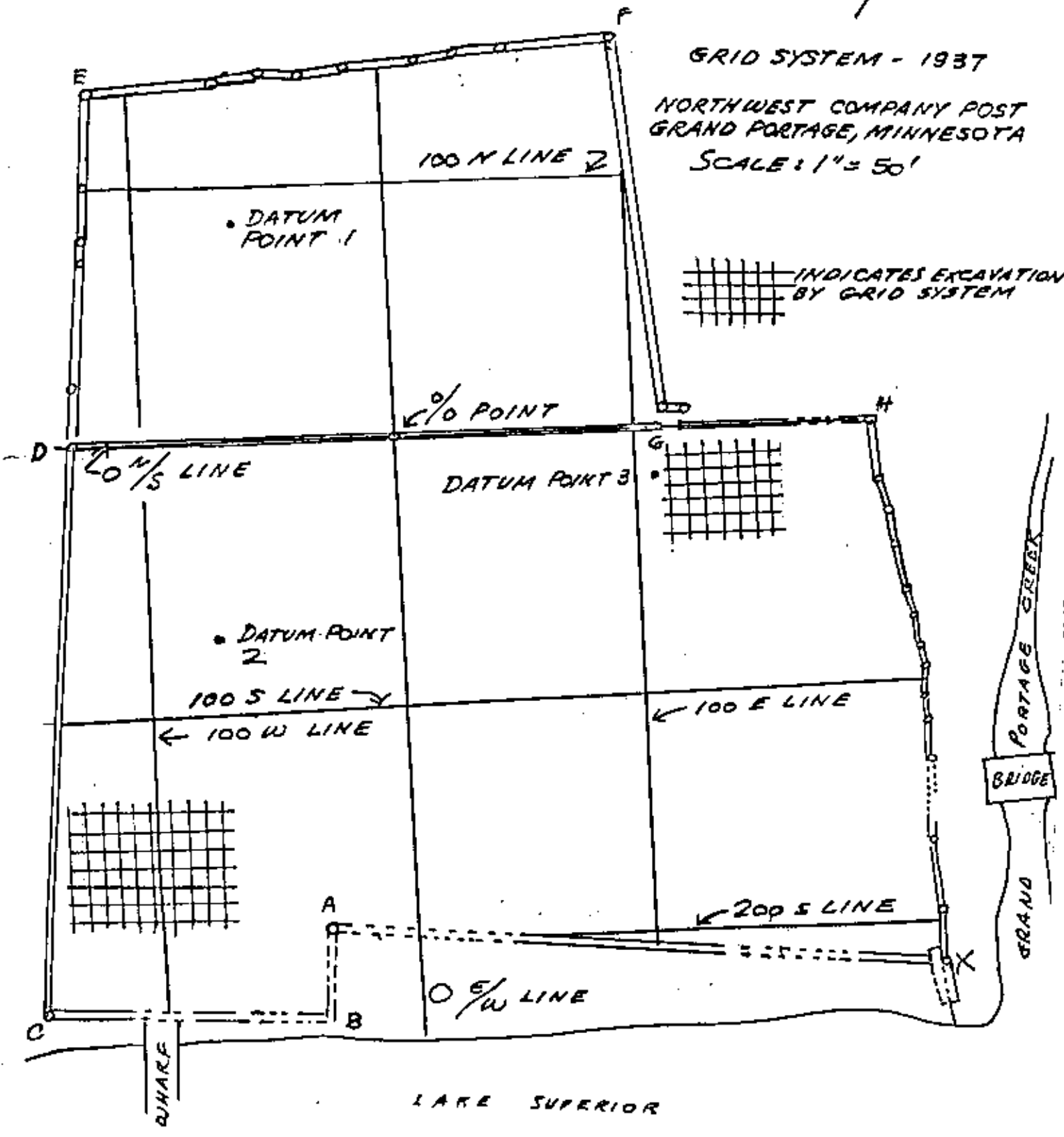
Brown established detailed grid systems and used them to control his excavations in two areas in 1937. One of these areas is about 50 feet E-W by 52 feet N-S. It was situated in the general "east gate area" and south of Corner G and east



GRID SYSTEM - 1937

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SCALE: 1" = 50'

INDICATES EXCAVATION
BY GRID SYSTEM



of the eastern end of the Great Hall. The other area measured about 45 feet N-S by 70 feet E-W, and was situated in the southwestern portion of the stockade enclosure. The Cook County Historical Society museum building was moved to this location in 1938.

It is highly unfortunate that his field notes, and feature notes do not make more extensive reference to the 1937 grid system. The designations written on the artifact bags used in the field are not precise either.

Site Maps and Detail Maps, 1936-1937

Eighteen maps were prepared in conjunction with the two seasons of excavation at this site. They will be discussed in general terms at this point as they have been described in detail in another portion of this report. Ten of these maps are outline maps of the stockade enclosure; many of them depict interior features also. The remaining eight maps are detailed maps of more limited areas within the enclosure.

The maps naturally reflect the excavator's major concerns and efforts toward the attainment of his goals. In 1936, the greatest efforts were directed to finding the stockade outline and the locations of the gates and defensive features such as blockhouses. Seven outline maps of the stockade show the progress toward these goals from June to October, 1936. Of the

four detailed maps from this season, three of them relate to a gate or possible blockhouse location.

Only two of the eleven maps from 1936 cast much light on surveying methods used. One of them is our Map. No. 3, dated August 22, 1936. It gives detailed measurements of the stockade outline, interior measurements and the locations of the three datum points. The other map is the S. S. Walker Map (Map No. 9). It gives an exact depiction of the stockade outline along with measurements and angles, and was made by an engineer. Brown wisely used it as his base map thereafter. The 1936 maps are adequate depictions of the stockade outline and the few interior areas excavated.

The major objectives during the 1937 field season were to conduct exploratory excavations in the stockade interior in search of structural remains and to solve the questions raised by the complex remains found in the "east gate area." Therefore, there were only three outline maps prepared of the stockade outline during this season. They served only as a basis for showing the interior excavations of this season. The four detailed maps made in 1937 all relate to interior exploratory excavations. Thus, all seven of the 1937 maps relate in a large measure to the interior excavations made that year.

Many of these maps reveal the details of the grid system

established in 1937. These maps are well prepared and are adequate representations of Brown's excavations at this time.

All of the maps discussed above, with the exception of the Walker map, appear to have been prepared with a plane table and alidade. Distances were taped or measured with a transit and stadia rod. No specific references to mapping methods are present in the records of excavations; they have been supplied by inference from an examination of the maps and miscellaneous data.

The Walker Outline Map of the Stockade,
October, 1936

A detailed survey was made of the stockade outline on October 6 - 8, 1936, by Stanley S. Walker, an Indian Department engineer. He was assisted by G. Hubert Smith and other field party members. Ralph D. Brown was much impressed by this survey and commented as follows:

"(Walker) . . . made a transit survey of the stockade site, on a scale of 20 feet = 1 inch, which shows the exact position and course of the exterior walls of the stockade, and the contours of the ground surface at the site. This survey is to be based on data available from a bench mark of the United States' Coast and Geodetic Survey, B.M. (X181) in the school yard, which was run to the stockade site" (Brown, 1936b, p. 4).

Thereafter, Brown used the Walker map of the stockade outline as a basis for all of his site maps. To date, I have detected only one error in this fine map. Walker assumed that

the elevation of Bench Mark X181 was 650 feet above sea level, and based his contour elevations on this figure. In actuality, this bench mark has an elevation of 610.25 feet above sea level. Walker's contours are therefore about 40 feet higher than they should be.

This is only a minor error, however. The Walker map is an excellent one, and the only one of the site prepared by a trained engineer.

Excavation Techniques, 1936-1937

Ralph D. Brown used "cross trenches" or short exploratory trenches set at right angles to the course of the palisade trench lines as his major excavation technique during most of his work at this site in 1936. After the course of a palisade trench line had been found, the trench was excavated in the belief that palisade pickets would be swiftly placed in it.

Much care was taken during the excavation of these trenches. Numerous picket butts, and the horizontal timbers which had supported them were found. Elaborate measurements were made of these timbers, and photographs taken of them. Salvagable pieces of wood were carefully preserved for exhibit and study purposes. Indeed, Brown was able to show that the average picket at the site had been about six inches in diameter rather than eighteen inches as a study of traveller's accounts of the site would have indicated. Many other characteristics of the pickets and their cross members were determined by this caution.

Elevation readings were taken at 10 foot intervals, both at the ground surface and in the excavated trench bottoms, along the course of the northern palisade trench line between

Corners E and F. These readings were made from Datum Point No. 1. Parts of the western and northeastern palisade trench lines were also recorded in this manner. The latter elevations were apparently based on Datum Point No. 2 (Brown, 1936e).

G. Hubert Smith excavated two large exploratory trenches through the western portion of the site in September, 1936. The sides and bottoms of these trenches were carefully trimmed and profile drawings made of the trench walls. Features found were studied and placed on the profiles. Their characteristics were also noted. Elevation readings were taken with a transit at 10 foot intervals, both at the ground surface and in the trench bottoms, along the courses of these two exploratory trenches; the reference point used was Datum Point No. 2. (Brown, 1936e).

Excavation by the grid method was used only three times during 1936, and in only limited areas. These were: (1) The "east gate area" near Corner G; (2) Corner X or the Southeastern stockade corner; (3) The site of Structure C-1 (Structure 1) which was found at the junction of the N-S and E-W exploratory trenches excavated in September, 1936.

The "east gate area" was staked out on a 5' grid system. The sod and top soil to a depth of 6" was first removed;

thereafter, levels of 6" or more were excavated and the soil screened when the quantity of small objects warranted it. Objects were kept separate by levels for later comparison and study. Only one 5' square was excavated at a time. When all squares in a series had been excavated into undisturbed clay, a vertical face was prepared and a profile drawn. Then, excavation was resumed on a new tier of 5' squares. Elevations were taken at the ground surface beside each stake from a central point (Datum No. 3 ?). A detailed map showing square locations and structural features found was made. There is no evidence to indicate that separate horizontal profile sheets were drawn at each level (Brown, 1938a, pp. 6-7).

Neither of the two other areas excavated by the grid method in 1936 appear to have been excavated in levels. Vertical profiles are extant for the structural features found at the site of Structure C-1. Notes on Smith's map of the area of Corner X provide some details concerning the trenches found there.

Brown's excavations in 1937 consisted largely of small test trenches and long exploratory trenches ranging in width from three to ten feet. These excavations were enlarged as structural or other features were discovered. Although these trenches were laid out with reference to a grid system which

covered the stockade enclosure, they were still only exploratory trenches which were controlled in some measure by grid coordinates. Brown only rarely makes reference to them by their grid designations in his field notes. Hence, his notes are difficult to interpret. He did, however, carefully trim the sides of his trenches so that any soil disturbances would stand out clearly. There is no evidence to indicate that he made profile drawings of the walls of any of his exploratory trenches in 1937. His features notes do, however, provide the depths of foundation trenches, post butts, etc.

The technique of excavation by arbitrary levels or stratigraphic levels was used only once ("east gate area"), in 1936. The artifacts from this location are incomplete and so jumbled, however, that they cannot be used to isolate levels which might have once existed there. There is little evidence to show that Brown excavated by levels in 1937, although there are a few notes on artifact bags which would indicate such had been the case in a few areas. There are no vertical profile sheets from the 1937 excavations. Presumably Brown was in no position to do this as he had no subordinates to assist him.

Rudimentary feature notes are extant from the 1937 excavations. Feature designations were noted directly onto the

maps of this field season, and brief descriptions of them are given in his field note book.

Numerous photographs were made of the site, excavation of the palisade lines, excavation of building sites, and features such as post butts, trench walls, etc. The photographs do not serve as a record for everything found during these two field seasons. For instance, a total of about seven fire-places were uncovered during these excavations. Photographs are extant for only four of them. There are no photographs extant of excavated structures other than the Great Hall.

Many field maps were made during the 1936-37 field seasons. They are invaluable for interpreting the areas excavated and the structures found. Those maps made during the 1936 field season contain only slight references to the use of N-S and E-W baselines, and three small grid systems which were used for the excavation of limited areas. The 1937 maps are much better in this respect. They demonstrate conclusively the existence and use of a site wide grid system.

Although Ralph D. Brown established a conventional grid system for his 1937 field season, he continued to use exploratory trenches which were laid out on this grid system as his major excavation technique. Thereafter, the logical procedures of the grid method were not followed. His exploratory trenches

do not appear to have been excavated by levels in a consistent fashion, nor are consistent references to grid coordinates made in his field notes, feature notes, nor on the specimen bags. Thus, he had a proper and logical method of excavation control established, but he did not use it methodically except in mapping.

It must be emphasized, however, that this excavation technique was not overly developed, nor widely used in the 1930's, and that this was the first historic site excavated in the state of Minnesota, and one of the earliest historic sites excavated in this region. In addition, he had a great need for supervisory assistants during this season.

The 1936 Excavations

Brown began his excavations on the western palisade trench line on June 10, 1936. Here, his crew excavated a series of "cross trenches" which intersected the course of the palisade trench line at right angles. These short test trenches were about six feet in length, two to three feet in width, and three or more feet in depth. This is a standard, time saving method of following a trench line used by many archeologists up to the present time. Within about a week, Brown had found more than one-half of the stockade outline with this method of

excavation (Brown, 1936d, p. 7).

By August 22, 1936, the major outlines of the stockade had been defined by use of the cross trenching method. None of these cross trenches were plotted on maps during the 1936 field season. A number of them were relocated during exploratory work along the stockade outline in 1963 (A.R.W.).

Once the outlines of the stockade had been defined, the fill of the stockade trenches was removed in anticipation of reconstruction of the palisades. Brown describes his explorations along the stockade outline as follows:

"Through a system of projected and circling cross trenches the whole outline of the stockade was soon located. The course of the outline once determined, the fill of the stockade trenches was then removed except in parts underlying the road" (Brown, 1938a, pp. 5-6).

Thereafter, Brown staked out the "east gate area" or Corner G on a 5' grid system oriented on a N-S axis. This was done in August, 1936, after some portions of this area had been uncovered by test trenches. This grid extended over an area 25' x 30'. The sod and top soil to a depth of 6" was removed. Thereafter, levels of 6" or more were excavated, and screened when the quantity of small objects warranted it. All objects in any level were kept separate for later comparison and

study. Only one 5' square was excavated at a time. When all 5' squares in a series had been excavated up to a given line, a vertical face was prepared and a cross sectional profile drawn. With this completed, excavation was resumed on a new tier of 5' squares. All squares were excavated into undisturbed clay. Elevations were taken to the ground levels beside each stake from a central point (Datum Point No. 3 ?). A small sketch map showing the square locations and structural features which had been identified was made. There is no evidence to indicate that separate horizontal profile sheets were drawn at each level (Brown, 1938a, pp. 6-7).

After the general course of the stockade outline had been found, two large exploratory trenches were excavated in the western half of the stockade enclosure during September, 1936. The N-S trench was parallel to the E-W baseline, but five feet west of it. The E-W trench was parallel to the N-S baseline, but about seventy to ninety feet south of it; it was roughly parallel to Lake Superior. They intersected each other in a right angle at 80S-5W.

These trenches and those excavated in 1937 have been given numerical designations in this report for ease of reference. The two 1936 trenches are listed below with their grid coordinates.

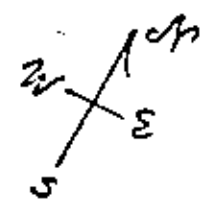
Trench No. 1. This N-S trench was four feet in width. It was located parallel to the E-W baseline, but five feet west of it. It was also parallel to the western wall of the Great Hall, but about 23.5° west of it. It extended from 80N-5-9W to 180S-5-9W; a lineal distance of 260'.

Trench No. 2. This E-W trench was also four feet in width. It was located parallel to the N-S baseline, but from 70' to 90' south of it; it was also roughly parallel to Lake Superior. It commenced at 80-90S-30E and ran to 85-89S-120W. The eastern portion of it was 10' in width; at 80S-20W, it declined to 4' in width for the rest of its length westward. It was 150' in length.

When these trenches had been excavated into undisturbed soil, their sides and floors were carefully trimmed. Any soil disturbances were carefully studied, plotted on profile sheets, and their characteristics described (Brown, 1938a, p. 6).

Elevation readings were taken with a transit at 10 foot intervals both at the ground surface and excavated trench bottoms, along the courses of the two exploratory trenches; the reference point used was Datum Point No. 2 (Brown, 1936e).

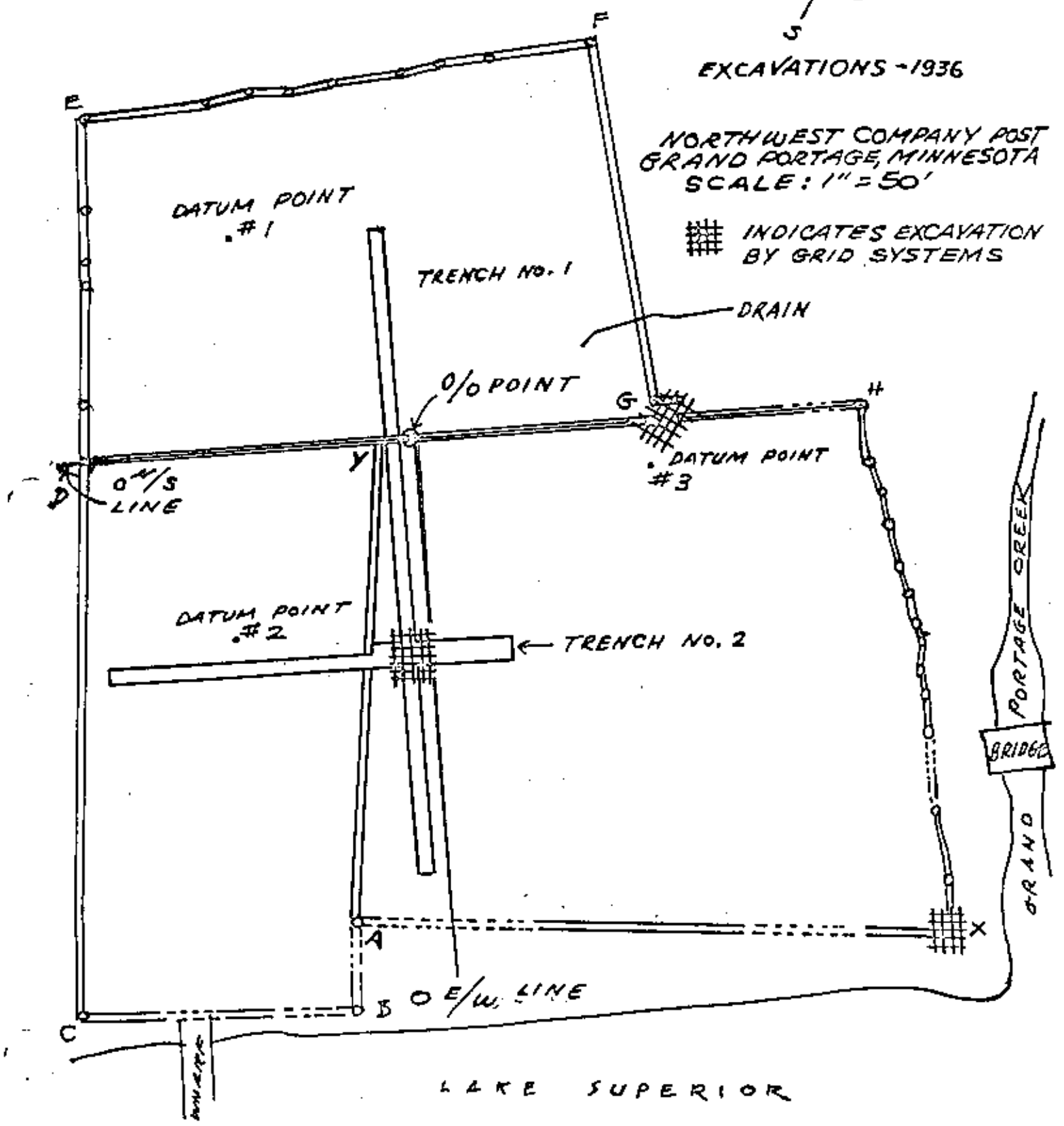
G. Hubert Smith was in charge of the excavations from about September 5, 1936 to October 29, 1936. He excavated parts of the stockade outline, the troublesome Southeastern



EXCAVATIONS - 1936

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SCALE: 1" = 50'

INDICATES EXCAVATION
BY GRID SYSTEMS



LAKE SUPERIOR

stockade corner, (Corner X), and the site of Structure C-1 (Structure 1) at the intersection of the N-S and E-W exploratory trenches as well as the exploratory trenches described above. Smith established small grid systems at Corner X and the site of Structure C-1. His maps have survived.

The following progress was made during the course of the 1936 field season: (1) The general course of the stockade outline was discovered, as were its corners. (2) Two unexpected interior palisade lines were found. (3) One gate or blockhouse location was found and excavated. (4) A drain dating from the fur trade era was found. (5) Two large exploratory trenches were excavated in the western portion of the stockade enclosure. (6) The remains of two or more structures were uncovered.

The 1937 Excavations

The O N-S/O E-W point was used as a base point again in 1937, and baselines were extended through it at right angles to each other as previously described in the section on Surveying Methods and Excavation Controls. Most of the stockade enclosure was divided into a 20 foot grid, if the need arose during the course of excavations, this grid was subdivided into smaller segments.

Thereafter, a series of exploratory trenches were laid out in North-South and East-West directions. These trenches naturally intersected each other at right angles. They were expanded if something such as a portion of a structure was found. The resultant excavations almost defy description in verbal terms. They can best be understood by reference to a map of the 1937 excavations (Map 8).

Brown excavated a total of 23 exploratory trenches or areas during 1937. At least this is the total arrived at from a study of his map which depicts his excavations between September 7 to October 27, 1937 (Map No. 17). A study of his field notes reveals that other limited excavations were made on the interior of Corner H, the Northeastern stockade corner which abutts on the western bank of Grand Portage Creek. It is very probable, however, that he excavated other exploratory trenches which are not shown on the 1936-37 maps. This was indicated by the Minnesota Historical Society's 1963 excavations at the site.

During the month of September, 1937, his excavations were largely confined to the area west of the O E-W baseline. Up to September 20, 1937, he had excavated eight trenches and areas in this region. Fifteen other trenches and areas were excavated between September 20th and October 27, 1937. The

bulk of these excavations were east of the O E-W baseline and south of the O N-S baseline. During this same period, he also excavated an area about 50 x 70 feet in the Southwestern corner of the enclosure. He discovered the site of the Great Hall in September, 1937 and delimited it in the same month.

Two areas were excavated by the grid method during this season. These were: (1) "the east gate area" and a section south of it, and east of the Great Hall; (2) An area measuring about 50 by 70 feet in the Southwestern corner of stockade enclosure. The Cook County Historical Society Museum building was moved to this latter location in about 1938.

Listed below are the exploratory trenches and areas excavated in 1937:

Trench No. 3. An E-W trench, 5' in width which is located at 38-43N-103E and extends to 38-43N-110W. It extends for a distance of 213'. This trench commences at the palisade trenchline running between Corners F and G, about 40' north of Corner G and runs westward within 4' of the western palisade trench line. It intersects with the N-S trench excavated in 1936 (Trench No. 1).

Trench No. 4. An E-W trench, 5' in width which starts at 19-24N-20W and runs westward to 19-24N-110W. Two N-S trenches extend N-S from this trench. These and other exten-

sions give it an irregular form which can best be understood by consulting a map of the 1937 excavations. Brown lists a possible structure site at about 13N-50W.

Trench No. 5. An E-W trench, 4' in width, which commences at 17-22S-11W and runs westward to 17-22S-100W; a distance of 89'. This trench intersected a two roomed structure, and numerous extensions were made southward from it to delimit the building. This building is Structure No. 6.

Trench No. 6. An E-W trench, 3' in width, which commences at 29-32S-18W and extends westward to 29-32S-56W. At its western end it becomes a part of a larger exploratory excavation which extends from 17-48S-55W and westward to 19-45S-116W. This large area of about 31' N-S by 60' E-W embraces a structure 22' wide by 55' long. It has an E-W axis and contains two fireplaces. This is Structure No. 6. The trench is 38' in length.

Trench No. 7. An E-W trench 3' in width which runs between 57-60S-15W and 57-60S-119W. It is 104' in length.

Trench No. 8. An E-W trench 10' in width which extends between 100-110S-20W and 100-110S-127W where it intersects with the western palisade line.

Trench No. 9. An E-W trench 5' in width which extends between 140-145S-100E and 140-145S-131W where it intersects

with the western palisade line. Adjacent to this trench and connecting with it is an excavation which measures 48' N-S by 70' E-W. This area was excavated to provide a site for the Cook County Historical Society museum building which was moved here about 1938.

Trench No. 10. A N-S trench 4' wide and 10' long which extends from 7-17S-35-40E.

Trench No. 11. A N-S trench 3' wide by 7' long which extends from 7-14S-60-63E.

Trench No. 12. A E-W trench 5' wide by 12' long which extends from 5-10S-83-95E. The well for the Great Hall kitchen (?) was found within this excavation.

Trench No. 13. Although not technically a trench, this area is herein called that for conformity with the standard methods of excavation at the site. It is an area called "The East Gate Area" of about 50' x 52'. It extends from 7N-45S-105-155E. This area was excavated on a 5' grid basis with a combination of horizontal and vertical profiles much similar to trenching. The eastern edge of the Great Hall is adjacent to the western edge of this excavation.

Trench No. 14. A E-W trench 5' wide and 91' long which extends from 32-37S-20E to 32-37S-111E. This trench runs through the center of the Great Hall which is 30' N-S by 95' E-W.

Trench No. 15. An E-W trench 5' wide and 100' long which extends from 80-85S-40-140E. This trench intersects Trench No. 24.

Trench No. 16. An E-W trench 5' wide and 86' long which extends from 100-105S-0-86E. The eastern end of it abutts on the Cook County Historical Society Museum building which was then in this portion of the site.

Trench No. 17. An E-W trench 4' wide and 26' long which extends from 114-118S-104-130E. The western end of this trench abutts on the Cook County Historical Society Museum building which was then in this portion of the site.

Trench No. 18. An E-W trench 3' wide and 44' long with short N-S extensions. It is located at 161-164S-55E-98E. A deposit of stone was found in the western end of this excavation.

Trench No. 19. A N-S trench 5' wide and 36' long which runs from 42N-95-100W and 3N-95-100W. It extends southward toward the 0 N-S line.

Trench No. 20. A N-S trench in direct line with trench No. 19. It is 5' wide and 97' long and extends 44S-95-100W to 140S-95-100W. It begins at the southern edge of Structure No. 6, and intersects Trenches 7, 2, and 8 before it merges with the large excavation in the Southwestern corner

of the enclosure which was prepared for the Cook County Historical Museum building.

Trench No. 21. A N-S trench 5' wide and 95' long which extends from 46S-60-65W to 140S-60-65W. This trench intersects with Trenches 7, 2, and 8 before it merges with the large excavation discussed immediately above.

Trench No. 22. A N-S excavation 8' long and 6' wide which extends from 41S-42-48W to 49S-42-48W.

Trench No. 23. A N-S trench 5' wide and 110' long which extends from 65S-35-40E to 175S-35-40E. This trench intersects trenches 15, 16, and 9.

Trench No. 24. A N-S trench 6' wide and 34' long which extends from 60S-86-92E to 94S-84-92E. A narrow clay filled trench was found here. It presumably is associated with a structure. This trench intersects Trench No. 15.

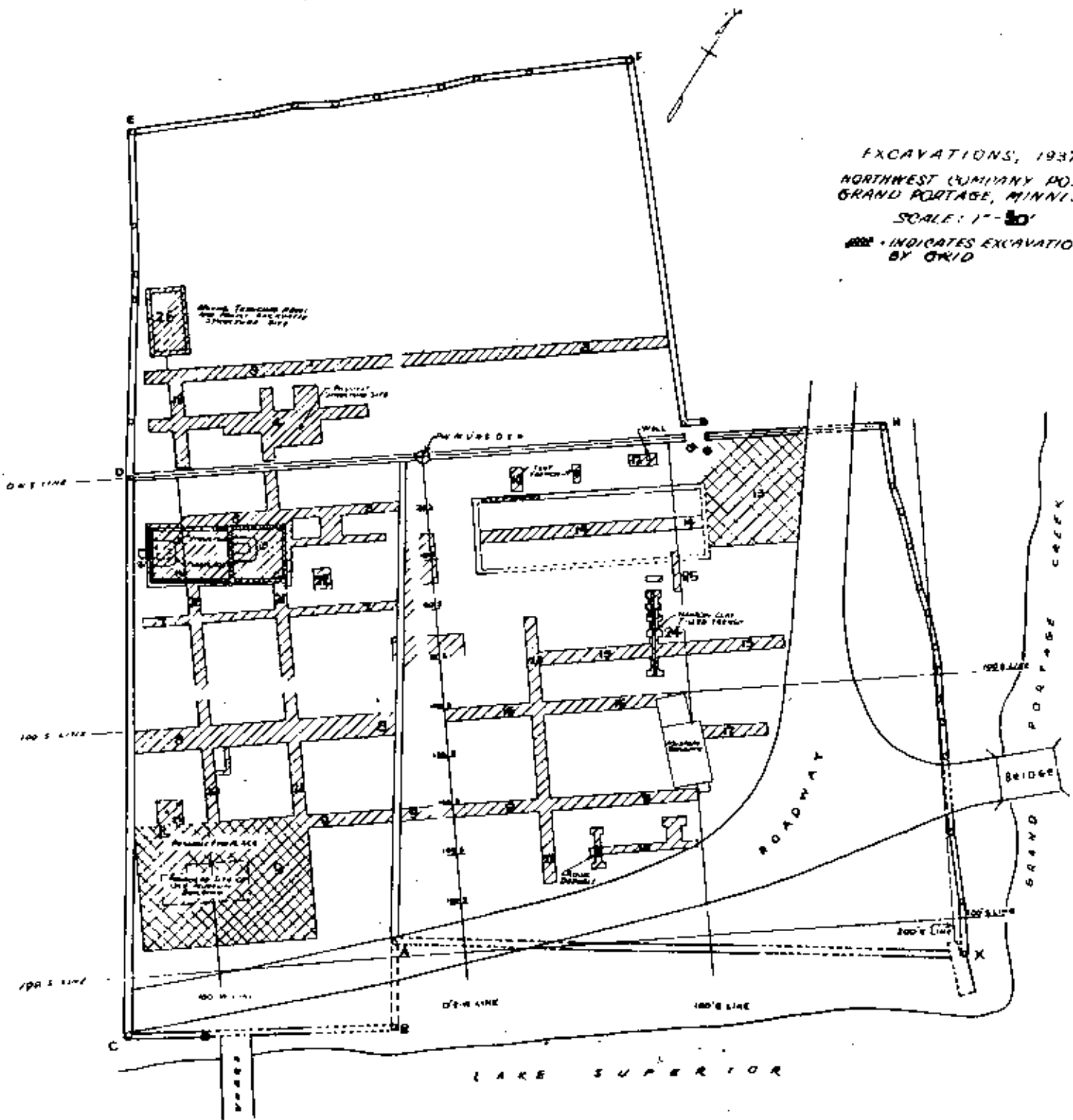
Trench No. 25. A N-S trench 2½' wide and 17' long which extends from 45S-100-102E to 62S-100-102E. It intersects the projected southern wall of the Great Hall near its southeastern corner.

Although Brown established a conventional grid system to control his excavations during the 1937 field season, he continued to use exploratory trenches which were laid out on this

grid system as his major excavation technique. He used the grid method of excavation in only two areas during this field season.

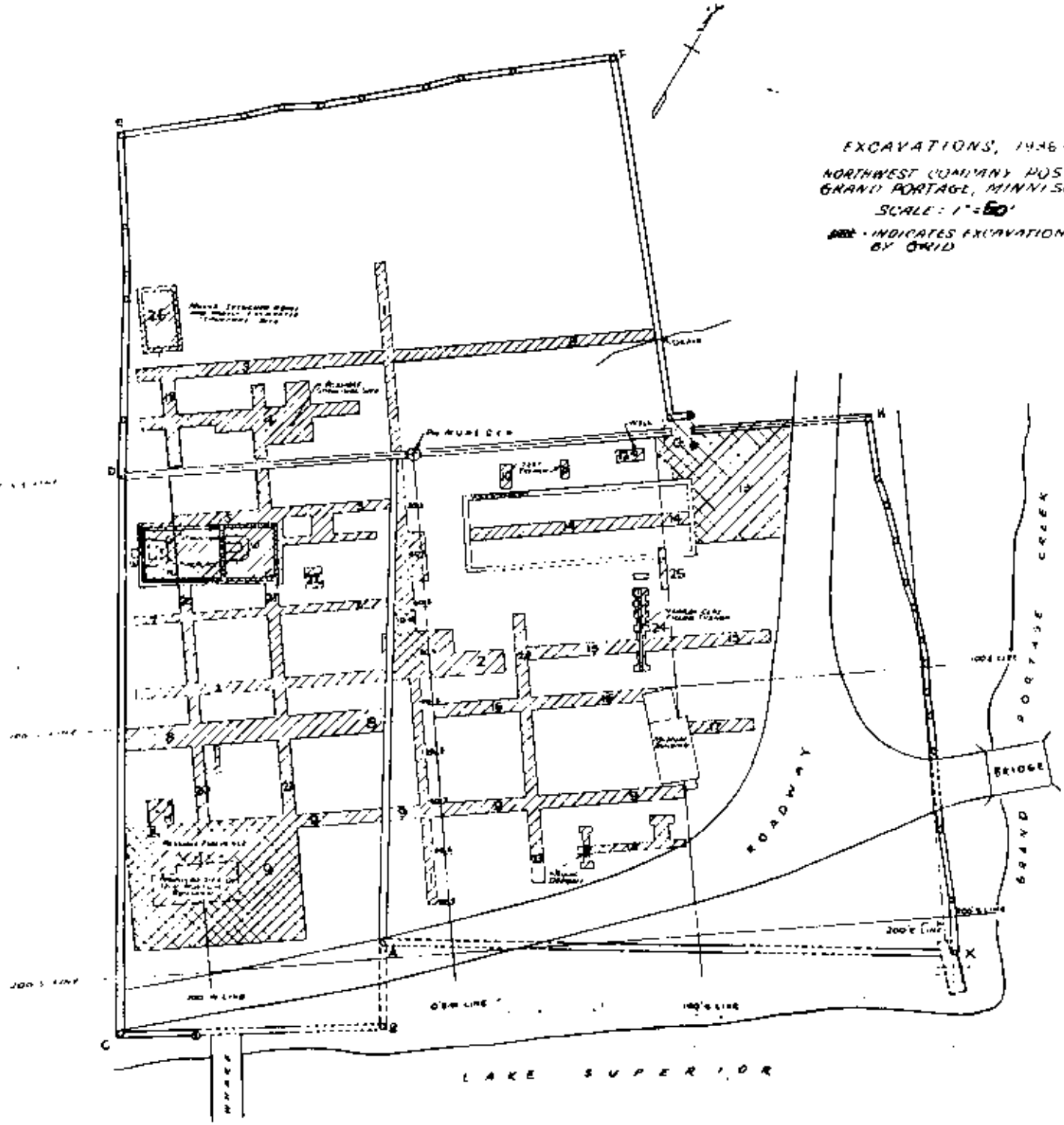
The following progress was made during the course of the 1937 field season: (1) The remains of 13 structures and probable structures, including the site of the Great Hall were found. (2) Further explorations were made in large portions of the stockade enclosure. (3) A considerable number of isolated features possibly relating to structures were found. (4) It was conclusively demonstrated that a number of super-imposed structures existed in the area north and east of the Great Hall. (5) It was established that several building methods had been used in constructing buildings at this site.

EXCAVATIONS, 1937
 NORTHWEST COMPANY POST
 GRAND PORTAGE, MINNESOTA
 SCALE: 1" = 50'
 ■■■■ INDICATES EXCAVATION
 BY GRID



Map B

EXCAVATIONS, 1936-1937
 NORTHWEST COMPANY POST
 GRAND PORTAGE, MINNESOTA
 SCALE: 1"=50'
 [Hatched Area] INDICATES EXCAVATION
 BY GRID



Map 9

THE ARCHEOLOGY OF THE SITE

The Stockade Outline

The limits of the stockade enclosure were probably originally defined entirely by eye to include an area of sufficient size in a suitable relationship to the natural topography, Grand Portage Creek, and Lake Superior. When viewed from the ground, the enclosure has the appearance of symmetry, but such ^{not} is/the case. Accurate maps of the site reveal that the enclosure is only roughly quadrilateral in form. In terms of compass orientation, the longer sides of the enclosure lie approximately 45 degrees west of North.

The enclosure occupies a site approximately 367 feet north-south by 341 feet east-west. Its form is roughly that of a square with the upper right hand corner missing. It can also be described as two rectangles of unequal size with their long axes parallel to each other. The larger rectangle forms the southern portion of the enclosure. The smaller rectangle is laid parallel to the northern side of the larger rectangle, but it commences about 70 feet west of the northeastern corner of the larger rectangle. These rectangles have a common western wall. (Map 10).

The stockade enclosure of 2.3 acres is divided into three major sections by two interior palisade lines. The rear section (smaller

rectangle) is .727 acres; the southwestern section is .599 acres; and the main section is .985 acres (Brown, 1938a, p. 8) (Map 4).

The stockade enclosure is formed by six exterior palisade lines and two interior palisade lines. A description of its form follows. Commencing in a clockwise fashion at Corner X (the southeastern stockade corner), let us follow it around in a clockwise manner.

Although the southern palisade line contains a right angle in its course, it is parallel to and in close proximity with Lake Superior. It runs west from Corner X to Corner A for a distance of 233'. Thereafter, it runs south to Corner B for a distance of 35.5', and west from Corner B to Corner C (the southwestern stockade corner) for a distance of 107.7'.

The western palisade line is straight and is situated on a reasonably level area which slopes gradually upward from the lake to the foot of Mount Rose. It extends north from Corner C to Corner E (the northwestern stockade corner) for a distance of 367'.

The northern palisade line lies at the foot of Mount Rose, a local landmark which rises about 300' above the surrounding terrain. It runs east from Corner E to Corner F (the northeastern stockade corner) for a distance of 203.4'.

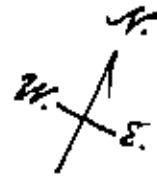
The northeastern palisade line runs south from Corner F a distance of 149' to Corner G (the interior angle at the "east gate").

The northern palisade section between Corners G and H extends east from Corner G for a distance of 72.7'. (Corner H is the northeastern stockade corner which abutts on the west bank of Grand Portage Creek).

The eastern palisade line lies parallel to the west bank of Grand Portage Creek. The central portion of this palisade is not straight. It has a series of "jogs" in its course which may have been made because of large sub surface boulders or some other factor. Its course is southward between Corners H and X for a distance of 216.3'. Total perimeter of the stockade outline is about 1385'.

One interior palisade line is located between Corners D and G. Corner D is situated 226.7' north of Corner C along the course of the western palisade. This feature was called "the central wall" by Brown; it runs east-west for a distance of 225.5' between these two corners.

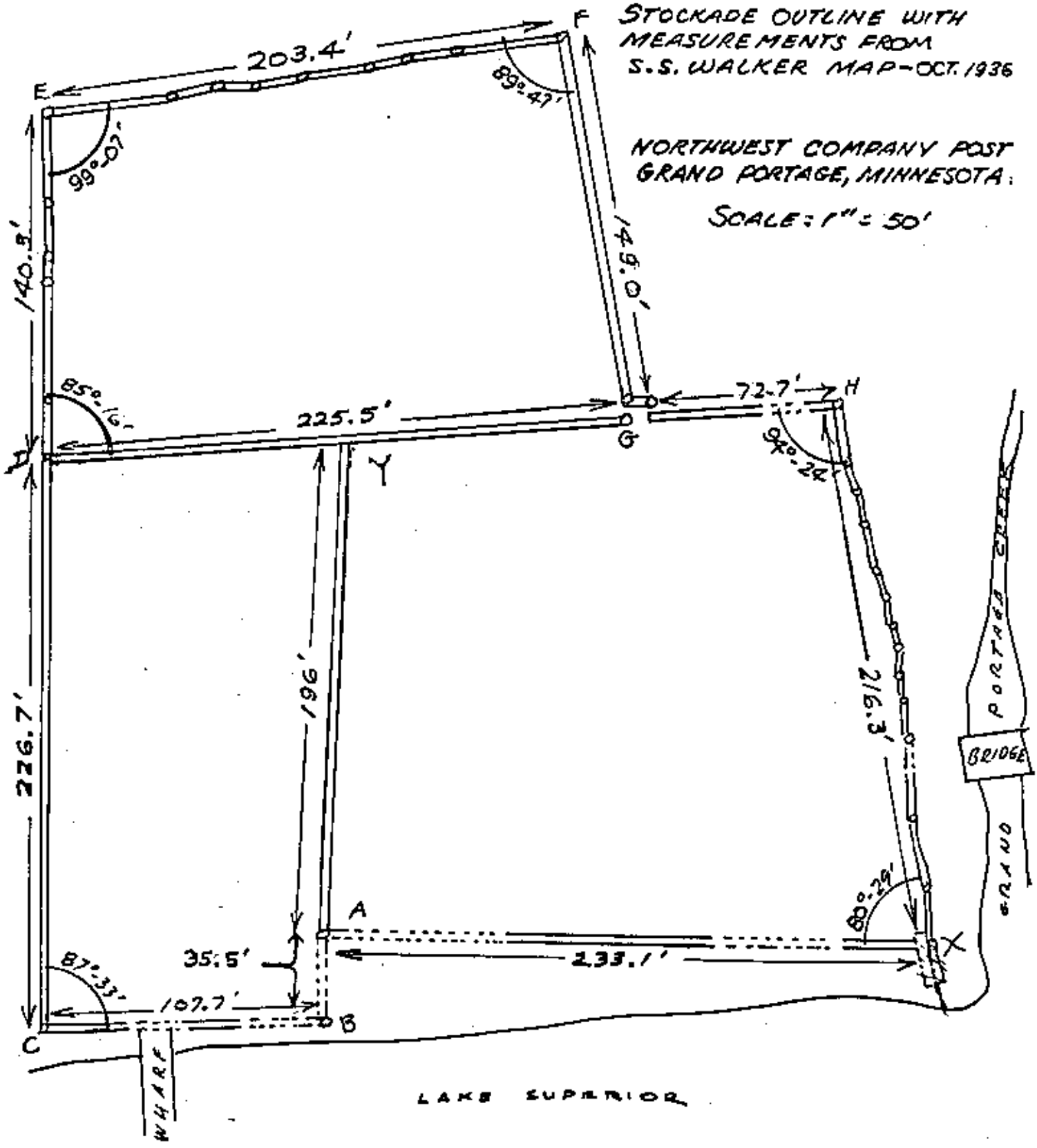
The second interior palisade line extends north from Corner A to Corner Y for a distance of 196'. See Map 10 for a graphic explanation of these features.



STOCKADE OUTLINE WITH
MEASUREMENTS FROM
S.S. WALKER MAP-OCT. 1936

NORTHWEST COMPANY POST
GRAND PORTAGE, MINNESOTA:

SCALE: 1" = 50'



LAKE SUPERIOR

Only scanty evidence is available to hint at the relative dates during which the three sections of the enclosure were erected and used. During the 1936 excavations slight indications were seen which indicated that "sections of the west and middle walls were erected in reopened trenches belonging to an earlier period." "It is possible that the middle wall and a part of the west wall mark the line of an earlier post, but . . ." (Brown, 1936c, p. 2; 1936d, p. 9). It is probable that these traces of reconstruction relate to the rebuilding of a decayed palisade in its original location as discarded or used pickets which had been used as horizontal subsurface bracing were found in the western and central palisade trenches. This evidence would imply that these palisades had time to decay and were replaced in their original locations.

It is logical to assume that the original fur post at this site would have been erected on the best available site. This would have been the area in the "main" portion of the enclosure which is bounded by Corners A-Y, Y-H, H-X, and X-A. This area measures 233' east-west by ca. 196-216' north-south, and would have been relatively large in comparison with other fur posts of that era. It is also possible that the entire southern portion of the enclosure bounded by Corners C-D, D-H,

H-X, X-A, A-B, and B-C, could have been erected as one unit when the post was originally built, but this is unlikely. Such an enclosure would have encompassed an area of 216-227' north-south by 298-341' east-west which would seem to be overly large for a concern such as the Northwest Company ca. 1768.

The southwestern section of the enclosure, bounded by Corners A-B, B-C, C-D, D-Y, and Y-A, measures 108' east-west by 227' north-south. Its long axis runs north-south and perpendicular to Lake Superior. The palisade line between Corners A-Y contained no evidences of post butts. Canted boulders, which had probably served to brace the picket butts were found here instead. This would indicate that the pickets in this trench had been removed, perhaps when the original stockade enclosure was enlarged by adding the southwestern section to it.

Speculation has also been made that the entire southern portion of the enclosure was built at one time and that the interior palisade running from Corner A to Corner Y was added about 1803 to decrease the size of the enclosure. The post was occupied by the XY Company, a much smaller concern, for about a year after its abandonment by the Northwest Company.

The rear section of the enclosure, bounded by Corners D-E, E-F, F-G, and G-D, measures about 226' east-west by 149'

north-south. This area is rocky, rough, and wet even today. It does not show the signs of occupancy present in the southern portion of the enclosure. It is not a desirable location for much other than a livestock pasture. There was at least one structure and perhaps more built along dry ground near the western palisade, so portions of it must have been used for dwellings or storage during the fur trade era. This section of the enclosure was probably added to the southern area when more space was needed.

Brown expressed the opinion that if the entire site was occupied at one time, the rear section may have served as a livestock enclosure; the main section, which includes the Great Hall, as a business area; and the southwestern section as a residence and storage area. These speculations are logical and are supported to some extent by the fact that four probable dwelling units with fireplaces were found adjacent to the western palisade in the southwestern portion of the enclosure. Several other structures, apparently without fireplaces, were found in the main portion of the enclosure; they were probably workshops or storage structures.

A further speculation would be that the average life of a palisade at this site would be between 20 and 25 years. To support this, we have the evidence that the existing palisades,

which were erected in 1938, are in sore need of replacement in 1963. They have stood for a span of 25 years.

We know from historical evidence that the first British post at this site was built about 1768 by John Erskine or Askin (Nute, 1940, p. 134). If 20 to 25 years are added to this date as the presumed life of the original palisades erected about 1768, 1788-1793 would be the time span at which a reconstruction would have been necessary. The site was abandoned by the Northwest Company in 1803 and about 10-15 years after the presumed reconstruction of the original palisades. Presumably, this second set of palisades would have been in good condition at this date. Thus, the palisades would have had to have been rebuilt only once during the Northwest Company's use of the site. This speculation would account for the evidences of palisade reconstruction which Brown found in the western and central palisades in 1936.

A further study of the materials relating to the "east gate area" and a careful excavation of the interior of the stockade enclosure may provide a dating of structures by the artifacts found associated with them. Thereafter, it may be possible to assign dates of construction and usage to the three areas of this enclosure. It is also possible that new manuscript materials such as a sketch or map of the site might

be found which would resolve many of our present problems of interpretation.

Construction of the palisades

Archeological evidence indicates that the following method of constructing the palisades was used. After the site had been selected, posts to mark the corners of the palisade trench lines were set into the ground. Workmen then commenced digging trenches about two feet wide and three feet deep between these markers (Plate 4b).

The nearby countryside was searched for white cedar trees which would produce straight logs 4 to 10 inches in diameter and from 15 to 18 feet in length. The logs were brought to the site, trimmed and peeled, and made into pickets. Because of the natural taper of the trees, the bases of half of the logs became the tops of pickets. Completed pickets ranged from 4 to 10 inches in diameter with the bulk of them between 6 and 8 inches in diameter. Lengths ranged from 15 to 18 feet, but the average picket was most probably nearer 15 feet in length. Tie pieces of varying lengths, widths, and thicknesses were also prepared. They probably averaged about 10 feet in length, two inches in thickness, and 5 inches in width. They were inserted into slots cut into the pickets about 3 feet down from the picket tops.

Sections of pickets, perhaps ten feet long, were assembled on the ground by pinning together as many as 20 pickets with tie pieces and dowels, and then were raised into place in the trenches. The picket butts were packed tightly into the trenches, and as other sections of the palisade were raised, they were fastened to those already in position. Great care must have been taken to fit these sections of pickets together so that the tie pieces from adjacent sections coincided.

Discarded building timbers, old pickets, or faulty pickets, were set in horizontally, in loose soils, at the bottom on each side of the palisade section, between the picket butts and the trench walls. A foot of soil was thrown in, tamped down, and a second series of horizontal poles was similarly set in place. A few more inches of soil were packed in and the trench was filled completely. The picket butts were then held in the vise-like grip of double rows of timbers held by packed soil. (Profile 1 and Plate 7a).

This method of construction was demonstrated conclusively at the western palisade trench line where the decayed butts of nearly a dozen pickets were found just below the ground surface. Nearby, a number of horizontal logs were found embedded in clay fill in their original positions where they had been placed to act as subsurface supports for the pickets.

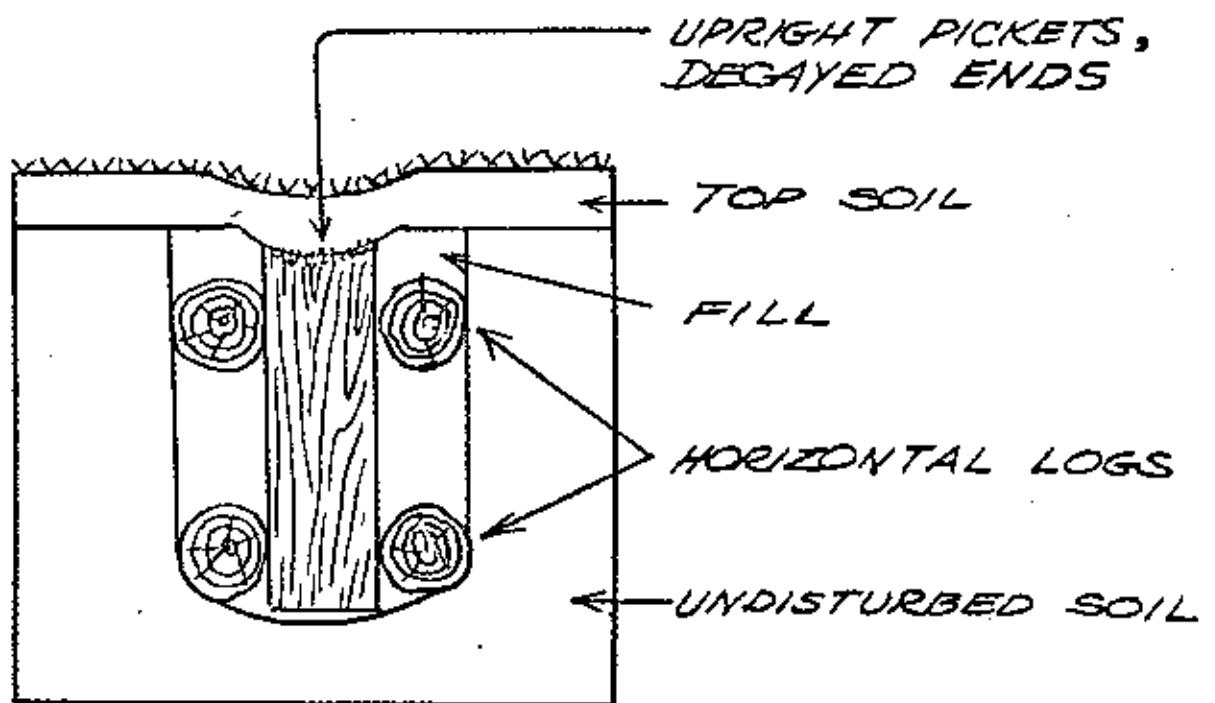
These rows of logs stood from 6 to 10 inches apart, indicating that palisade pickets of an average of 6 to 8 inches in diameter had stood between them (Brown, 1936d, p.6). (Plate 8a and b).

Soil conditions had a marked influence on the modes of bracing the pickets in the trenches. The soil was largely sand along the lakefront and for about 150 feet northward. In this area, it was necessary to use double rows of horizontal logs to brace the pickets within the trenches.

From about 150 feet northward of Corner C (the southwestern stockade corner), to about 20 feet beyond Corner D, the soil was a heavy brown clay. Single rows of horizontal logs were used to brace pickets in this type of soil. Here, the topsoil was full of large stones and the clay subsoil was very wet. Fortunately, the wetness aided materially in preserving the wooden bracing placed in this area. The best preserved specimens of timbers came from wet clay in the "center wall" between Corners D and G.

A layer of slate was found in the region from about 20 feet northward of Corner D to Corner E (the northwestern stockade corner). This slate outcrop was found to extend eastward along most of the course of the northern palisade trench from Corner E for about a distance of 160 feet toward Corner F. The

VERTICAL PROFILE WESTERN PALISADE
TRENCH LINE-1936. REDRAWN-1963



trenches cut through the slate were narrower and shallower than those in other portions of the site. Palisades in this area were not braced with horizontal logs. Boulders, placed on the ground surface appear to have been used instead of timbers in the rear palisade line between Corners E and F.

Large boulders, found everywhere on the site except in the sandy portions, were also packed into the palisade trenches, and were doubtless used to buttress the walls, inside and out, where signs of weakness were apparent. This form of bracing was especially evident in the interior palisade trench between Corners A and Y (Brown, 1938a, p.p. 11-12).

The Pickets

About a dozen incomplete pickets in a fair to good state of preservation were recovered from the palisade trenches where they had served as horizontal braces for the vertical palisade pickets. The better preserved specimens were found in wet clay in the "center wall" between Corners D and G.

Detailed measurements of five pickets have survived. These are summarized hereafter. Length: 9 feet to 11.5 feet. Diameter at top of picket: 3.5 inches to 6 inches. Average diameter is about 5.5 inches. Two pickets are 5 inches and two pickets are 6 inches in diameter. Diameter at bottom of

picket: 4.25 to 5.5 inches. Three pickets are 5 to 5.5 inches in diameter. Top of picket to dowel hole center: 3.15 to 3.65 feet. Average distance is about 3.25 feet. Tie cut depth: 1.5 to 2.5 inches. Average is about 1.75 inches. Tie table length: 4.25 inches to 6 inches. Average is about 5.25 inches. Length of tie cut (vertical): 7.5 to 9 inches. Average is about 8 inches. Dowel hole diameter: about 1 inch.

All pickets were made of white cedar. They ranged from 4 inches to 10 inches in diameter with the bulk of them being between 6 and 8 inches in diameter at their bases. The natural taper of the trees made it necessary to use the bases of half of the number of logs as the tops of pickets. Picket lengths ranged from about 15 to 18 feet. Approximately 3 feet of each picket would have been buried in the ground, thus leaving a picket height above ground of from 12 to 15 feet. There is some evidence which would indicate that the palisade in the rear of the enclosure between Corners E and F was of lesser dimensions.

The typical picket was sharpened to a point by beveling it evenly on four sides, beginning about 10 inches from the upper end. Three and a quarter feet down from the tip, an outwardsloping cut 5 inches long and 2 inches deep was made. Presumably, the outward slope of this cut was to drain off moisture

which would rot the wood. The rear of this cut was flat. In its center, a hole about 1 inch in diameter was bored with an auger through the picket. The bottom of the picket was then trimmed to a standard length and the picket was completed (Brown, 1938a, p.p. 11 and 36). (Figure 1a)

Tie Pieces

Tie pieces about 10 feet in length, 5 inches in width, and 2 or more inches in thickness, were prepared to fit into the slots cut into the upper portions of the pickets. These horizontal structural members were trimmed on their tops and bottoms to fit into the slots prepared for them. Holes 1 inch in diameter were bored through these tie pieces to match corresponding holes bored in the pickets. Dowels were driven through both holes and served to lock perhaps 20 pickets into a section (Brown, 1938a, p. 11). (Figure 1a)

Only two poorly preserved tie pieces were recovered. One of them was 4 feet long, 4 inches thick, and probably originally more than 6 inches in width. It contained 5 holes of about 1 inch in diameter, which were spaced 6 to 9 inches apart center to center. The second tie piece was $8\frac{1}{2}$ feet in length, $2\frac{1}{4}$ to $2\frac{3}{4}$ inches thick, and $4\frac{3}{8}$ inches in width. In cross section, it was roughly "D" shaped. The rear surface

was flat as it had to fit against a corresponding flat surface in the picket. Eighteen dowel holes 1 inch in diameter were found in this piece. They were spaced from 4 to 6 inches apart. Several fragmentary hand trimmed dowel pins were found preserved in their holes in the pickets (Ibid, pp. 12-13). (Plate 9 a & b). (Figure 1a).

DETAILS OF PALISADE CONSTRUCTION

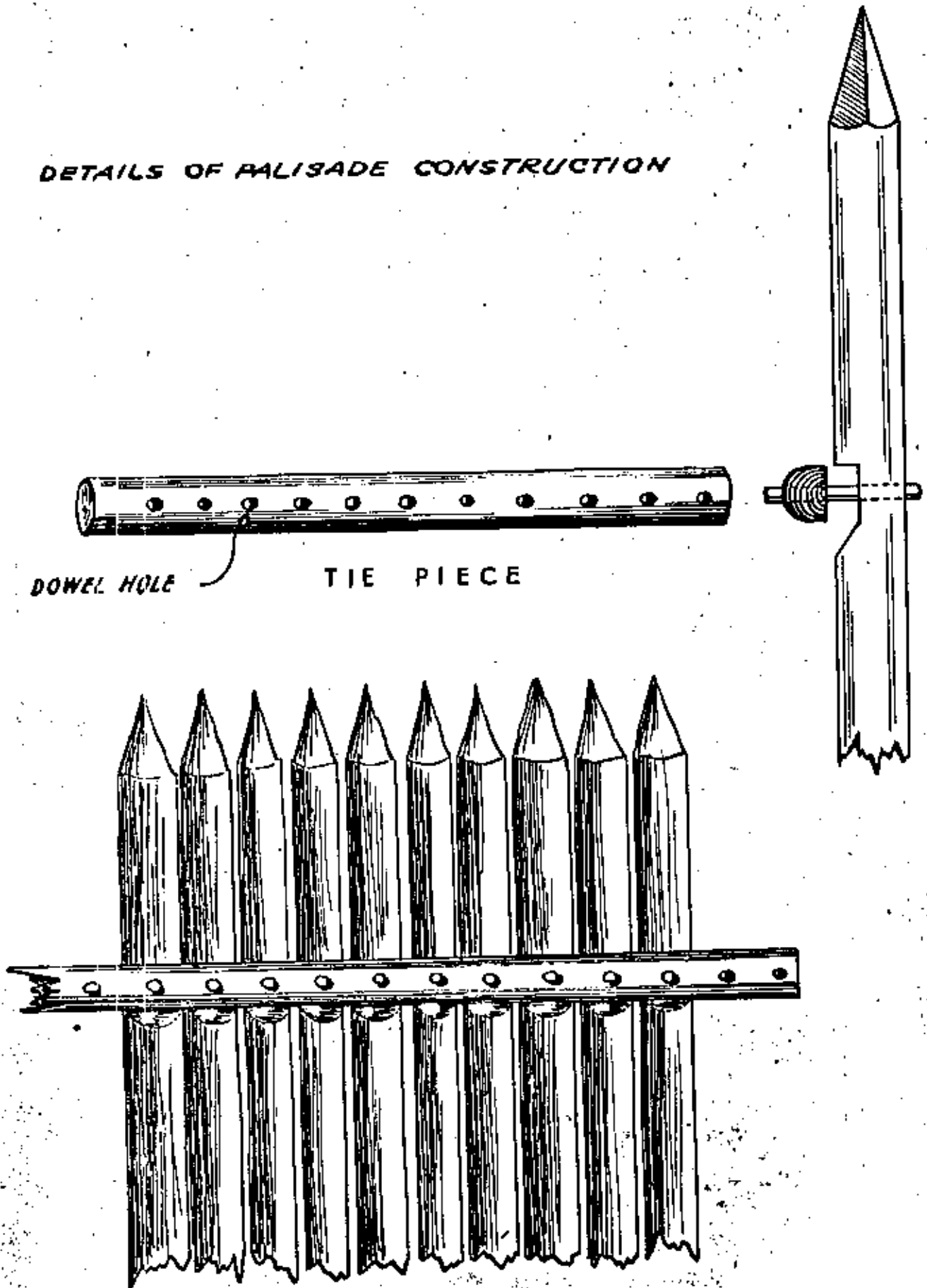
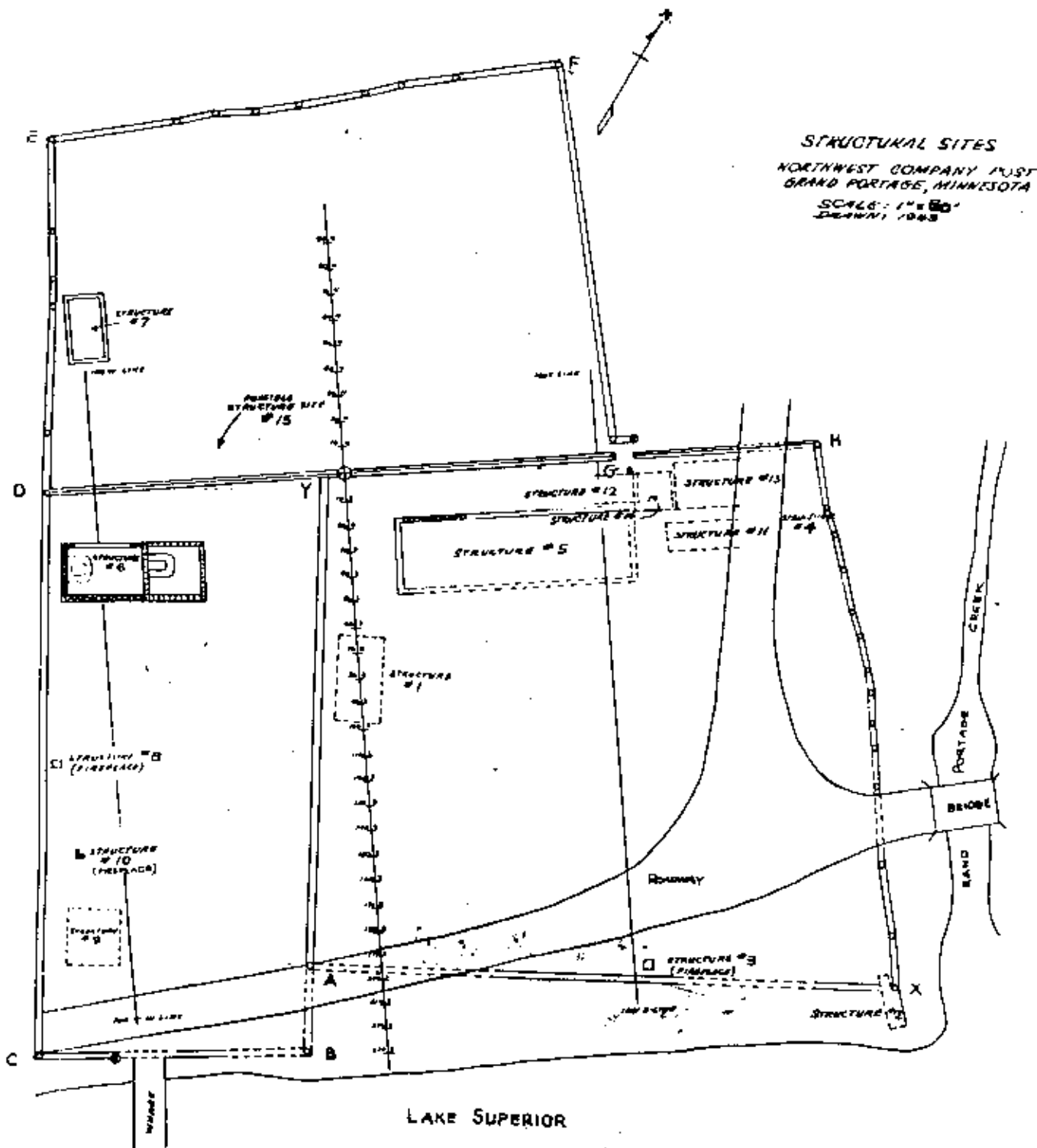


Figure 1a



Map 11

Structures

A total of fifteen structural sites or probable structural sites are discussed below. The data concerning them are not very satisfactory. In some instances, there are no detailed maps of structures, and there are no photographs of the structures after excavation. This was caused by incomplete structural remains or disturbances, or the sites were not completely excavated.

The poor preservation of structural remains is not surprising when one considers the fact that buildings were undoubtedly modified, rebuilt, razed, and burned during the fur trade occupation of this area. The American Fur Company's fishing station of the 1830's also appears to have been in this vicinity. Finally, there have been several generations of Indian occupancy here from about the 1830's to ca. 1938. During this latter period, gardening, fishing activities, fencing, and the construction of a fox run have all contributed to the destruction of this type of evidence. It is also highly probable that materials such as squared stone were removed from building foundations and fireplaces for reuse in other structures. Obviously all of these activities have been factors in the poor preservation of structural remains at this location.

Consideration must be given to the various types of structural remains which would have been left by the different methods of construction used here, if we are to correctly interpret the structural evidence. It is obvious that several types of buildings were built at this site. Each of them left its own characteristic structural remains.

Let us first of all consider the remains which would have been left by a conventional "American frontier style" log cabin built of corner notched horizontal logs. This type of structure was often placed directly on the ground surface if the ground was level and permanence was not a major consideration. When such a building gradually rotted away, only faint traces of rotted wood would be left where the bottom logs had been. Masses of chinking might be found along the building outline, as would some nails and perhaps some fallen and rotted roof timbers. In general, this structural evidence would be faint and hard to trace. A burned log cabin would be an exception.

When conditions warranted it, a log cabin could be erected on simple stone corners, or on a single course of stones which served as a foundation. These stone architectural features would survive indefinitely if they were not disturbed by subsequent building activity on the same location or by the

reuse of the stones in another structure. Under ideal conditions this structural evidence would be unmistakable and easy to interpret.

It is also possible to construct a log cabin on wooden piles set into the ground at its corners and about midway along its walls if the ground is wet or uneven. The only structural remains left by this method of construction would be the post molds. These would obviously form the building outline. This structural evidence would be faint and difficult to interpret.

The most popular building method used at the site appears to have been the "palisade" or "En pile" in which vertical logs were set into foundation trenches. These trenches form the structure's outline, and rotted vertical logs often would remain in the trenches. This evidence is unmistakable and relatively easy to interpret. A possible variant of this style of construction is a method whereby large vertical logs were set into pits along the lines of these foundation trenches. They are present at the corners and about midway along the trenches. Such features have been tentatively interpreted as the remains of massive braces which were set into building walls to stiffen them, or to support roof timbers. Such structures had diagonally sloping roofs or perhaps "A" shaped roofs (Jeffrys, 1942, Vol. 1, pg. 82).

Structures of a more permanent nature or those intended for special uses are represented by coursed stone foundations which form the structure's outline. The foundations of the Great Hall are an example of this type of structural evidence. Of course, no evidence relating to the wooden superstructure has survived. It is highly probable, however, that the Great Hall was built in the French-Canadian method of notched upright timbers and hewn or sawn horizontal timbers which were set into these mortised slots. It is entirely possible, of course, that stone foundations of this nature could support a conventional superstructure of the log cabin style. It is obvious that these foundations provide an excellent outline of the building, but that they do not tell us much about its other characteristics. Structural evidence of this nature would survive indefinitely unless later structures were superimposed or the building site was levelled or robbed of squared stone for reuse.

The fourth method of construction used at this site would be that of placing hewn or sawn horizontal timbers into slots mortised into upright timbers, but not on a continuous stone foundation. Structural remains left by this method of building would be the rotted stubs of these upright timbers or of the pits into which they had been set. The resultant soil

disturbances would form the building's outline. Typically, it would consist of two parallel rows of post butts or pits. (See Structure No. 11). Stone piers could also support these upright slotted timbers. (Maps 11 and 12).

Structure No. 1

The remains of this building were found at the intersection of the N-S/E-W exploratory trenches (80S-5W) which were excavated under the direction of G. Hubert Smith in September, 1936. His detail map of this area (My map No. 10) is entitled: "Grand Portage Stockade / Detail near junction E-W & N-S exploratory trenches showing structure C-1". This map shows the details of excavations from 60-105S/2W-30E.

Structure No. 1 is rectangular in form and 18 feet E-W by 30 feet N-S, and with an approximate N-S orientation. The western wall of this building was six feet east of and parallel to the course of the interior palisade trench which extends northward from Corner A to Corner Y. Therefore, it might have been associated with this palisade line and contemporaneous or later in time.

The evidence for the existence of this building consisted only of foundation trenches about one foot in width and from one foot to eighteen inches in depth: which formed a

rectangular outline. Only portions of the northern, eastern, southern, and western foundation trenches were excavated as were the northeastern and northwestern building corners. The southwestern and southeastern building corners were projected on Smith's map from the courses of the excavated foundation trenches. A portion of the foundation trench line extends northward seven feet from the northwestern corner of the structure. It is therefore highly probable that this structure consists of two or more rooms, and that it is larger than the dimensions set forth in Brown's progress report (Brown, 1936b, pg. 3).

Decayed wood was found in most of the excavated foundation trenches. Some of this wood consisted of small timbers about four inches in diameter which were set vertically in the trench fill. The trench fill consisted of a predominately sandy gray clay which contained some broken rocks and charcoal. The foundation trenches were found beneath about one foot of sandy gray clay. Thus, the trenches commenced about one foot beneath the ground surface. They extended downward for a foot to eighteen inches through a yellow sand. The trench bottoms were from two to two and one-half feet below the present ground level. At one point, a stone was found in the base of a trench; it probably had supported vertical

timbers or house walls (Profiles 2, 4, and 5). Mottled yellow sand and black loam were found under a portion of the building.

The data available concerning this building would indicate that it had been a rather slightly built structure with a dirt floor. Its walls appear to have been made by inserting vertical timbers of a small diameter into a foundation trench. Similar structures with sloping roofs were frequently built by French Canadians (Jeffrys: 1942, Vol. 1, p. 82).

There is some evidence to indicate that this building may be larger than the original excavators suspected. It should be re-excavated when feasible, and completely delimited. Fortunately, there are some small areas of it which are intact. Valuable cultural materials which might date it could possibly be recovered from such an excavation. (Figure 1).

Brown states that there was a rather large amount of building debris found at this location. It was composed of: ". . . chiefly square nails, window glass, pipestems, and the like." (Brown, 1938a, p. 24). A search through the surviving artifacts from this spot produced the items listed below.

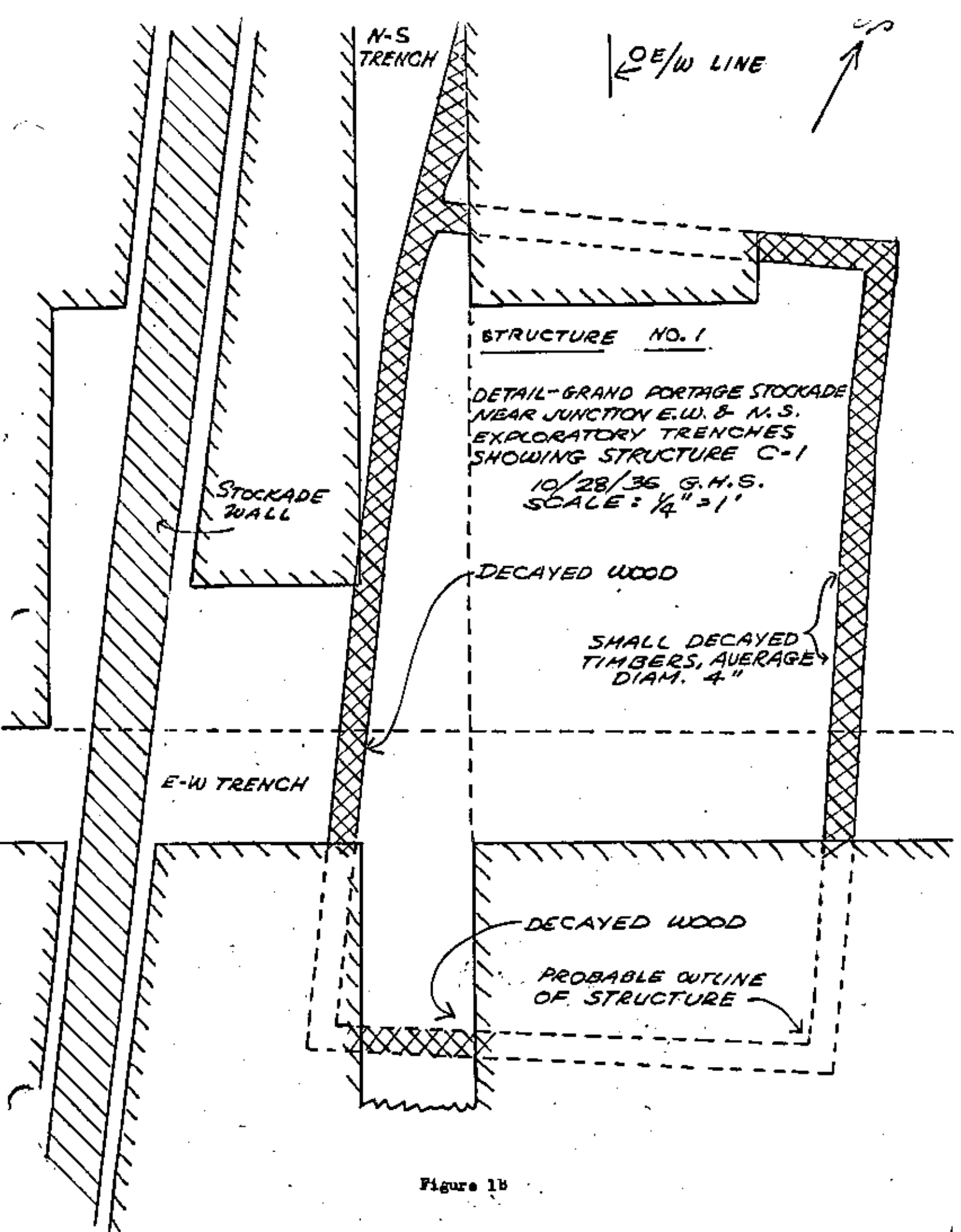


Figure 1B

Structure No. 2

This feature is situated at Corner X, the Southeastern stockade corner. The area was excavated in September, 1936 by G. Hubert Smith and Allan Holmberg. Here, they found the eastern palisade trench and another trench which was west of it. These trenches ran parallel to each other in a N-S direction. They were four feet apart, measured from the inside edges of the trenches which faced each other. They were six feet eight inches apart measured from their centers. Judging from this evidence, there must have been a passageway four feet in width between these two trenches as there was no evidence of an obstruction between them. There were also two other trenches in this area. These were the southern palisade trench and a N-S extension of the trench west of the eastern palisade trench.

The eastern palisade trench (Trench A) was approximately two feet four inches in width. It extended southward beyond the projected Corner X (which was arbitrarily selected as the junction of the centers of the southern and eastern palisade trenches), a distance of fourteen feet. Beyond this point, its course had been obliterated by erosion.

Parallel to the eastern palisade trench, but about four feet west of it was a second trench (Trench B). This feature measured thirty inches across and was seventeen feet six inches in length. This trench line extended southward a distance of eleven feet six inches from the center line of the southern palisade trench. The remains of a considerable number of small decayed upright timbers which appeared to have oval cross sections, were found to extend around the outer perimeters of this trenchline.

The southern palisade trenchline (Trench C) intersected at a right angle with the western edge of Trench B. This trench was eighteen inches in width.

A fourth trenchline (Trench D) was found at the northern end of Trench B. It was about one foot in width and extended northward for an indefinite length. It was parallel, at a distance of about four feet seven inches westward from the eastern palisade trench (Trench A).

The evidence discussed above is puzzling for a number of reasons. First of all, we find that the eastern palisade trench line extends beyond its junction with the southern palisade trench line for a distance of about fourteen feet. Another trench line runs parallel to its course to the westward. What can this mean in terms of structural remains? Apparently, these trenches, and the palisades which once stood in them, were deliberately extended to the southward with a definite purpose in mind. Such palisades could have been "wing" or "brevet" walls which might have served as barriers to persons who lounged around the front of the southern palisade, but it is more logical to believe that they might have been intended as portions of a defensive structure at this location. The present writer is inclined to accept the latter viewpoint.

Further complicating factors are the presence of small oval upright timbers along the outer perimeters of Trench B; and the presence of the small trench line which extends northward from the northern end of Trench B. In October, 1936, Brown and Smith apparently interpreted the small trench (Trench D) as a possible building foundation (Map No. 8 & Figure 2).

A plausible interpretation of this evidence is that the two parallel N-S trenches (Trenches A & B) represent one of

the "bastions" mentioned by Thomas de Boucherville as existing at this site in 1803 (Quaife, M.M., War on the Detroit, 1940, p. 12.). Surely, the small upright timbers in Trench B are not of such a size that they could have supported a large superstructure.

It is also quite possible that Trenches A and B are merely the foundation trenches for walls of a passageway which once existed between them. A gate or doorway could have been readily built in this area as there was a clear passage four feet in width between these trenches. Such a passage might have had a simple roof over it and a gate or door on its inside face.

We still must account for the small trench which extends northward from the northern end of Trench B. Some evidences of this feature were found in 1963 while making excavations on the interior face of the Southeastern stockade corner. This feature could possibly represent a building wall that ran northward into the interior of the stockade for some distance. Further excavation is needed on the interior of this portion of the stockade to provide more information concerning these puzzling structural remains.

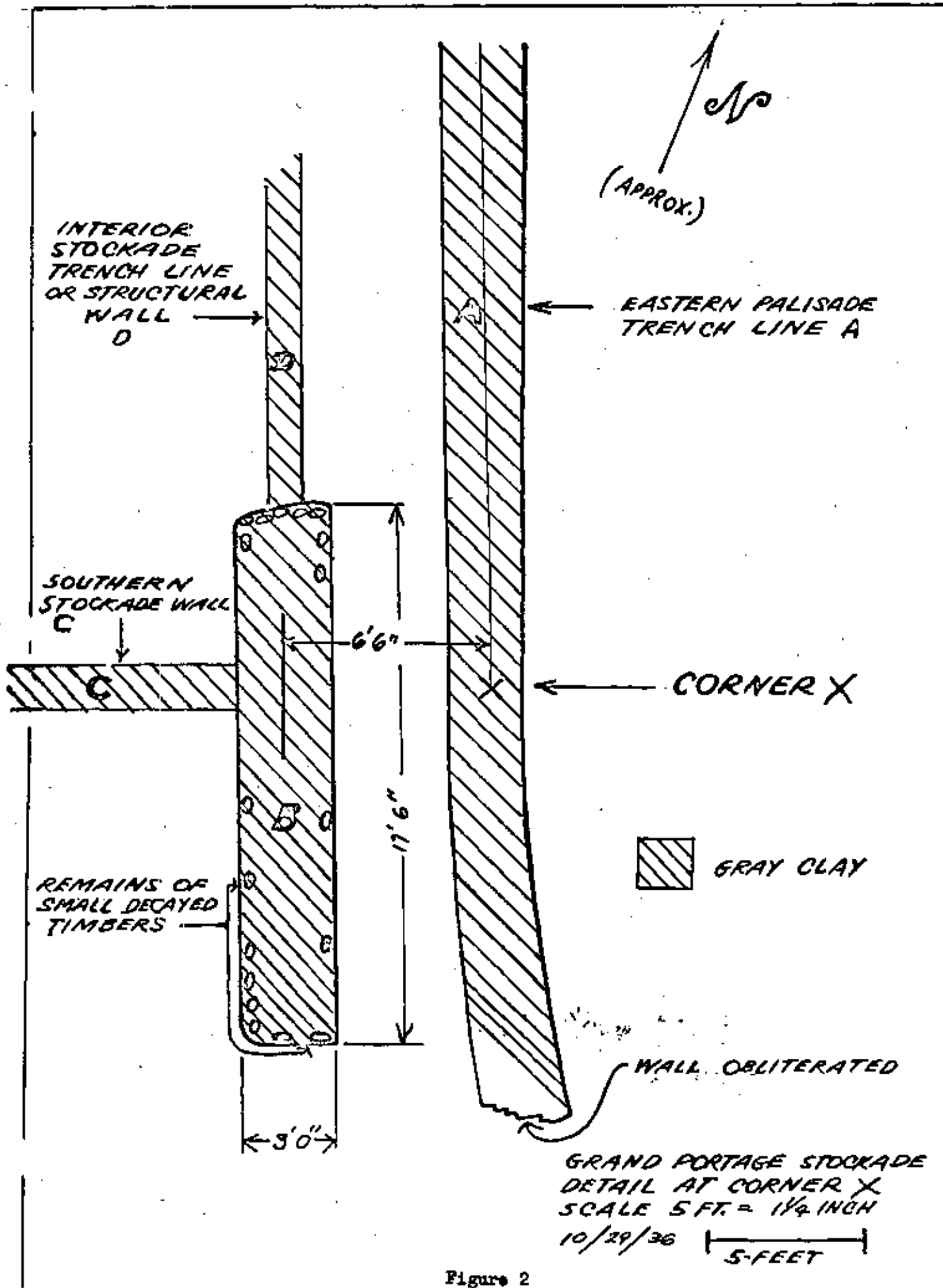
Ralph D. Brown suggests that a gate house for checking incoming shipments of merchandise once stood at this location.

Presumably he is referring to the possible building wall (Trench D) (Brown, 1938a, p. 16).

Further structural evidence concerning the area south of Corner X will not be found as this spot has suffered from wave erosion. Some limited excavations were made here in 1963, but nothing of any importance was found. There is a slight possibility that a possible palisade trench found near Corner B in 1963 may run eastward to a junction with the southern "wing" of the eastern palisade trench. Further excavations here in 1964 will answer this question.

The present writer is not satisfied that the structural remains found at this location were suitable to carry the weight of a heavy blockhouse. It is possible, however, that a blockhouse, if one ever existed here, may have been supported by heavy horizontal timbers. They could have completely disappeared. The structural evidence found here to date indicates that the southern palisade trench (Trench C) halted abruptly at its point of meeting with the N-S trench B. The small vertical timbers with the oval cross sections which were found in trench B suggest that a wall of a slight nature, perhaps with a hollow center, once stood here.

The bulk of the available evidence would suggest that a bastion or a covered entryway with a gate stood here, not a



blockhouse. (Figure 2).

Structure No. 3

This structure is postulated on rather scanty evidence. A fireplace about six feet square was found on the interior face of the southern palisade line during September or October, 1936. It was situated at about 200S/100E. Brown marked its location with two large posts which were set into the ground a short distance out from its southern perimeter. This area was relocated during the 1963 field season; it would be about six feet north of the interior face of the southern palisade line.

Although no notes or photographs are extant concerning this feature, the assumption is made that a fireplace of these dimensions would be associated with a log cabin structure. The only evidence for its existence is that it is designated on Map No. 8 which was made in October, 1936.

Structure No. 4

There is not much evidence at hand concerning this structure or structures. During the period from September 5 to October 8, 1936, G. Hubert Smith conducted minor excavations at the interior of the Northeastern stockade corner, Corner H, which is adjacent to Grand Portage Creek. Brown mentions

in his report for this period that:

"... the foundations of a building or buildings were encountered in the course of cross trenching near Corner H, in the work on the East wall. This structure is also situated on the ridge, (an old beach level) and because of its admirable location, overlooking the creek and the first gate, ("east gate") as well as the whole enclosed area, may possibly have been one of the two guard houses mentioned in older accounts. Because of the fact that this structure lies partly under the road paralleling the creek, work in this area will have to be deferred" (Brown, 1936b, p. 3).

Brown next referred to the interior of Corner H (Brown, 1938a, p. 14) in the following terms:

"Whether any archeological evidence will be forthcoming on the dimensions or types of blockhouses belonging to the post unit depends on whatever still remains to be disclosed. The logical points at which one should expect to find these two protective features are at and inside corners C and H. . . . Corner H may contain this evidence, although the rock pile which is located at this point has from its upper levels contributed objects of more recent appearance than post times; (Northwest Company era) these may belong to the blacksmith shop which is said to have stood there."

Brown's field notes for September 22, 1937 mention that a local Indian named Posey, when a small boy, remembered seeing ruins of a blacksmith shop just inside Corner H. (Brown, 1937c, p. 5). Presumably this blacksmith shop would have stood there about 1880 or earlier.

There are no photographs or maps which reveal any details of the excavations in this locality. Thus, there are no details concerning these structural remains. There is sufficient evidence, however, to indicate that a building which was probably a blacksmith shop stood here about 1880 or earlier.

Structure No. 5

This building is the Great Hall. Ralph D. Brown discovered a section of stone wall ten feet in length on September 11, 1937. By September 14th, he had uncovered eighty feet of this wall and had found the northwest corner of this building. He correctly identified this site as that of the "main hall" which was known by tradition to have been within the stockade enclosure.

The stone foundation lay parallel to the course of the "center wall" or palisade line running between Corners D and G; it was about 17 feet south of this palisade line. The building was oriented on an East-West axis. It measured 95 feet in length E-W and 30 feet N-S.

The complete northern and western walls of this building were found. Only a portion of the southern wall was discovered. The northwest, southwest, and northeast building corners were found. The course of a portion of the southern wall was uncovered, but the southeastern corner and the eastern wall were missing. They were projected onto a map from the existing walls.

The northern wall was in the best condition. (Plate 11b) It was composed of rather carefully laid courses of roughly squared slate from the vicinity of Mount Rose. In some spots, the walls were five or six courses in height; in others, only one or two courses could be found. Brown excavated alongside the walls and found that most of them appeared to lay on undisturbed sand. No data on the width of the foundation walls is available, but a measurement taken from Map No. 9 would indicate a width of two to two and a half feet for them.

Little evidence was found concerning the existence of fireplaces within the building outline until restoration of this structure was underway in 1938. In September of that year, Willoughby M. Babcock photographed a footing made of laid slabs of slate which measured 7 feet by 9 feet. It was found near the east center of the building and probably served as a fireplace footing. (Babcock, 1940b, pg. 7). (See Plate

12b and Figure 3).

A cluster of burned boulders and ash was found near the center of the eastern end of the building at the same time. (See plate 12a). It is impossible to interpret this feature without a precise location for it.

In October 1937, "cross trenches" were excavated through the interior of this building. Brown states that these trenches were dug to varying depths into undisturbed sand which underlay this portion of the site (Brown, 1938a, p. 19). His map of this area, however, shows only one excavation within the confines of this structure. This is Trench No. 14 which was five feet in width and 91 feet in length (East-West); it ran through the center of the Great Hall. The few disturbances found here were identified as being of recent origin. Brown is quite positive in stating that: "no trading post structures occupied the hall site before the hall was erected" (Brown, 1938a, p. 19). In actuality, not much of the interior of this building was excavated. Very little building hardware or other debris was found within the building enclosure (Ibid, p. 20).

Brown attributed the loss of the eastern and southern building walls to natural erosion of the sandy soil, gardens, and to the clearing of the area for a fox run which occupied

THE GREAT HALL
STRUCTURE No. 5

SCALE : 1" = 20'

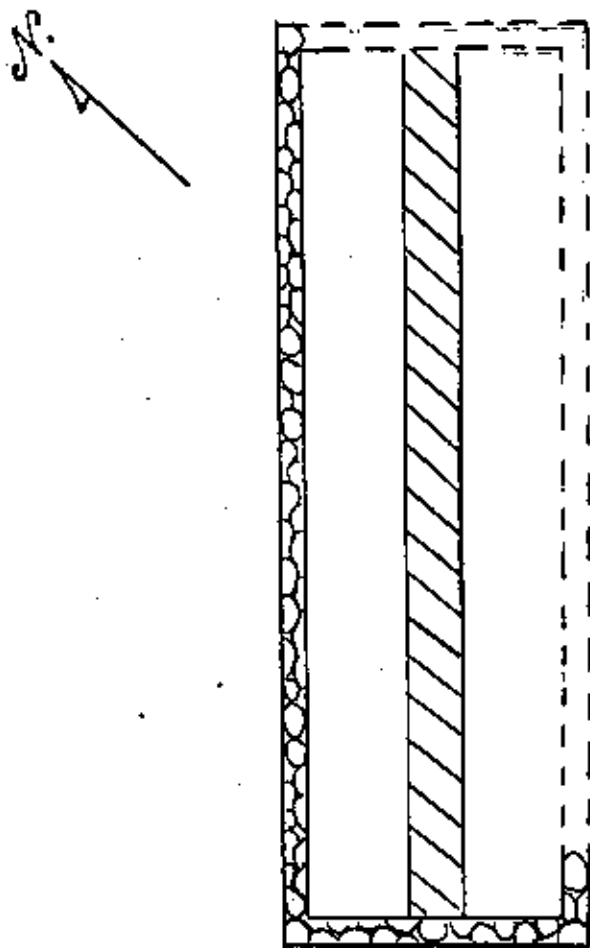


Figure 3 .

a portion of the south central wall of the building in the 1930's.

The scanty structural remains found at this location definitely establish that a building 30 feet in width and 95 feet in length once stood here. One historical account (Baker, MHS Collections, Vol. 9, pg. 10) says that this building had a large dining room 60 feet long with a puncheon floor. It is unlikely that further evidence concerning this building will ever be recovered. (Figure 3).

Structure No. 6

On September 11, 1937, a fireplace was found in the course of exploratory trenching. Further excavations in this area in October, 1937 demonstrated that this fireplace was built into the western wall of a building unit which measured about 22' by 22'. The outline of this unit consisted of a stone wall composed of squared slate slabs; in the better preserved portions it was three or four courses high, and about one foot in width. (plate 11b).

Immediately west of this unit lay another structure. It was approximately 22' in width and 32' in length although its walls were not well preserved. It also had a fireplace built into its western wall. The western face of this building lay

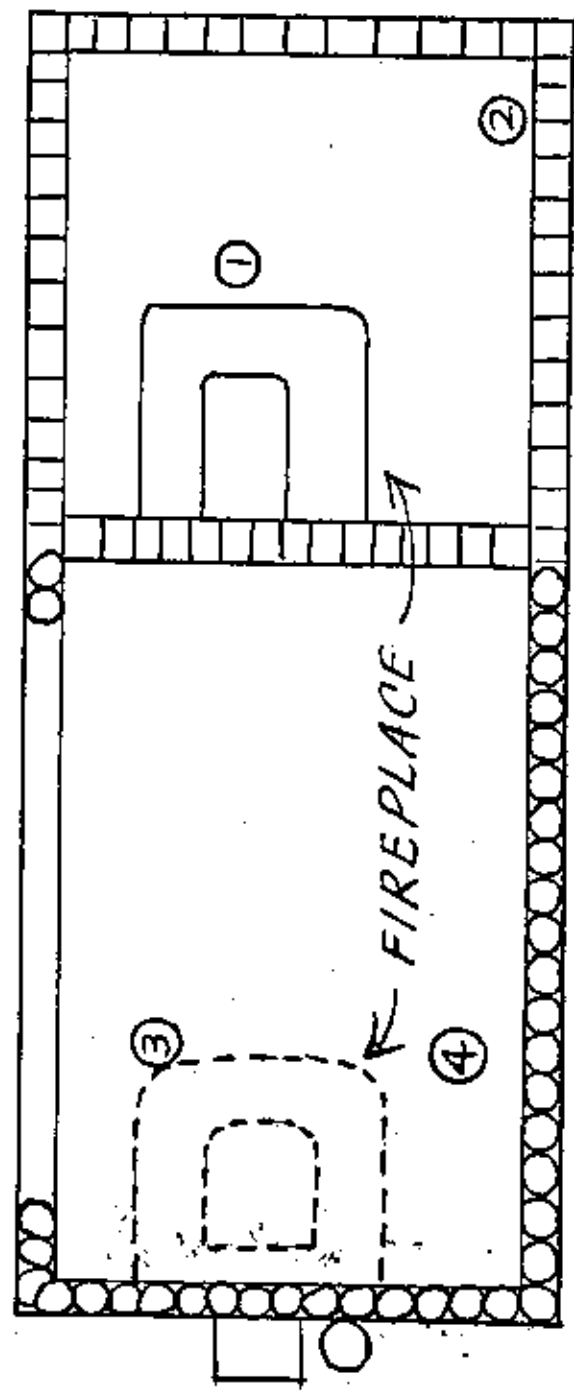
parallel to and about 7' eastward from the interior face of the western palisade trenchline. This structure's foundations were formed of local rounded boulders about one foot in diameter.

Together, these two building units formed a building approximately 22' in width, North-South, and 54' in length, East-West. The foundation lines of the western building unit were continuations of the north and south walls of the eastern building. The coordinates for this structure are: 21-45S (east end), 20-42S (west end) by 60-115W. Brown offered the opinion that perhaps the western portion of the building was built first, and the eastern portion added at a later date, although the reverse could also be correct.

Each of the fireplaces were about 10' square; their interior faces were slightly rounded at the corners. Both of them had a "horse shoe" shape with the open end of the horse shoe placed against a western wall. When discovered, the fireplaces consisted of heaps of stones lying in clay. The hearths were made of flat stones embedded into the earth. The fireplaces were built of squared slabs of slate which had been probably set in a clay mortar. The chimneys were made of rounded boulders. The fire pit of the eastern structure was well filled with ash and burned debris; the second, and western



STRUCTURE NO. 6



□ = SQUARED STONE

○ = BOULDER

Scale: 1/8" = 1'

Figure 4

fireplace was less well filled. (Plate 14a & b).

The walk or yard south of this composite building had been sanded or gravelled at the time of its occupation for a distance of about 10' southward from its southern edge. This layer ranged in thickness from two to three inches. Brown believed that a building singled out for special attentions of this nature had been of more than ordinary importance. He thought that it might have been the dwelling of the superintendent of the fur post. An obvious conclusion would be that the doorways had faced to the south as this led onto the gravel walk and would face away from the northern winds. (Brown, 1938a, pp. 25-26). (Figure 4).

Structure No. 7

Brown began excavations on a mounded area in the northern half of the stockade enclosure on September 15, 1937. Here were found indications of a building lying parallel to the western palisade trench, and with its long axis running North-South. The grid coordinates are: 50-75N/90-106W.

The earth and stones in this area were removed by levels, but a large quantity of jumbled stones made excavations difficult. These stones might have come from a high wall which had fallen or from fallen fireplaces. (Plate 13a). A burned area

was found in the mound which ran northward from its center. At about ground level were found the charred remains of trimmed logs or hewn boards; they lay under a layer of burned organic material.

Excavations were halted on this structure on September 20, 1937 as the features were not clearly distinguished and demanded more attention than Brown could give them at the time. He had a large crew and no one to assist him in supervision (Brown, 1937c. pp. 3-5). (Plate 17b).

In his final report, Brown recorded some additional data concerning this building site. The building was about 12 feet in width East-West, and 25 feet in length North-South. It had been destroyed by fire. A probable chimney and fireplace had stood against the southern building wall, but had tumbled down so that it was almost unrecognizable. Under this tumbled fireplace heap, which was carefully removed stone by stone, was found a series of charred cross beams. They rested on earth burned a bright brick red. These beams had been spaced about one and one-half feet apart. Considerable more information concerning this structure might be found when it was completely excavated.

Associated artifacts were: "an old fashioned simple door lock, and a long hand made hinge" (Brown, 1938a, p. 27).

Structure No. 8

On September 22, 1937, Brown found a fireplace near the western end of an E-W exploratory trench which lay immediately south of the 100 S line. No foundation outlines were found in association with it, but a post butt nearly one foot in diameter was found about 10 feet distant. Debris found within this feature was of the Northwest Company period (Brown, 1937c, p. 5; Brown, 1938a, p. 29).

This feature consists of squared slate slabs laid in earth; three large flat boulders were associated with them. (Plate 15a). No measurements are available for it, nor are its coordinates known. It does, however, lie on the 100 S line, just east of the western palisade line. Further

excavations here might establish another building outline.

Structure No. 9

This structure was discovered in the southwestern corner of the stockade enclosure under the site proposed as a location for the Cook County Historical Society building. Its grid coordinates were: 163-187S/105-128W. Thus it measured approximately 24 feet N-S by 23 feet E-W.

The southern portion of this building is incomplete. The southwestern corner is composed of a single course of squared stones laid in the form of a right angle. The southeastern corner consists of a trench which forms a right angle, but this corner is not in a direct line with the southwestern corner. It is about 5 feet north of a line which would connect it with the southwestern corner.

The western, northern, and eastern segments of this building consisted of trenches about one foot in width. Their depths ranged from 22 inches to nearly 3 feet. Seven irregular disturbances were found along the courses of these trenches. These are Features B-20a, B-22, B-24, three unnumbered areas, and B-42. These disturbances or pits were regularly spaced at intervals of about 7 feet along the western, northern, and eastern trenches. Two of them are at building

corners. Their depths vary from 27 to 36 inches. It is probable that large posts were once set into them.

A trench line which is probably earlier than this building extended E-W through its northern portion. This feature began at the interior of the western foundation trench and then extended southward parallel to the northern building trench until it reached the eastern foundation trench. Thereafter, it continued outside of the building in an eastward direction for a distance of 18½ feet. The remains of small post butts were found in much of the course of this trench. It may represent the remains of an earlier building which was possibly built on this location.

A poorly built fireplace was found in the west central portion of the building. The rear wall of this feature was in line with, and formed a part of the northern building wall. It measured 7 feet E-W by 4 feet N-S. It was made of a single course of squared and round stones and was incomplete as its western wall was missing. A considerable quantity of ash and debris rested on the bright burned earth of the hearth (Brown, 1938a, pp. 27-28). (Plate 15b).

The incomplete nature of the structural evidence found at this location makes it impossible to be positive about many aspects of the building. At a first glance, one would

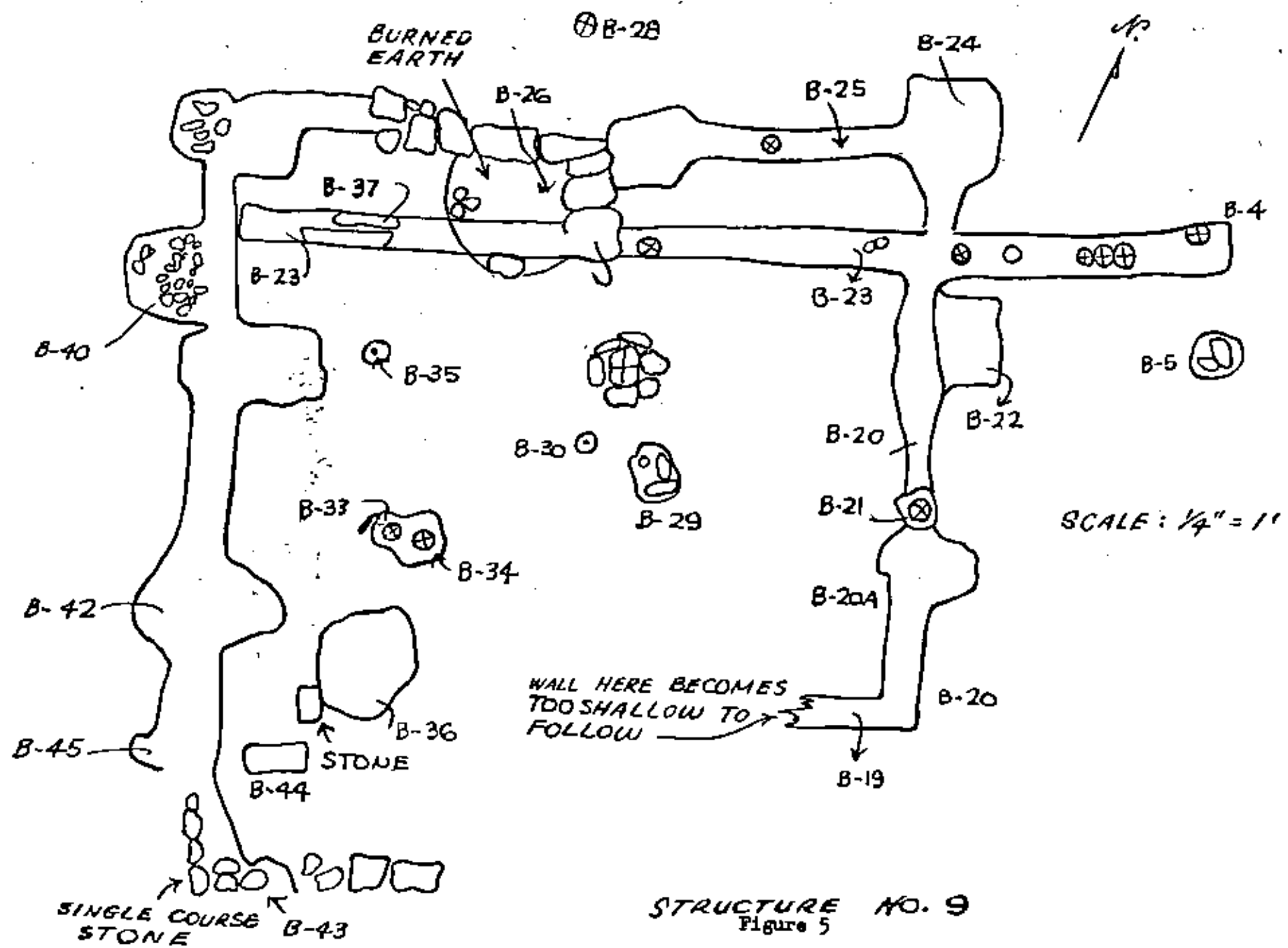
think that only one building had stood here. There is a good possibility, however, that more than one structure may be represented by these remains.

The southern portion of this building is incomplete. The southwestern corner is composed of a single course of squared stones. It is in sharp contrast to the southeastern corner which is not in line with it, and which is a right angled foundation trench. Furthermore, there is the puzzling trenchline which runs E-W through the northern portion of the building parallel to the northern foundation trench, and which then extends eastward, outside the building for a distance of $18\frac{1}{2}$ feet. The burned earth of the hearth, and one stone of the eastern fireplace wall appear to overlie this trench although this is not a positive conclusion, as there are no notes which refer to this possible superimposition.

It does not seem logical that one portion of a building would be made of vertical timbers set into foundation trenches while another wall was formed of coursed stone. It is possible that we have here the remains of a building whose walls were formed of vertical timbers set into foundation trenches, and that the regular depressions along these walls represent pits into which large vertical timbers were set at regular intervals as bracing.

Perhaps we can speculate that the puzzling N-S trench line was associated, in an earlier building, with the right angled course of stones found in the southwestern portion of this area. It is possible that these stones belonged to a fireplace of this structure. If this speculation is correct, this building would have extended further to the southward as does this N-S trench. (Figure 5).

A large quantity of nails, window glass, and scrap metal were found in this area.



STRUCTURE NO. 9
Figure 5

Structure No. 10

A probable structure site is represented by the incomplete remains of a fireplace composed of squared slabs of slate found at 140S/116W. Only portions of the western and southern walls of this feature were found. The fireplace opening or hearth area apparently faced the east.

Most fireplaces at this site were found in line with the exterior walls of buildings. It is offered as speculation that this fireplace stood in line with the west wall of a structure which once stood at this location.

Structure No. 11

This probable building site was found southeast of the Great Hall. It is bounded by coordinates 25-36S/125-146E. It is represented by a series of five oval, rectangular and round post holes or pits (Brown's features: C-27a, C-28, C-30, C-31, and C-33), which were from 22 to 30 inches deep. Two of these pits contained the remains of posts about 4 inches in diameter; the others had no wood in them.

These pits formed two parallel N-S lines which were about ten feet apart. The pits were about ten feet distant from each other, measured from their centers. They form an outline which measures about 10 feet N-S, and 21 feet E-W. The northeastern corner of this tentative structure was destroyed by a

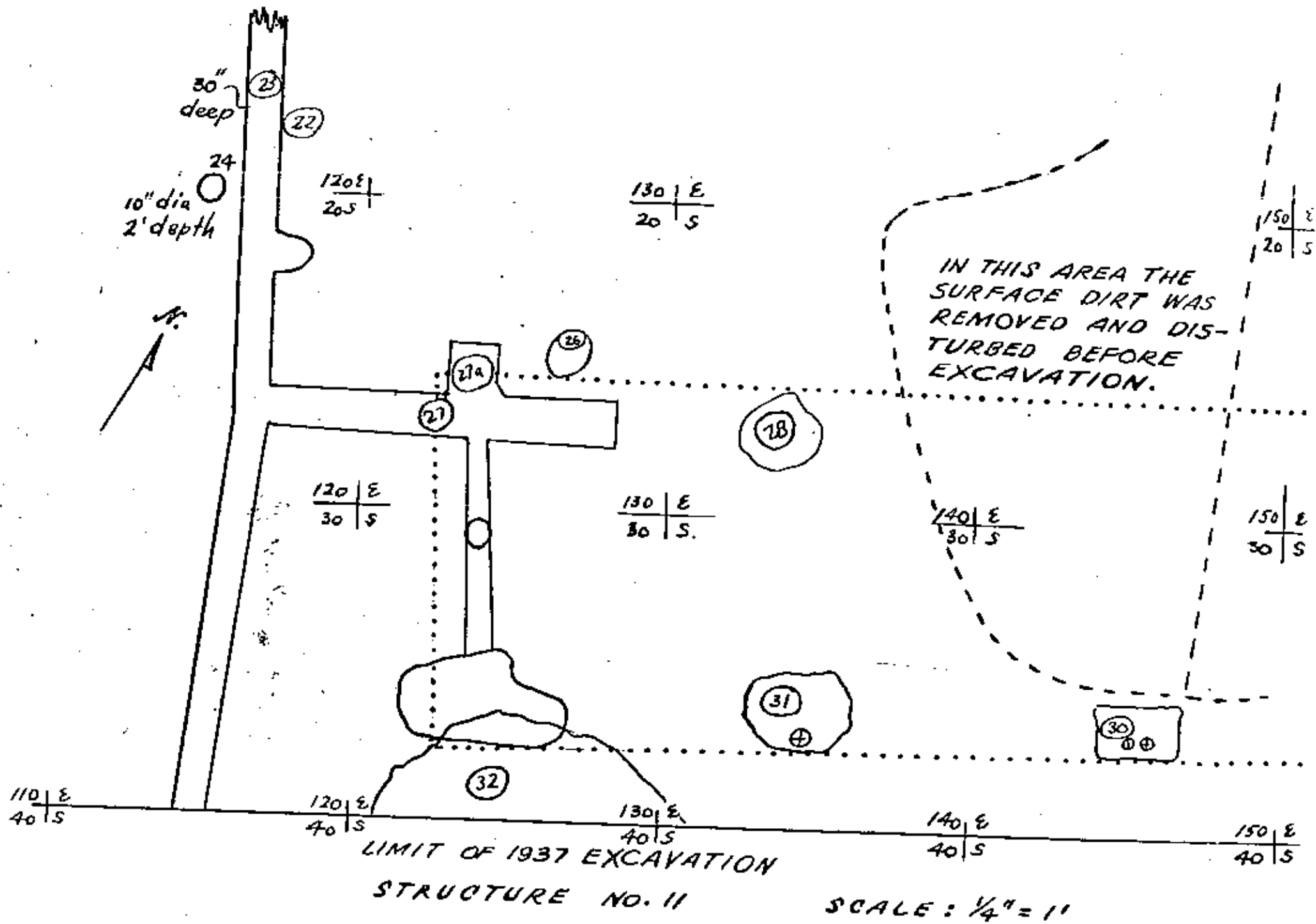


Figure 6

soil disturbance. A shallow trench (Feature C-29) ran between features C-27a and C-33 in a N-S direction. Brown believed that this trench belonged to another structure as it was only a shallow building wall (Brown, 1938a, p. 24). He also advanced the suggestion that more of these pits might be found under the roadway at the eastern end of this tentative structure.

It is very probable that these soil disturbances represent the remains of a building which was supported on posts cut off flush with the ground surface. The post remains found in two of these pits are too small to have formed the upright supports of a building constructed in the French-Canadian style of notched upright posts into which were set horizontal hewn or sawn timbers. The associations of this probable structure with the trenches west of it remain to be established. (Figure 6).

Structure No. 12

This building site was found near Corner G or the "east gate area." It was located south of the "center wall" which runs E-W between Corners D and G, and north of the northern wall of the Great Hall.

Here, Brown found a foundation trench less than one foot

wide and about two feet deep. It extended E-W for about 16 feet although its western end was not fully excavated. The eastern end of this trench was at the southernmost of the two large "gate posts" found at Corner G. Two parallel N-S foundation trenches were uncovered at the eastern end of this structure. They formed a double wall 12 feet in length which halted at the northern wall of the Great Hall. Therefore, they were probably contemporaneous or later in time than the Great Hall. A short trench, which may have formed the southern wall of this building, was found about 18 inches north of the northern wall of the Great Hall. It was only 9 inches wide and ran E-W for a distance of $6\frac{1}{2}$ feet.

Brown offers the suggestion that this structure had served as a kitchen and that it may have enclosed the well which was found 22 feet westward of the northeast corner of the Great Hall and about 11 feet north of the Great Hall. This structure, although not complete, was about 10 feet in width and at least 16 feet in length. It was probably considerably longer and extended farther to the west (Brown, 1938a, p. 21). (Figure 7).

Here is another structure whose walls were probably formed by setting vertical timbers into foundation trenches.

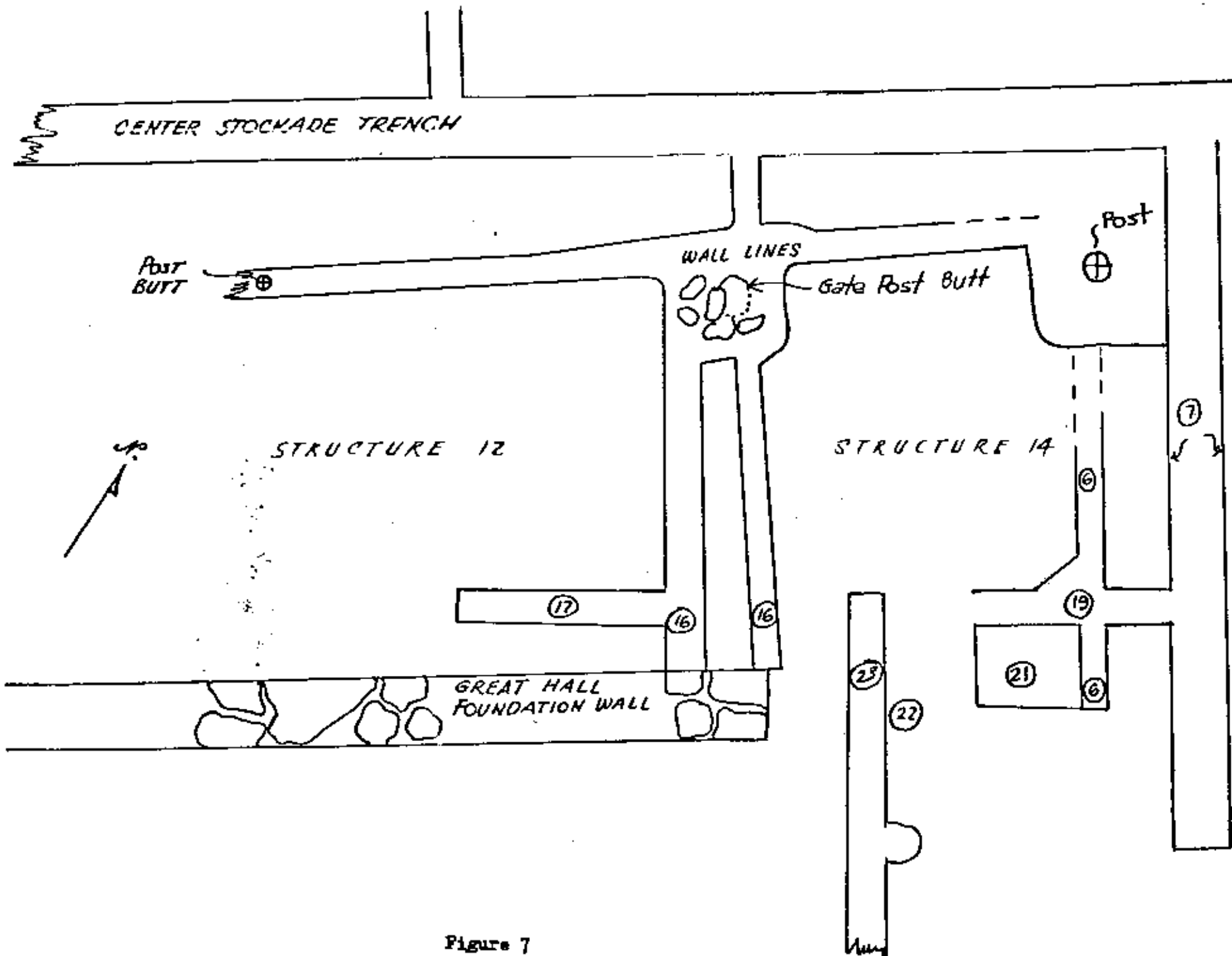


Figure 7

Structure No. 13

This building stood about 3 feet south of and parallel to the "center wall". Its western edge was about 16 feet east of the northeastern corner of the Great Hall. The grid coordinates are: 0-20S/130-153E, although its eastern end continues eastward for an unknown distance under the roadway which occupied this portion of the site in 1937.

The structure was 13 feet wide N-S and at least 23 feet in length E-W. Its western wall was represented by a foundation trench 1 foot in width and $1\frac{1}{2}$ feet in depth; this trench contained vertical wooden post butts. The northern foundation trench was 1 foot wide and 1 foot 9 inches deep; its length was 24 feet. At this point, it went eastward under the roadway. Vertical post butts were also found in its fill. The southern wall of this building was represented by a trench about 1 foot wide and at least 23 feet long.

At a distance about 10 feet eastward from the western building wall was found a submerged room or cellar. This feature (C-12) lay well within the outlines of the structure just described. It extended to a depth of 4 feet 7 inches into undisturbed clay. A wooden cribbing had once supported the cellar walls; it had been constructed in the French-Canadian notched corner post, horizontal hewn timber technique.

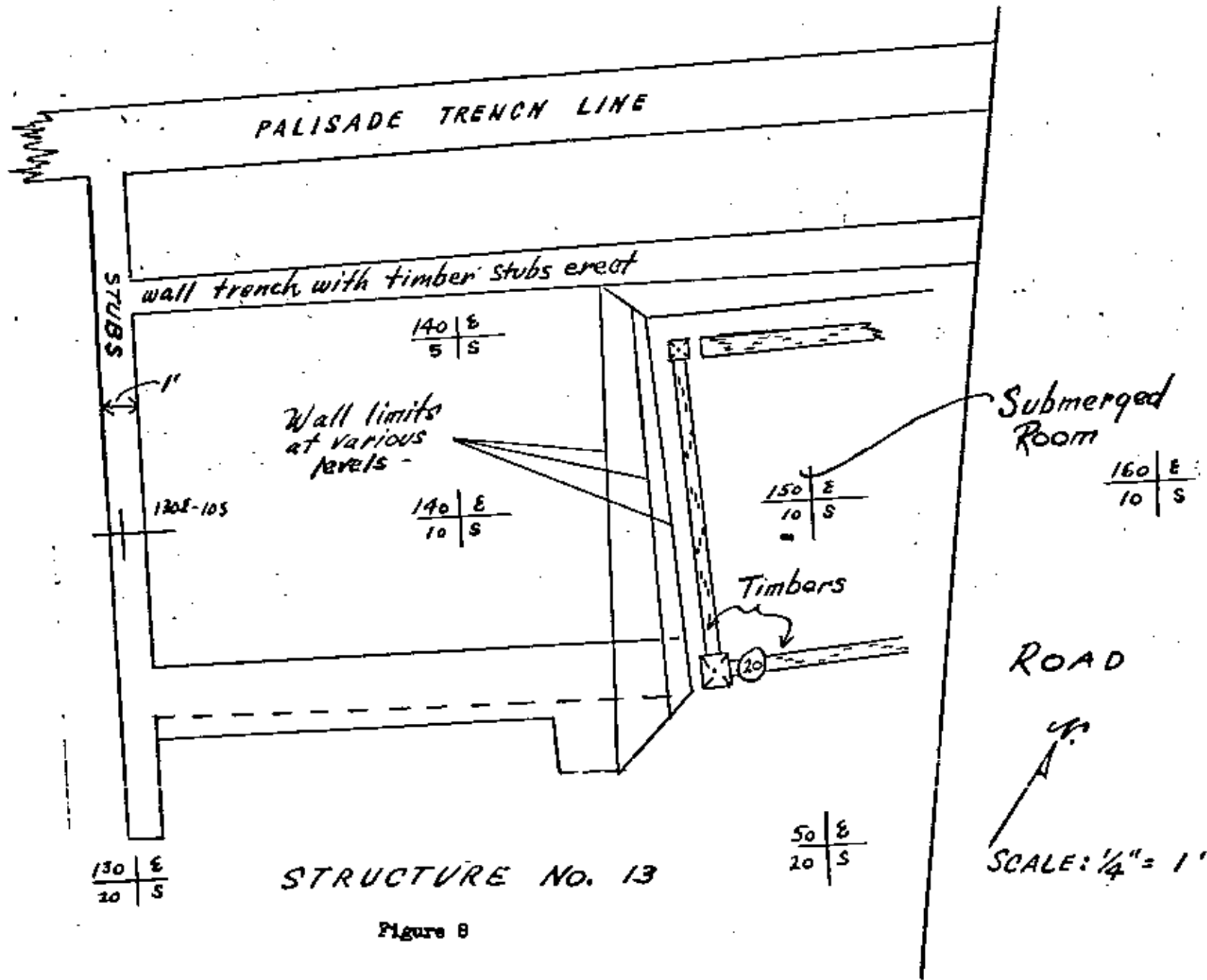
The northwestern and southwestern corners of this cellar were found in situ. They had been upright timbers from 9 inches square to 9 by 12 inches. Running N-S between them was the remains of a board about 9 feet long and about 9 inches wide. At right angles to this beam, and extending eastward into the roadway from each of these two vertical corner posts were the remains of two similar horizontal boards. Evidences of at least four other horizontal boards were found as this cellar was excavated. The present evidence would indicate that this cellar had measured about 10 feet N-S and at least 6 feet (and undoubtedly more) E-W. Cellar depth had been about four and one-half feet.

Enough evidence was found here to determine accurately the method of cellar construction. After the cellar pit was dug, upright corner posts were set in each of the four corners. These posts were prepared in a manner common at about 1790. Long vertical slots were mortised to a width of about 2 inches and a depth of about 2 inches into two adjacent sides of the vertical timbers. Hand hewn planks about 2 inches in width would have then been slid on top of each other in a horizontal fashion to form the cellar walls. These planks were about 9 inches in width, and about 2 inches in thickness.

A wooden door was found lying flat on the floor of this cellar. Although it was in poor condition, it measured 7 feet in length and 39 inches in width. The face of the door was composed of four boards from 9 to 10½ inches in width, and 7 feet in length. The rear of the door was formed of boards 39 inches long which were spaced about 6 inches apart. These cross pieces were firmly nailed to each board which they intersected.

No hardware, such as hinges or locks, was found on any edge of the door. It was left where it was found, because of its poor condition, after it had been covered with newspapers. Brown hoped that it might be re-excavated at some future date when a method of preservation was available (Brown, 1938a, pp. 22-23). (Plate 16b); (Figure 8). The southern door of the Great Hall was modeled after this door (A.R.W.).

The structural evidence at this site demonstrates that a building formed of vertical timbers set into trenches once stood here. It measured approximately 13 feet in width on a N-S axis and at least 23 feet in length E-W. Within it was found a cellar about 4½ feet deep and 10 feet N-S and at least 6 feet E-W. No evidence to indicate the location of a doorway was discovered. This building probably served for storage as evidenced by the cellar.



Structure No. 14

A possible third building unit is represented in the "east gate area" by structural remains located between Structures 12 and 13. These remains are: A trench (C-16a) which runs N-S from the southern most "gate post". It was 9 inches in width and about 30 inches deep, and 13 feet in length. Another foundation trench which does not have a feature number, forms a right angle with Feature C-16a northeast of the southern gate post and runs eastward for a distance of 6 feet before it becomes indistinct. Thereafter, it probably continues for another two feet, for a total distance of 8 feet. At this point, it becomes lost in a badly disturbed area. Trench C-6 commences in this same disturbed area and runs N-S for a distance of about 8 feet where it merges with feature C-19. Thereafter, it continues southward for a distance of about 3 more feet; for a total distance of about 16 feet. This trench measured about 9 inches in width and 1.5 feet in depth (Brown, 1938a, p. 23).

The trenches discussed above may possibly delimit a structure about 13 feet N-S and 11 feet E-W, but it is also possible that these walls are a part of a larger structure which was previously discussed as Structure No. 12. (Figure 9).

Structure No. 15

This is a highly tentative structural site. There is nothing in the field notes concerning it, and there may be one photograph which depicts it. The basic evidence for its existence is a notation, "Possible Structure Sites", on Map No. 13 (A-5). The coordinates of this feature are: 12N/50W; it is located in the south central portion of the rear section of the stockade enclosure about 12 feet north of the "center wall". A possible photograph of this feature is reproduced in Plate 13b. The legend on the rear of this photograph is: "A stone heap in Area F. Work was discontinued at this stage of the picture. It may be another tumbled fireplace."

Additional Structures

While excavations were underway on the "center wall" or central palisade trench line in September, 1936, three soil disturbances were noticed in the southern face of this trench. The first disturbance was located from 37-38.5' eastward along this trench line from Corner D. It was 1.5' in width, and was interpreted as a possible trench. Another disturbance was found 28-32' eastward of Corner D. It was 3.5' wide and 28" deep. No interpretation is possible for it. The third

disturbance was found 99' eastward from Corner D. It was 6' wide and 30" deep. Brown believed that all of these features should be investigated as they were close to Structure No. 6 which he interpreted as the residence of the resident superintendent of the fur post.

Discussion:

Of the fifteen structures or probable structures discussed in this report, only Structures 1, 2, 5, 6, and 9 can be presently interpreted with confidence. These structural units were distinct entities and enough of them has survived so that reasonably adequate ground plans can be made of them. It is also possible to provide an interpretation of the construction methods used with them, and some speculations concerning their functions.

Structures 3, 8, 10, and 15 are represented only by isolated stone fireplaces and can only be described at the present. Most of these units were not completely excavated. There are good possibilities for further archeological excavations at these locations. Obviously, any definite statements concerning them must wait until these excavations have been made. All of these structures could have been used as dwelling units as they had provision for heating during the winter months. This is especially true with Structures 3, 8 and 10

which were situated away from the interior of the stockade enclosure and near the palisade walls. However, it is also possible that some of these units could have served as workshops or for storage.

Structures 11, 12, 13, and 14 are in the puzzling and complex "east gate area." It is obvious that further archeological excavations must be made here if these structures are to be delimited and interpreted. It must be emphasized, that the 1936-37 excavations at this location may have either destroyed all archeological evidence or hopelessly confused it. None of these postulated structures contained fireplaces, so we must conclude that none of them served as dwelling units, at least in the winter months. It is possible that the fireplaces from some of these structures have not yet been uncovered as portions of Structures 11 and 13 lie under the old road across the eastern portion of the stockade enclosure.

Structures 11, 13, and 14 may have served for storage although Structure 14 may have been a part of a defensive unit. Structure 12 may have served as a kitchen for the Great Hall.

Structure 2 is interpreted as a defensive bastion, although the wall (Trench D) probably was from a separate building, which may have served as a warehouse for checking incoming shipments of trade goods. Structure 1 was not completely

excavated. It may well have had a fireplace. Conclusions concerning it must therefore be held in reserve.

Structure 5 was the Great Hall which served as a meeting and dining place for partners and clerks of the Northwest Company. Structure 6 must have been the dwelling of an individual of some status at the post, as it had a stone foundation, two rooms, and two fireplaces, and a sanded walk or yard on its southern side. Structure 7 was also a dwelling if its location and physical aspects can be correctly interpreted at this date. Structure 9 also appears to have been a dwelling as it contained a fireplace and was situated against the western palisade.

These admittedly tentative interpretations of the functions of these building units show that one probable defensive unit has been identified (Structure 2); seven possible dwellings (Structures 3, 6, 7, 8, 9, 10, and 15); six possible storehouses or workshops (Structures 1, 4, 11, 12, 13, and 14); and one conference and dining building, the Great Hall (Structure 5).

A study of the structural methods used in erecting these structures reveals that four possible building units are represented only by isolated stone fireplaces. No statements can be made presently concerning the structures which were presumably

associated with them.

The outlines of Structures 1, 4, 7 (?), 9, 12, 13, and 14 were formed by narrow foundation trenches. These units obviously were built in the French-Canadian "palisade" or "en pile" manner which involved setting upright logs into trenches. Structure 2 was constructed in essentially the same manner, but it was of a defensive nature, and thus much different from the other structures at this site. †

The outline of Structure 11 was formed by large pits. It is very likely that these pits once held large vertical slotted timbers into which hewn or sawn horizontal boards would have been inserted. It is also possible that these pits once held large timbers which were cut off flush with the ground surface and served as piers to support the building sills.

Structure 9 had both foundation trenches and pits associated with its outline. It is very difficult to interpret it as a single building unit. There is a considerable possibility that two structures are represented here, and that they are partially superimposed.

The construction methods used in erecting four structures are unknown, at present. Six and possibly seven building units were built in the French-Canadian "palisade" or "en

pile" manner. Two structures had stone foundations; little can be said about their superstructures. One structure was apparently built in the "notched upright timber, horizontal hewn board" style. Another structure may have been built with "palisade" walls which were braced with large upright timbers. There may have also been superimposition of two buildings at this latter structural site. (Map 12).

The Well

This unusual feature was found on October 15, 1937, but its true nature was not recognized for several days. It was situated 22 feet west of the northeast corner of the Great Hall, and 11 feet north of the northern wall of this structure. Its grid coordinates are: 6.5S-91E. The well opening was "D" shaped with the straight side of the "D" oriented to a true north-south direction. When completely excavated, its least diameter was 19½ inches; the greatest diameter, 27 inches. Total depth was 11 feet below ground surface.

The well's orifice was found about two feet below the ground surface in a heavy deposit of gray clay. A "D" shaped outline was formed by 10 vertical hand hewn boards. In the center of this outline was a fill of clay and flat stones which was difficult to remove. As excavation progressed, these boards were found to extend downward to a depth of about 8.8 feet below the ground level. The boards were about 9 inches in width and from 6.2 feet to 6.8 feet in length. They formed an exterior cribbing for the well, and were held in place only by the wet clay which surrounded them. At a depth of about 8.8 feet, these boards rested on a wooden barrel lacking top or bottom. The barrel was about 24 inches in diameter and 27 inches in length. It was formed of 23 wooden staves. The

bottom of the barrel rested on sand and gravel at the base of the well.

Sitting on top of this barrel, and apparently inside the hand hewn vertical boards, were two other superimposed barrels also without tops or bottoms. The staves from these barrels had given way and stuck out irregularly into the well fill. As excavation progressed downward, the staves from these two upper barrels were removed and labeled. The three superimposed barrels rose within the well to a height of about 7 feet 9 inches from the well bottom. The top of the uppermost barrel came within about 3 feet 3 inches from the ground surface.

The soil in the upper levels of the well was sandy; thereafter gray clay was found to a depth of about 8 feet, where it turned to a blue clay. Water had to be pumped out as the excavation was deepened, into sand and gravel at the base of the well.

A number of objects were found in the well fill. Among them was a long stick $1\frac{1}{4}$ " in diameter and 66" in length; it extended vertically from about 4'6" from the ground surface to a depth of about 9'. One side of it was flat for a portion of its length and one end was pointed. It was apparently a building stake and of balsam or spruce. A timber, about 4" square and 47" long was also found extending vertically through

the well fill. Its two ends were pointed, and two sides were covered with a red or brown paint. Ralph D. Brown thought it might have been a decorative feature on the nearby "east gate." Also found within the well fill were a side and bottom of a wooden bucket. It was recovered at a depth of two to three feet about the well bottom. This bucket was covered with a reddish-brown paint which was probably the "Spanish Brown" mentioned in historical accounts as being used to paint the buildings of this fur post. A symmetrical wooden device with a hole in it was found with this bucket. At the bottom of the well, on top of the sand and gravel, were found numerous wood chips, a single china sherd and a shingle. The shingle had a weathered surface on it which was 4½" in length. This demonstrated that shingles used on the roofs of buildings at this site, had a "weather surface" of this width.

The three wooden barrels found within the well had probably been used to carry provisions to the fur post; and when no longer needed, had their tops and bottoms knocked out, and were used to crib the well. The bottom barrel, which was well preserved, was left in place. Thereafter, the entire excavation was filled with sand so that it could be easily re-excavated in the future. (Brown, 1937a, pp. 55-56; Brown, 1938a, pp. 31-32).

It is probable that this well was closely associated with Structure 12 which may have served as the kitchen for the Great Hall. (Map 8).

The Drain

Inhabitants of the fur post found the ground wet, especially in the rear portion of the stockade enclosure, as it is today, and built an open wooden sided drain to alleviate this condition. Evidences of this feature were found during the excavation of the course of the palisade trench line between Corners H and G in 1936. It crosses this portion of the palisade obliquely 38 feet north of Corner G. (See Map 7). Some 22 feet of the drain was exposed inside the stockade enclosure, and 28 feet of it outside of the enclosure. More of it undoubtedly lies under the present day visitor's parking lot. (plate 7b).

When exposed, most of the boards which comprised the sides and bottom of the drain were in a fair state of preservation. They were found at a depth of 18 to 21 inches below the ground surface. Hand hewn boards from 8 to 10 feet in length, and about 2 inches thick and 10 inches wide, had been laid in an open trench in a "U" shape. The top was probably left open.

Although simple in design, it undoubtedly served to drain away surface water from this area into Grand Portage Creek. (Brown, 1938a, pp. 17-18).

Gates and Defensive Structures

The historical and archaeological evidence concerning the gates and defensive structures at this post is scanty, confusing and inconclusive. This situation has arisen because of the grossly inadequate historical record concerning the physical attributes of the post, and the obscuring of structural evidence by the rebuilding of the palisades and gates.

It is not likely that this establishment required an elaborate system of fortifications. In actuality, its palisades appear to have served more as fences and windbreaks. They were safeguards against petty pilfering and traffic controls; their basic function was not that of defense. Additional controls over individuals entering the post were provided by guard houses situated over the more important gates. Fire protection was also given the post by men who manned these guard houses at night to watch for fire (Macdonell, "Diary" in Gates: Five Fur Traders of the Northwest, 1933, p. 92).

Defensive structures were often associated with gates in fur trade posts of this era for use in the unlikely event that an assault was made on the enclosure. This was elementary logic as the palisades were so high that they were difficult to scale, at least by large bodies of men. It is

probable that such structures at Grand Portage were not of a very formal nature. No evidence of Indian-White conflict at this site is in the known historical literature.

Historical Evidence

There are only two basic references to gates and defensive structures at the site. Presumably, Grand Portage was so well known to participants in the fur trade that no one ever bothered to write an adequate physical description of it. No ground plans have been found either. An engraving entitled, "View of the Grand Portage on Lake Superior" is present on the margin of a map credited to Joseph Bouchette in 1815, but it must be a view of Fort William, the successor to Grand Portage. It is not a view of the Grand Portage. This illustration is of much interest, however, as Fort William's architecture was probably much akin to that of the earlier Grand Portage.

George Heroit, writing in 1803-1806, states that the Northwest Company post at Grand Portage ". . . consists of a large picketed fort, with three gates, over which are two guard houses." (Heroit, 1807, pp. 203-205, Canadas).

In the spring of 1803, Thomas Boucherville wrote about the fort as follows: ". . . and consisted of palisades with tall cedar pickets with bastions at the four corners." (Quaife, ed., War on the Detroit, p. 11, Chicago, 1940).

It is barely possible that these two reports complement each other. Heroit's information could have related only to the gates and guard houses over them while Boucherville mentioned only the bastions which were at outside corners of the enclosure. Thus, we could be dealing with three gates, two of which had guard houses over them, and four bastions which were at exterior corners of the post. This arrangement is not very plausible, however. It is far more probable that the fort was protected by peaceful relations with local Indians. Logic, however, would indicate that the three entrances to the post were situated so that they could be defended if necessary. The local topography and a number of historical considerations will be discussed as they have some bearing on the three gates known through the scanty historical documentation.

A considerable portion of the gate problem hinges on whether or not a wharf was located in front of the southern palisade. If a wharf were located here, canoes laden with trade goods would have docked at it for unloading. Then, a large double gate in the southern palisade, and fronting onto the dock would have been essential. Such a major entrance could well have had a guard house over it. Although considerable efforts have been devoted to historical research concerning this problem, it has never been definitely resolved.

It is possible, however that further historical evidence will be found concerning this traditional feature. No archaeological evidence to indicate a gate at this location has been found. In the summer of 1963, a careful search was made for evidences of a gate in this area, but nothing was found. The southern palisade trench continued without a break in front of the traditional site of this wharf. Thus, we must conclude that only traditional accounts support the existence of a wharf of the fur trade era at this location.

An almost opposite viewpoint, which does not have much concrete evidence to support it, contends that the main entrance to the fort was in the "east gate" area. This is mainly based on the assumption that no wharf existed, and that it would not have been judicious to land laden birchbark canoes on the relatively steep and rocky beach at the southern or lake facade of the enclosure. In theory, it would have been more logical to have run the canoes up into the mouth of Grand Portage Creek for a distance of about 250' to a point where the creek became broader. There, a relatively deep, quiet anchorage was available. The flaw in this supposition, however, is that no such anchorage is presently at hand in the creek.

Many of the local Indians state that they berthed quite large boats in this inlet up to the 1930's. According to

them, the water was three or four feet deep at that time. The creek was wider at this point too, and had sloping sides which would have given a relatively easy access to the "east" or rear gate of the post.

For this to have been possible, two factors must have changed since the 1930's. The first is that the level of Lake Superior must have been higher in the fur trade era, and perhaps into the 1930's. The second is that the creek mouth has silted considerably since the 1930's.

Let us consider the lake levels first. Accurate records of water levels in the Great Lakes have been kept since 1860. In the one hundred plus years since that time, the level of Lake Superior has varied between 602' and 598.4' above sea level, with the average level being around 600'. Thus, it would seem that the lake level at say 1790 or 1800 was not significantly higher than at the present day. The possibility of a higher lake level is not very significant when viewed against previous levels. (Hydrograph . . . Lake Levels, 1860-1963).

Some attention must be given nevertheless to the fact that Lake Superior characteristically reaches seasonal lows in February or March and then climbs to a high in July or August. Furthermore, the annual spring runoff would raise the creek level by two or three feet. Thus, the lake and

creek would be at or approaching seasonal highs in June when the fur trade brigades came to Grand Portage in their large Montreal canoes. Local Indians contend that there has been a silting of the creek mouth in recent years. Therefore, it is probable that large canoes were able to travel up the creek for a few hundred feet during the fur trade era.

Another matter which has considerable bearing on the locations of the fort's gates is that there were apparently three phases of stockade construction⁶ at the site. As these are discussed in some detail on pp. 58-64 of this report, they will be dealt with in only a cursory manner at present. In theory, the original fur trade post at the site would have been erected in the best available location. Probably this would have been the area bounded by Grand Portage Creek on the east, Lake Superior on the south, Corners A-Y on the west, and Corner Y-H on the north. It is also possible that the entire southern portion of the enclosure bounded by Grand Portage Creek on the east, Lake Superior on the south, Corners C-D on the west, and Corners D-H on the north could have been enclosed as one unit when the post was first erected, but this is unlikely because of its size. Seemingly, this would have been an overly large area for a trading concern such as the Northwest Company when it was first formed ca. 1768.

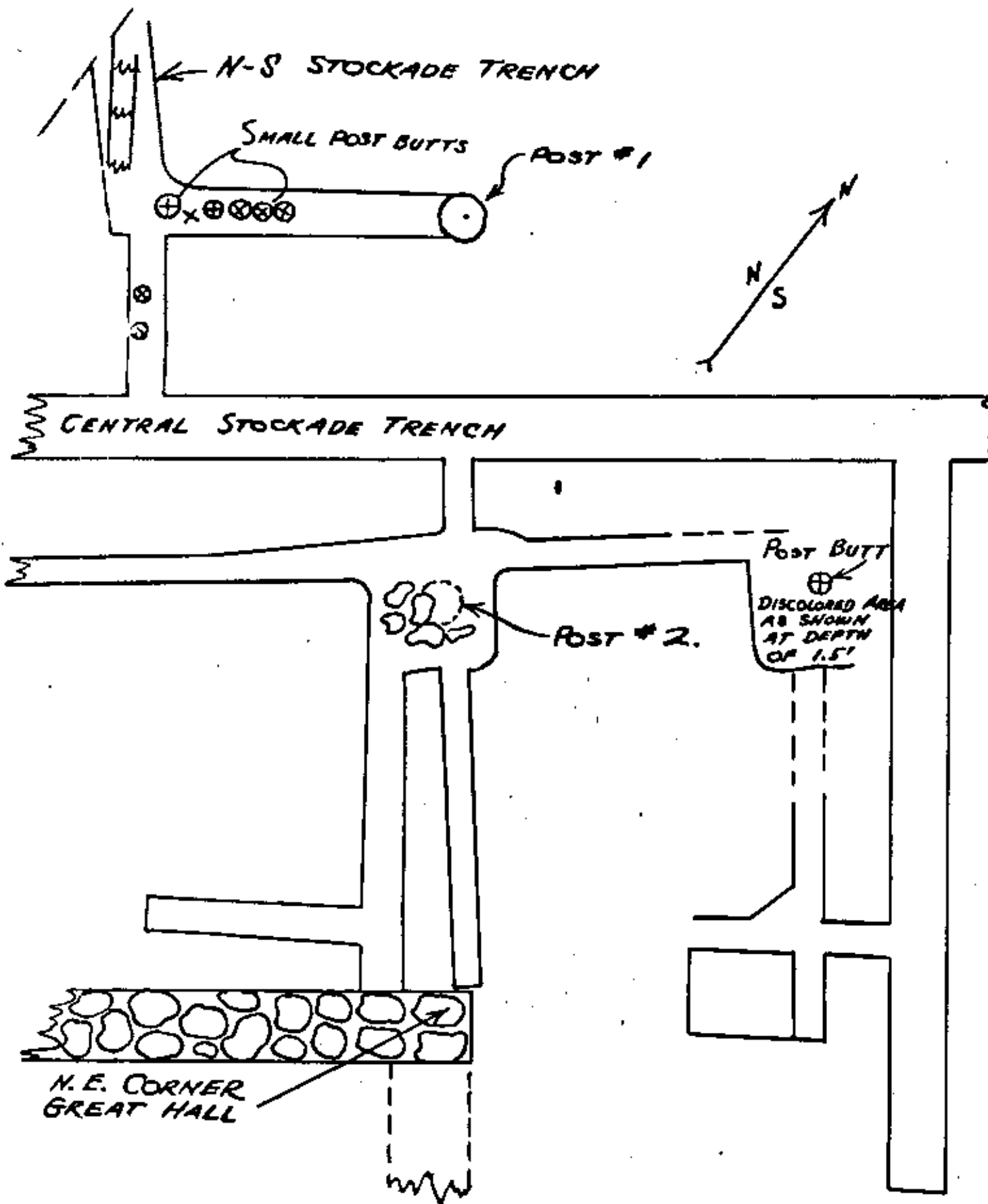
The rear section of the enclosure, bounded by Corners

D-E on the west, E-F on the north, F-G on the east, and G-D on the south was probably added to the southern section of the enclosure when more space was needed. This probably would have been during the period of greatest business activity at the site, perhaps ca. 1790-1800.

It is readily apparent that each of the three portions of the post enclosure would have had gates and perhaps defensive structures associated with them. When changes were made in these enclosures, locations of the gates might have been shifted to some degree, but efforts presumably would have been directed toward retaining the heavy gates in their original locations. It is highly probable that the "east gate" near Corner G was altered when the rear portion of the enclosure was added. Some comments concerning these alterations are given below.

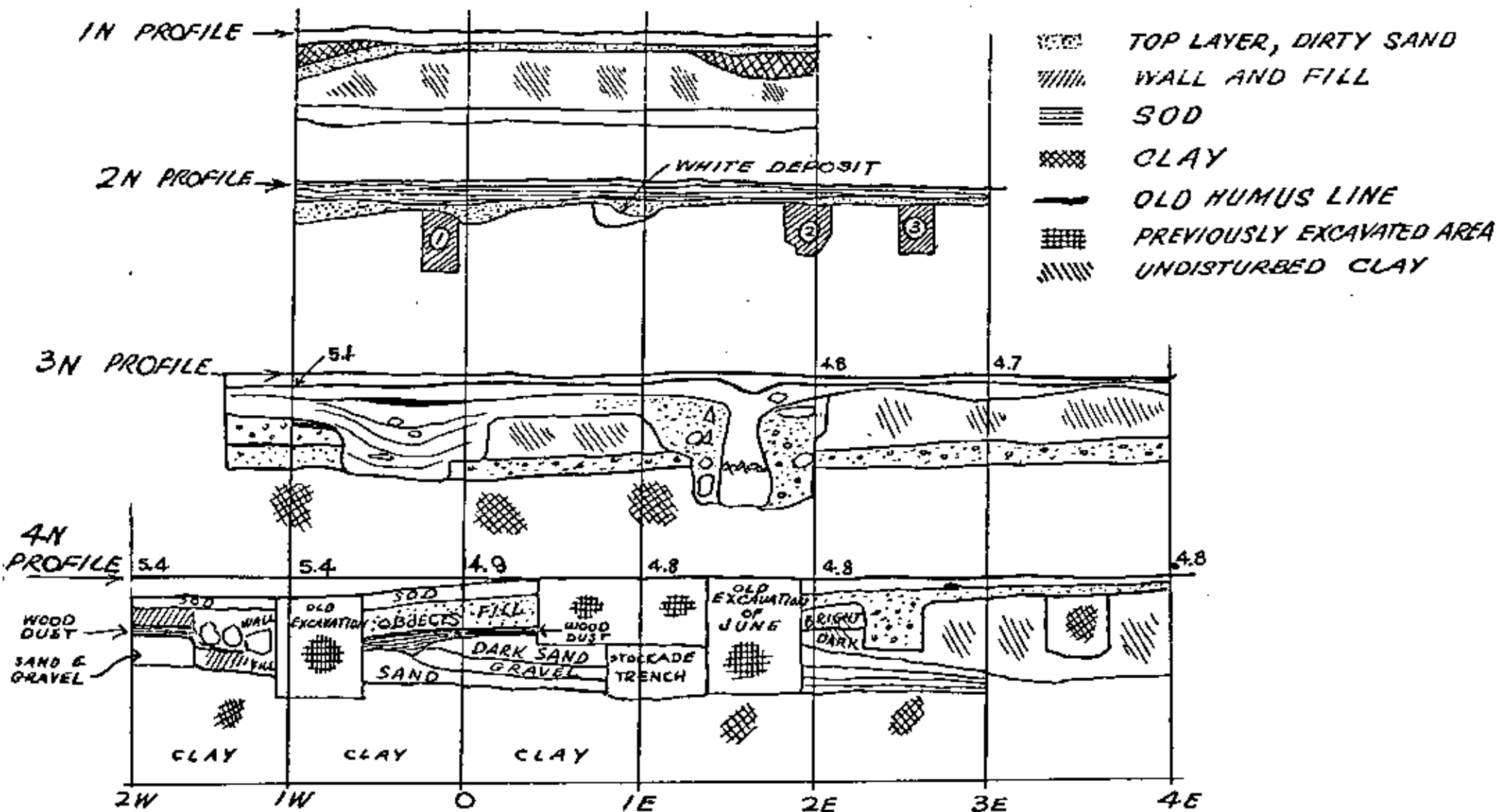
Archaeological Evidence

Archaeological excavations in 1936-37 revealed two gates or gate areas. These are the "east gate" and the passageway at Corner X. No evidence has yet been uncovered to reveal the location of the third gate, which perhaps was situated on the southern palisade so that it gave access to Lake Superior. No trace has been found of the four "bastions" mentioned by Boucherville in 1803, although it is quite possible that he was referring to gate defensive structures when using



Structural evidence found at "The East Gate" in 1936-37.

Figure 9



VERTICAL PROFILE OF THE EAST
GATE AREA, 1936
REDRAWN: 1963

the confusing term "bastion". Perhaps the features found at Corner X could be called "bastions" as they seem to have had some defensive function and projected outward from the line of the southern palisade.

"The East Gate"

It is likely that an entrance existed at Corner G from the time of the original palisading of this area. An entrance here would have been useful to bring in trade goods from canoes berthed in the nearby creek. A large canoe building yard is also thought to have been nearby. Thus, this would have been an important gate, perhaps the main gate of the post. As such it would have warranted a guard house over it. This structure would also have provided an elevated viewpoint for guards watching for signs of fire in the numerous wooden buildings within the enclosure.

Primary attention will now be given to the more obvious features which can be readily identified as gate or gate defensive components. Remains such as the trenches which must have belonged to small buildings built in the "en pile" manner south of the gate will be ignored.

Two large spruce posts 18" in diameter were found near Corner G. They were of such a size that they must have served as gate posts from which large massive wooden gates were hung, or were two of a series of four similar posts which supported

a gate defensive structure built in the "notched corner post, horizontal sill" style. Hereafter, these large posts are referred to by numerical designations for precise identification.

Post No. 1 was located 10' east of the center of the northeastern palisade trench running between Corners F and G, and about 6' north of the center of the "Central Stockade Trench" which runs east-west near Corner G. Post No. 2 was found about 12' south of Post No. 1, and was 5.5' south of the center of the east-west "Central Stockade Trench." A "discolored area" of a size suitable to accommodate a third large post, tentatively called "Post No. 3 ?" was found 12' east of Post No. 2. A hypothetical fourth post, "Post No. 4?" may have been situated 12' north of Post 3 and 12' east of Post 1.

In the area near Corner G, the "Central Stockade Trench" ran east-west without an apparent break for a gate opening. This would indicate that a portion of the palisade was later removed to make a gateway. A small trench about 1' in width ran parallel to this stockade trench, but about 5' south of it. This trench commenced at Post No. 2 and extended westward for a distance of 16'. It may well continue farther westward. Apparently, it once supported vertical logs which formed one wall of a building erected in the French-Canadian "en pile" manner.

The northeastern stockade trench which runs between Corners

F and G halts at a distance of 5' north of the northern edge of the "Central Stockade Trench." A small "wing" or "flanking" trench with a number of post butts in it, commences at the southern end of this stockade trench and runs eastward at a right angle to it for a distance of about 9.5'. It abutts against Post No. 1. Another small trench, which perhaps served only as a temporary barrier, fills the gap of about 5' between the southern end of the northeastern stockade trench and the "Central Stockade Trench".

Fortunately, this area was excavated on a grid system based on 5' squares. A series of vertical profiles were also made as each tier of squares was excavated. These profiles are reproduced as Profile 2 in this report. Unfortunately, the building and rebuilding at this location has left a number of confusing structural features for which there is no simple explanation. We must, therefore, resort to speculative interpretations of this evidence. A heavy reliance has been placed on a series of drawings, accompanied by textual statements, which will present these speculations in a graphic fashion. (See Figures 9 - 16).

The original gate in this location was probably situated between Posts 2 and 3. It would have been recessed to a depth of about 5' south of the "Central Stockade Trench", and would have consisted of two large wooden gates which were

hung on these posts. A guardhouse was probably raised above this gate. It would have been supported by the four large posts, Numbers 1, 2, 3, and 4. (See Figure 10). When the rear or northern portion of the enclosure was added to the post, only minor changes in the "east gate" would have been necessary. This structure would have been roughly square and about 12' on a side. It would have been constructed in the "notched corner post, hewn horizontal sill" manner.

The small east-west trench which extends from the southern end of the northeastern stockade trench to abutt against Post No. 1 was logically built to connect with an existing structure. Also, although this particular gate structure is postulated on the inconclusive evidence of two large posts, a third tentative post, and a fourth completely hypothetical post, it does provide a logical solution for the structural remains found at this spot. A "gate house" would have been located immediately south of the gate. Such remains do exist. (See Figure 9). Furthermore, it does not seem logical that a major gate would have opened directly onto the northern wall of the Great Hall. If such were the case, it would have been difficult to move large objects through this area, and surely the large foot traffic would have been annoying to the important individuals who used the Great Hall. The gate and its defensive structure as outlined above, and on Figure 10

would have been immediately northeast of the northeastern corner of the Great Hall. Traffic through it would have passed in a direct line eastward of the Great Hall.

Structure at Corner X

A thorough discussion has already been made in this report on "Structure 2", the remains found at Corner X. (See pp. 79-84 of this report and Figure 2). In summary, these features consisted of two parallel trenches oriented in a north-south direction. They were separated by a passageway about 4' in width. Both of these walls extended southward beyond Corner X for a distance of 11' - 13'. These remains are interpreted as evidence of a possible "bastion" or a covered entryway with a gate. They are not the type of remains which would have been left by a blockhouse similar to that erected there ca. 1940.

It does not seem possible that the superstructure of a heavy blockhouse could have been supported by these relatively light walls. It is possible, however, that such a defensive structure could have been carried by heavy horizontal timbers which have completely disappeared. A light scaffold could have been placed on these walls, but nothing of a greater magnitude. If such were actuality, Trench B, which was apparently enclosed by split puncheons, could have housed a stair or a ladder which led to a slight superstructure.

Presumably, this would have been one of the gates mentioned by Heroit as being in existence ca. 1803-1806. Such a gate would have provided access to Lake Superior and might have served as an entryway for goods carried in from canoes which were run ashore on the nearby beach.

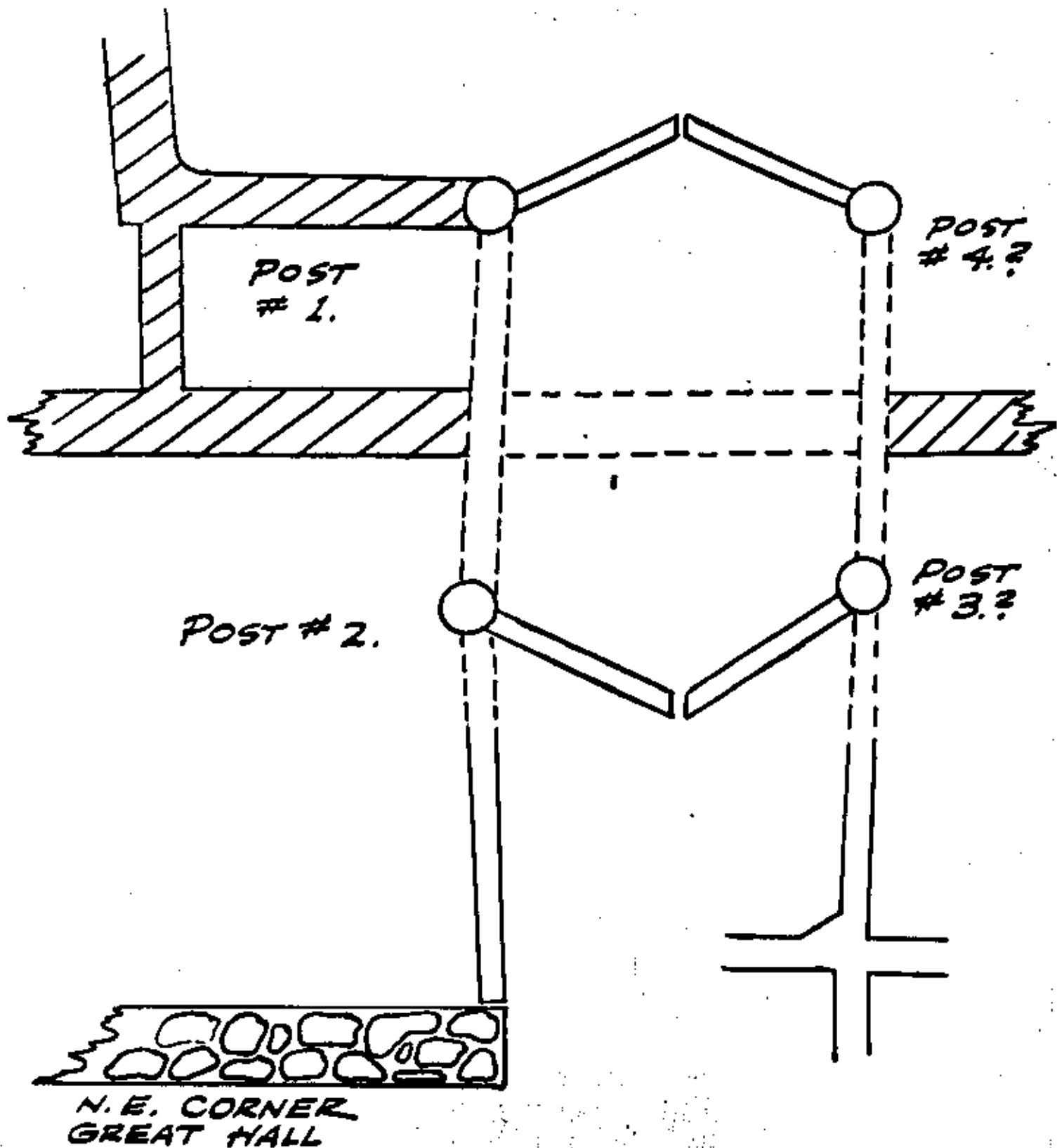
The Third Gate and the Bastions

To date, no archeological evidence has been found which indicates the presence of the third gate mentioned by Heroit. A logical location for it would have been on the lake front or southern portion of the palisade, but this area was excavated in 1963, and no evidence of a gate was found.

Structure No. 2, found at Corner X, is the best candidate for a "bastion", in that it projects beyond the palisade corner. Seemingly, bastions were merely strong points in fur trade post defenses. Theoretically, they should be situated at the corners of a post, and project outward beyond the palisades. With this arrangement, enfilade fire could have been made along both of the walls which formed the corner. Vague references have also been found to indicate that guard houses erected over gates were also called bastions. This term was used so loosely during the fur trade era that it probably only meant a defensive strong point.

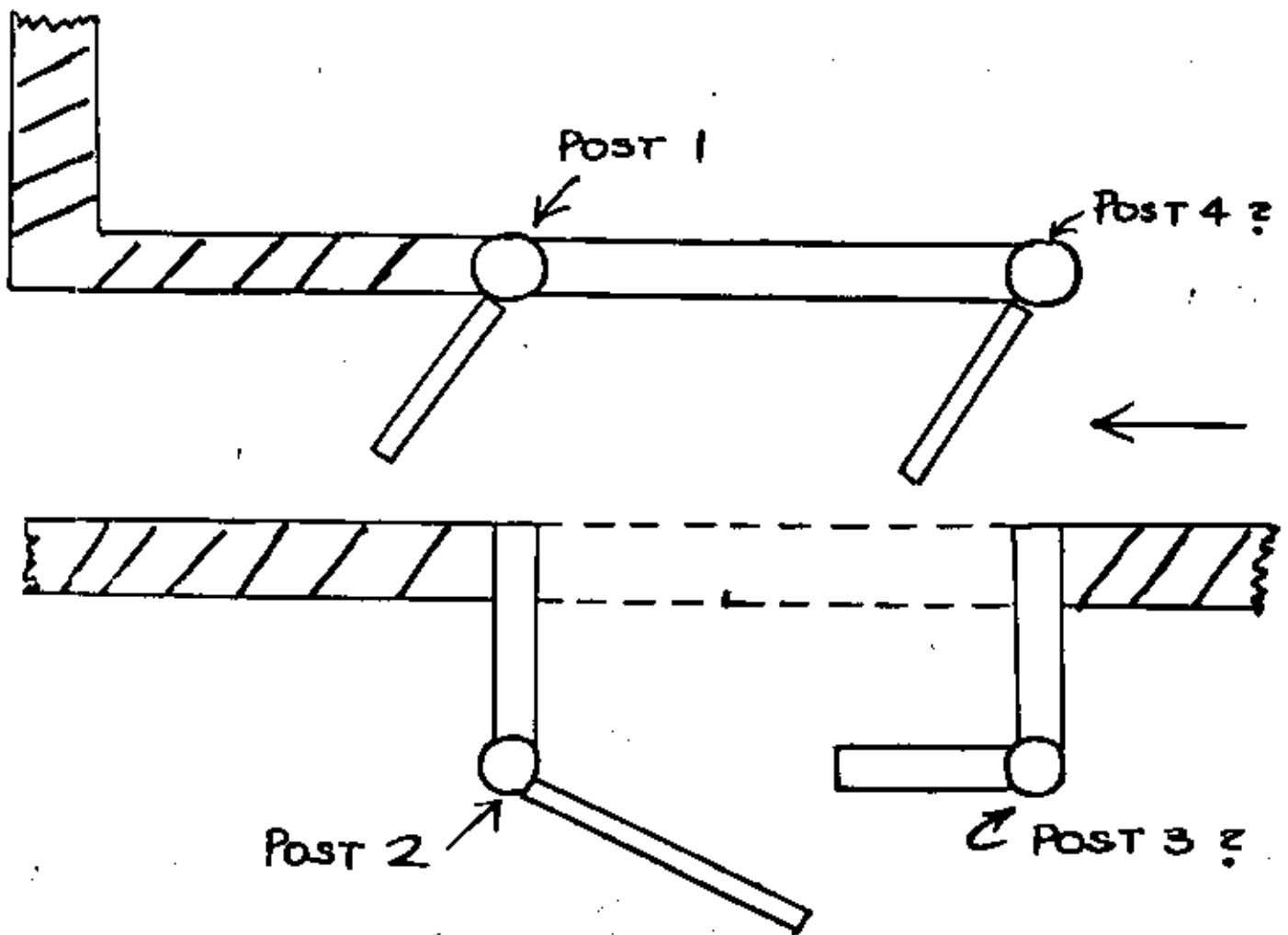
The four bastions mentioned by Thomas Boucherville could well have been the structure at Corner X, the "east gate",

and structures of which no traces have been left at Corners C and H. He could also have called the missing third gate a bastion, especially if it was surmounted by a guard house.



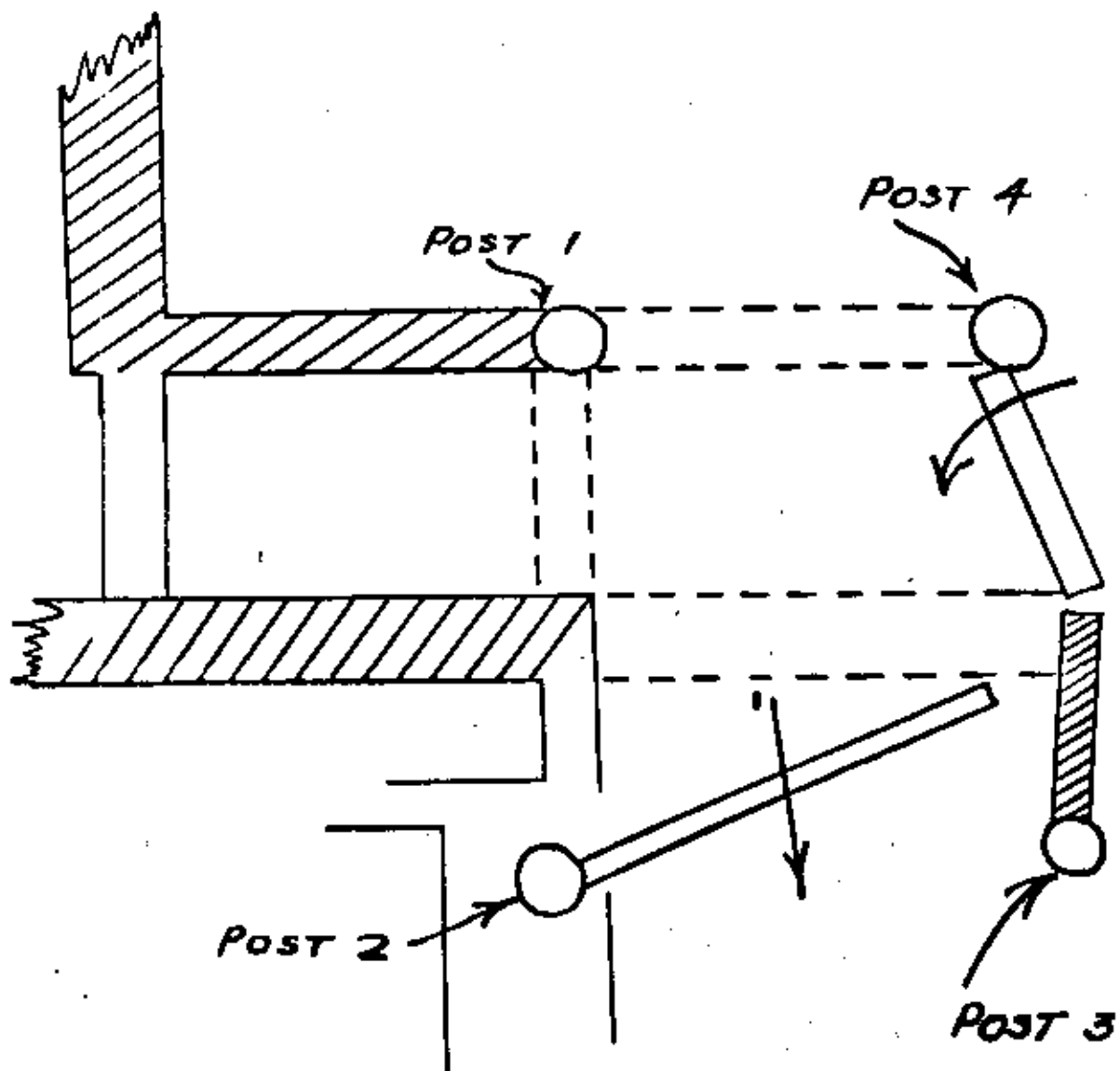
This is the most logical interpretation of the structural remains found in "The East Gate" area. Posts 3 and 4 are postulated on rather scanty evidence. With these four large posts, a square 12' on a side would have been formed. A guardhouse could have been erected overhead. This plan allows traffic to be routed in a direct line east of the Great Hall, and through a long passageway.

Figure 10



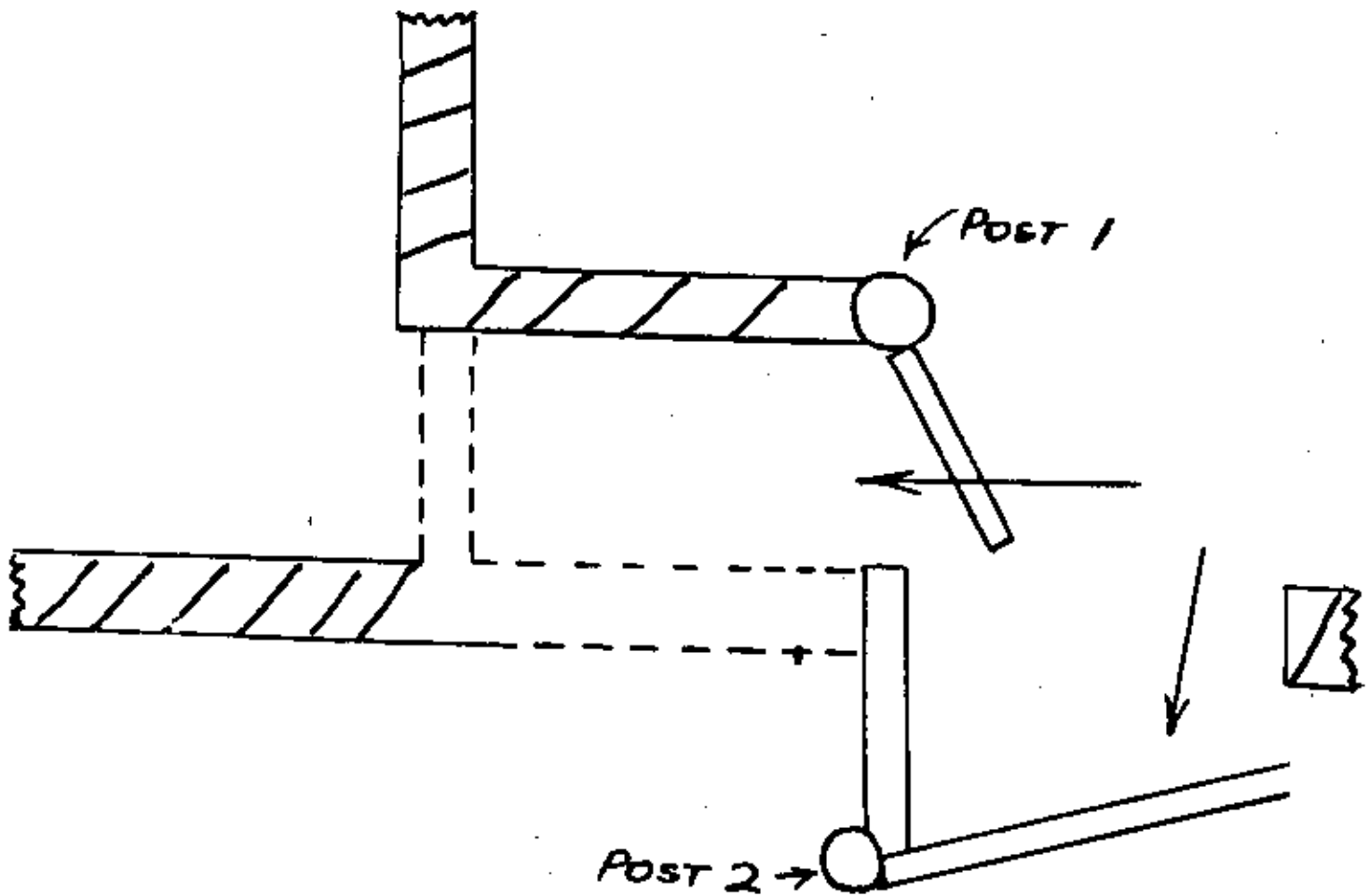
This interpretation is similar to that shown in Figure 10. A gate guardhouse could have been readily erected overhead on the four large posts. A direct access is provided to the rear portion of the enclosure. A right angled turn would have brought traffic to the east of the Great Hall.

Figure 11



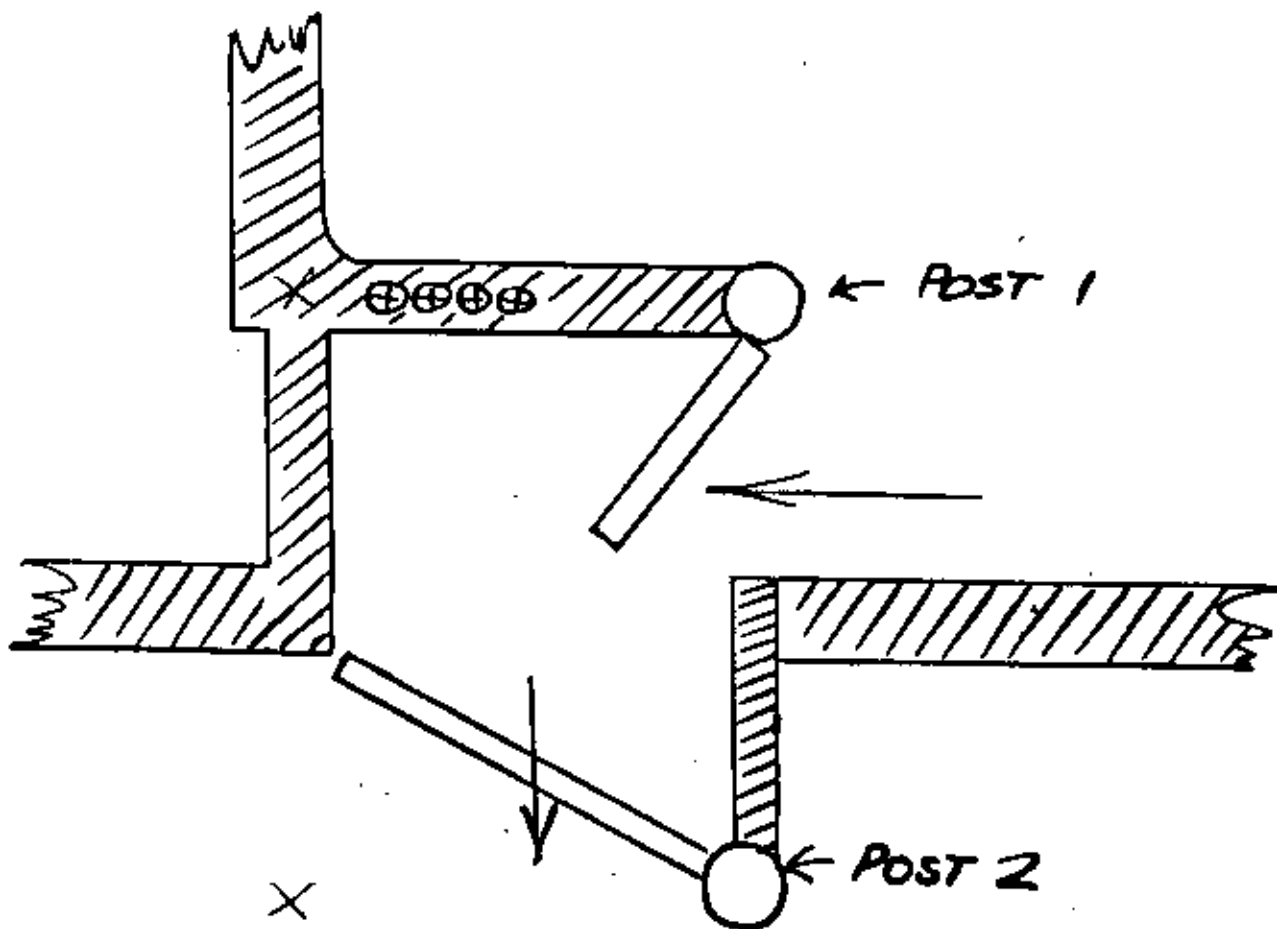
This plan is almost identical with that shown in Figure 11. It differs in that a gate does not pivot on Post No. 1, and a larger gate pivots on Post No. 2. A guard house could have been built overhead using the four large posts as a base. Here, traffic would also have been routed east of the Great Hall.

Figure 12



This plan utilizes structural evidence currently known from the site. A small gate, pivoting on Post No. 1, allows access to the rear portion of the enclosure. A larger gate, pivoting on Post No. 2, swings shut in a diagonal manner against posts in the "Central Stockade Trench." Such an arrangement, as it has only two large posts, would not have supported an overhead guard house. Here, traffic would have been routed to the east of the Great Hall.

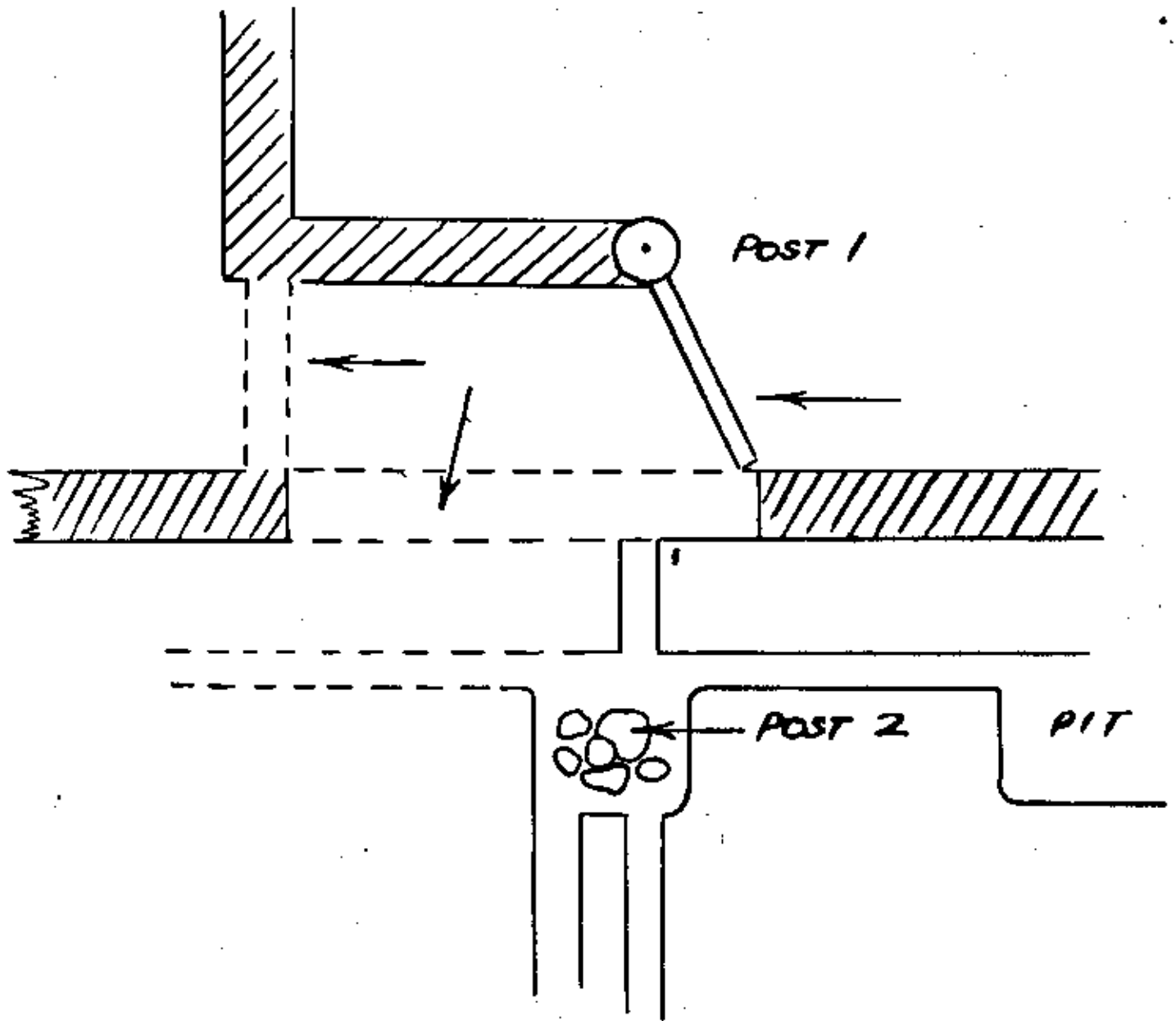
Figure 13



This interpretation is essentially the same as that of the present day blockhouse at the site. This type of design, however, would have been largely formed of walls of vertical logs set into trenches. Could it support the heavy superstructure of a guard house?

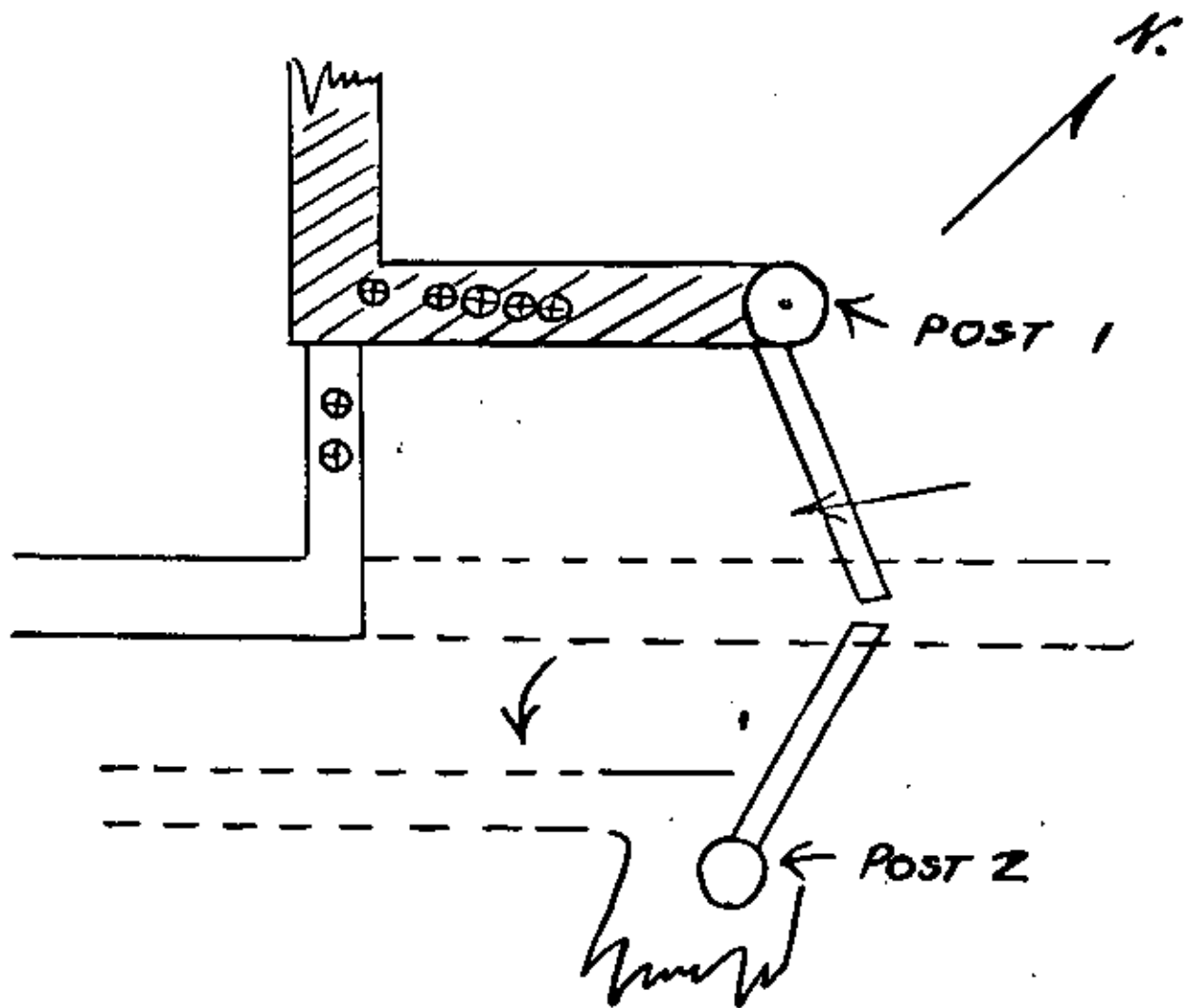
The reconstruction of a gate and a guard house, actually a blockhouse, at this site in the late 1930's ignored some archeological evidence such as the vertical post butts present in the trench running between the southern end of the northeastern palisade trench and Post No. 1. If a gate and a guard house had been erected at this exact location during the fur trade era, its walls would have consisted of vertical timbers. Note that no evidence of massive posts set into the ground as the locations marked with an "X" exists. This plan would have routed traffic directly into the northern wall of the Great Hall.

Figure 14



Here is another simple form of entry into the post enclosure. A single gate, pivoting on Post No. 1, closes against a portion of the "Central Stockade Trench". No function is assigned to Post No. 2, which may have been left from an earlier construction era. Traffic could have entered the rear portion of the enclosure or have turned at a right angle, and have been routed into the northern wall of the Great Hall, and thence eastward. It does not seem probable that these scanty underpinnings would have supported a guard house.

Figure 15



This entrance has two gates which pivot on Post No. 1, and No. 2. It would have served the functional purposes of an entry into the post enclosure, but would not have provided an adequate base for a superimposed guard house. Some means of closing the open space to the right of Post No. 2 would have been essential. This gate system would have routed traffic into the northern wall of the Great Hall.

Figure 16

ARTIFACT ANALYSIS

The following descriptions of selected objects recovered during the 1936-37 excavations at the site of the Northwest Company's fur trade depot supplement the artifact catalogs which are a portion of this report. These descriptions have been grouped in logical classes and sub classes in terms of the object's most common function, or with respect to the human activity which they best illustrate. These groupings are not mutually exclusive, and some cross references have been provided. For example: many items in the "Personal Possessions" category would fit with equal facility under "Trade Goods." A few objects presently lumped under "Tools and Implements" could have been also placed with "Trade Goods". Many of the materials in "Household Articles", the glassware in particular, could also be considered as "Trade Goods", or at least the liquor which they once contained would have readily fitted into this classification. The trade kettles might just as logically be placed in the "Household Articles" grouping instead of with "Trade Goods". Lastly, some justification might be found for placing the numerous kettle fragments with "Objects of Native Significance" as obviously the local Indians must have done much of the modification evident on these fragments. No attempt has been made to provide an exhaustive discussion

of each class of objects, nor to describe each object or fragment recovered. This has been done quite adequately in the lengthy artifact catalogs which accompany this report. A detailed, specialized knowledge is essential for the study of such materials as trade clay pipes, and the firearms components. The present writer does not profess these skills. He is content to leave a more detailed analysis to specialists in these subjects.

The entries below provide specimen catalog numbers, plate numbers if the object is illustrated, an identification and description of the object, its material, shape or design, size or dimensions, decorations and marks, and general historical notes. Measurements are given in English terms as most of these objects were undoubtedly manufactured in Great Britain or America. The conceptual approach used herein and the classifications are adapted from G. Hubert Smith's paper, "Fort Pierre II (39ST217), a Historic Trading Post in the Oahe Dam Area, South Dakota." Bureau of American Ethnology Bulletin 176, 1960.

PERSONAL POSSESSIONS

This classification is something of a catch all that embraces some materials which could also have been placed under Trade Goods. Efforts have been made, however, to utilize this category for those objects which an individual would normally use for personal grooming, clothing, record keeping, and amusement. In short, for daily living activities.

Razors. Nos. 288, 73, 16-5, 371, and 29-17; Plate 18. An unnumbered specimen with no provenience is shown on Plate 32. Two of these blades are hollow ground; two of them have a "V" grind; and one has a plano-convex blade.

Scissors. Nos. 13-24, 51-2, and 175; Plate 31. These fragments are non-diagnostic, and only establish the fact that scissors were used here.

Clasp knives. Nos. 96, B, A, 35-4, 37-11, and C; Plate 18. Four unnumbered specimens are illustrated on Plate 32. No. 35-4 is of the beaked or wharnacliffe variety of point. No. 37-11 has an eared flange at the bolster end of the blade. Knives of this type are illustrated in Moreau S. Maxwell's, Excavations At Fort Michilimackinac, 1961, p. 106, and are identified as being of French origin. A third blade of this form is on Plate 32. No. C is of a type found in Revolutionary War campsites. It is 4 3/4" long. See American Knives,

by Harold L. Peterson, 1958, Figure 162, p. 131. The knives in this sample range from 3 1/4" to 4 3/4" in length. All of them are of the "pocket knife" variety. Some of them appear to be of considerable antiquity.

Firesteels. Nos. 29-14, 391, 433, 173, 443, and 239; Plate 18. These are present in an "O" shape, a "D" shape, and an elongated oval shape. No. 391, an elongated oval shaped specimen, is 2 7/8" by 1 1/2". No. 173, an almost complete "D" shaped firesteel, is 3" by 1 1/2". No. 239, an "O" shaped example, is 3 1/2" by 1 3/4". Firesteels were common pocket or kit bag pieces and served as a universal source of sparks for lighting a fire or a pipe prior to the advent of the match. They were sold cheaply or served as gifts to Indians. Untold thousands of them were handled in the fur trade each year. ("A Footnote on Fire Steels" by Milo M. Quaife, Minnesota History, Vol. 18, No. 1, pp. 36-41, March, 1937).

Buckles. Nos. 4, 29-19, 12, 8-8-, 62-22, 39-12, 48-18, 361, and one unnumbered specimen; Plate 19. An unnumbered specimen is a brass shoe buckle of a high arch style. It is plain and undecorated. Measures 2 7/8" x 2 1/8". No. 4, fragment of an iron shoe buckle. It measures about 3" x 2 1/2". No. 29-19, is of yellow copper or brass. It bears fine ribbing on its inner and outer edges. No. 12, a fragmentary shoe

buckle, measures ca. 2 5/8" x 4". It is probably hand made and is of copper or brass. No. 8-8, is a portion of a highly decorated buckle or brooch which bears punched holes, raised dots, and serpentine lines. These decorations give a ribbed effect. The edges are marked with fine ribbing. No. 62-22, is the corner section of a flat brass shoe buckle. It has a bead and rope design. Nos. 39-13 and 48-18 are two matching fragments of a large shoe buckle. Together, they form a specimen 2 1/2" x 4 1/2". The buckle is composed of an elaborately chased and engraved pewter design on an iron backing. No. 361 is a corner fragment of a small brass buckle. No. 336 is probably a shoe buckle. It is 1 3/4" by 2 1/4". The raised letters, "ID" are on the back. There are also raised dots and palmate figures in each quadrant. (All of the above specimens are illustrated on Plate 19).

Uniform suspender buckles. Nos. 299, 445, 32-9-, 21-4, and 61-2; Plate 19. Only the last specimen listed is in a reasonably complete condition. In general, these buckles are much similar to a series illustrated by Maxwell, 1961, Plate 2. He states that they come from proveniences dated after 1760. They are thought to be British uniform buckles which were used to hold canvas straps.

The larger buckles described above are shoe buckles. They

went out of style about 1795. The medium sized buckles could have been used on knee breeches. The bulk of the smaller buckles most probably served as uniform strap buckles. Of course, surplus military gear could well have ended up in a trade goods assortment at Grand Portage. Their presence could be related to the small British military unit at this site in 1778, however.

Jew's Harp. No. 466; Plate 19. It is made of copper or brass and is 2" in length. The steel blade or tongue is missing. This trade item was popular with both Indians and whites and was traded for a long time period.

Slate Pencils. Nos. 212-2 (2), 360, 19-9, and 37-136. No. 212-2; Plate 19, is slightly more than 2" in length and about 1/4" in diameter. Such pencils were used until relatively modern times for writing on slates. Similar specimens were found in the school yard across Grand Portage Creek in 1962, but this artifact could well have been used by a clerk to calculate accounts during the fur trade era.

Inkwell. No. 25-2; Plate 19. This is a small brass or copper covered inkwell of the type carried in portable wooden writing desks. It is decorated with two groups of scribed lines encircling the middle of the metal sleeve. It is 1 7/8" high and 7/8" in diameter.

Buttons. Numerous buttons were recovered at the site. They are composed of copper or brass, pewter, iron and hard rubber or a similar material. There are: 17 brass or copper, 2 iron, 1 pewter, and 1 composition buttons. Altogether, there are twenty specimens in this sample. Most of them have been tentatively identified and dated on the basis of Stanley J. Olson's Paper, "Dating Early Plain Buttons By Their Form", American Antiquity, Vol. 28, No. 4, pp. 551-554, 1963.

Soldered eye, no foot. Nos. 12-6 (2), 12-7, 42-10, 158, 366, and 459; Plate 20. These seven specimens are of copper, brass or bronze. They all have a brass eye with no foot which is soldered to the center of the rear of the button. Olson assigns a date of 1785-1800 for virtually identical specimens..

Soldered eye in burred raised area. Nos. 10-2, 12-6, 28-13, 44-2 (2), 325, and 365; Plate 20). These seven specimens are also of copper, brass, or bronze. They have a spun back with a burred raised area in their centers. A brass wire eye is soldered into this hollow raised area. Similar specimens have dates of 1760-1785 assigned to them by Olson.

There appear to be five general size ranges present in these fourteen specimens. Five buttons are ca. 1/2" in diameter; three buttons are 13/16" in diameter; three buttons are 1" in diameter; and 1 button is 1 3/8" in diameter. Presumably,

these size ranges reflect the functional uses of the various specimens. The smaller buttons would have been probably worn on shirt fronts, cuffs, or on coat sleeves. The medium and larger sizes would have been used on the fronts of coats.

Hard rubber (?). No. 18-6; Plate 20. This specimen post dates 1850.

Pewter, one piece. No. 385; Plate 20. This specimen was stamped from sheet pewter. It has a concave face, and a wreath design is stamped on its front. The rear bears the maker's name, "Bartlees & Sons"; accompanying it is an oak leaf design. It is of the three hole variety, and would probably post date 1800 or somewhat later.

Brass, two piece. No. 343; Plate 20. This specimen has a thin gilded brass face covering a wooden back.

Brass, two piece. No. 19-6; Plate 20. This button has a thin decorated brass face covering an iron core. The face has a raised circular area which is surrounded by a circular beaded pattern. A circular tool mark is in the center of this raised area. Rays radiate outward from this mark. Diameter, 7/8".

Brass, decorated. No. 12-5; Plate 20. This is an elaborately decorated object. It bears a raised and perforate pin-wheel design.

Iron, one piece. No. 28-14; Plate 20. It is stamped

from thin iron sheet.

Special mention must be made of two of the brass buttons. No. 366 has stamped rays radiating outward from its center. No. 42-10 has a foliate cross design "prick punched" into its face. This decoration was probably made by its owner.

Trade Clay (Kaolin) Pipes. Fragments of kaolin pipes and more commonly of their stems are prevalent at this site. They have been manufactured in Europe since the early 1600's and are even produced in limited numbers today. Throughout this time span of some 300 years, there have been many varieties of them made, and a number of stylistic changes have taken place. The identification of the trade clay pipe and the dating of them has grown into a specialized task in recent years. Arrangements have been made with a noted student of the clay pipe to examine these materials at a later date. Therefore, no efforts beyond simple descriptions will be made at this time. It is highly probable, however, that all specimens in this sample date from the late 18th century through the 19th century.

There are fifty bowls, bowl fragments, and spurs which can be examined. Of these, the familiar "T.D." is most common as there are 32 examples of this brand. There are 8 specimens marked, "W.G." One example is marked, "A.V." One item bears the incomplete name, ". . . ADDELEY" on its bowl.

Five examples are unmarked. Three stem or bowl fragments lack spurs; therefore, they do not have brand marks which can be examined.

Of special interest are a number of modified clay pipe stems. Five of them are illustrated in Plate 20. All of them have been scored around their circumferences with a sharp implement such as a knife blade. Presumably, these score marks were made as guides for shortening the stems to a more convenient carrying length. Nos. 44-13, 36-36, 37-75, 38-24, and 62-25; Plate 20.

A number of other broken stems are illustrated. Many of them are several inches long and were approximately complete before the bowls were broken from them. Nos. 123-1, 26-19, 26-18, and 26-20; Plate 20. One specimen, No. 123-1, bears teeth marks on the shortened stem.

Three rows of clay pipe bowls are illustrated on Plate 20. The first item, No. 35-28, has no spur. Its fragmentary stem has been whittled to fit a reed or other hollow stem. No. 61-4 also lacks a spur and the stem has been modified to fit an attached stem. Two bowl fragments, No. 3-10, bear what appear to be oak leaves. No. 216-1 has moulded decorations which appear to be a commemorative stand of arms. No. 32-35 bears raised striations which run from the spur to the top of the bowl. The striations are grouped

in threes. The spur bears the letters, "A.V."

Four bowls of the familiar "T.D." variety are grouped in the second row, Nos. 32-40, 35-29, 48-22, and 135-9. The second specimen, No. 35-29, has the "T.D." brand in an inverted position. The fifth specimen in this row, No. 28-15, has the maker's name, ". . . ADDELEY" on its bowl. The bowl lacks a spur. This pipe is attributed to Robert Baddeley who made pipes in London ca. 1805. The third row has only two specimens. No. 63-18 is a stem with spur. The spur has the letters "WG" stamped on it. The last item in this row is an unnumbered "TD" bowl shown in profile.

In general, marked pipe bowls and spurs date from the last quarter of the 18th century and the 19th century. They became increasingly common after 1800.

Marble. No. 358; Plate 20. One unpainted ceramic marble, 3/4" in diameter.

Ice Creeper. No. 312; Plate 30. It consists of a flat iron bar about 3/4" wide and 4 1/2" long. Four prongs are present on the outer edges of the bottom of the specimen. Two loops are situated above them on the top of the item. It was worn under the instep of a shoe and was fastened onto the shoe with a strap or thongs which went through the loops. A pair of creepers were customarily worn and allowed the wearer to walk on ice without much danger of slipping.

BUILDING HARDWARE

Building fittings such as hinges, pintles, door hooks, hook eyes, door handles, latch bar keepers, lock, keys, and window glass are within this classification. Also included are fastening devices such as spikes, nails, staples and wood screws. Obviously, all of these materials are associated with the construction and furnishing of structures.

Hinges. Nos. 481, 482, 29-12, 28-4; Plate 21 and 4-3; Plate 25, were of a size suitable for doors and shutters. The larger door type hinges were hand made of wrought iron. A complete specimen, No. 481, is 1-1/4" wide and 17" long. It has a fish tail finial. Smaller iron hinges suitable for usage on shutters and cupboards average about 2" by 3", Nos. 29-12; Plate 21, and 4-3; Plate 25. Rosehead nails are still in place in these specimens and demonstrate that they were in use during the fur trade era.

"Home made hinges." Nos. 28-12, 36-13, and 12-13; Plate 21. These specimens were apparently locally made of kettle copper. They are so light that they could not have served on much other than a trunk, box with a hinged lid, or a light cupboard door. They are especially interesting as an utilization of locally available materials. They are 1 1/2" by 2" and 2" and 3" in size.

Pintles. Nos. 404, 384, 22-4, 136, and 49-2; Plate 21. Pintles were recovered in a variety of forms and sizes. They are usually found in an "L" shaped form with one long arm and one short arm. In use, the pointed long arm was driven into a door jamb or inserted into a partially bored hole in the jamb. Thus, the long arm is horizontal and the short arm is vertical. Pintles are a simple form of hinge which provide a surface on which a rounded hinge segment could rotate. This rotating surface is usually rounded. The specimens in this sample are from 3" to 5 1/2" in length. They average 1 1/2" in height.

Door hooks, hook eyes, door handles, latch bar keepers, locks and keys. Nos. 36-7; Plate 25; 229; Plate 21; No number, "1937"; Plate 26; 45-4, Plate 25; 248, 32-8, 287, 48-4, 55-3, 32-4, 29-9, and 286; Plate 24; No. 426; Plate 25. Examples of all of these items are represented in the artifact inventory. As all of them are relatively simple devices, no discussion will be made of them. The locks especially are in a fragmentary condition. Most of them appear to have been commercially made, and may be from a later era than the fur trade period. Of course, only a student of locks could identify and date them with authority.

Window glass. No specimens are illustrated. Much of this sample is thin and irregular indicating that it is of

some antiquity, but nothing definite can be stated concerning it. A fur trade depot of this status, however, would have had glazed windows in some structures. Presumably some of this glass is from them.

Shutter fasteners. Plate 22. One example of this fastening device was recovered from the site. Unfortunately, it is available only in the form of a measured drawing. Apparently it represents an original building fitting of the fur trade period. This item consists of two pieces of hand forged iron which are jointed together. The fastener itself has a curved hook at one end. It is $1 \frac{1}{8}$ " wide at the end opposite to the hook and $6 \frac{5}{8}$ " in length. The end bearing the hook is round in cross section. The other portion consists of a forged nail with a roughly round cross section, a sharp point, and a constricted portion with a flared top. The nail was obviously driven into the window casing for attachment.

The two pieces were fastened together as follows: a hole about $\frac{1}{4}$ " in diameter was drilled through the approximate center of the fastener. The nail head was inserted so that it projected through this hole, and was then peened to a larger diameter. The peening or flaring held the two pieces together. The fastener then easily rotated on the constricted portion of the nail. The pointed nail was driven into a window casing or the side of a building if it were used to

hold the shutter open. (See Plate 22).

Nails. Plate 23. These are the most common artifact at the site. Nails are present in a number of varieties and size ranges. The rosehead nail with a faceted head, square or rectangular shank, and either sharply pointed or chisel pointed ends is abundant. This type of nail ranges in size from small tacks of 1/2" to spikes of 6" in length. Such nails were hand forged and in common usage from Colonial times up to about 1870 as they were still fashioned from iron scraps at isolated forges or farms up until that date. A generally accepted terminal date for common usage of the roseheaded nail is about 1800 A.D. After that time, "cut" or "wrought" nails which were actually sheered from sheets of iron were used until the advent of the round wire nail about 1890. (Ancient Carpenter's Tools, by Henry C. Mercer, Doylestown, Pa., 1929, p. 238).

A few examples of smaller roofing and interior finish nails are present. The bulk of the nails found at the site were obviously used in the construction and finishing of wooden structures although many of them must have been used in simple wooden household furnishings such as tables, chairs, and beds.

A reasonably valid assumption can be made that the rose-headed nails found at this site date from the fur trade era

of ca. 1731-1804. The vast bulk of them would have been used during the era of greatest construction at the post which was from about 1768-1800.

The "cut" or "wrought" nails found here can be dismissed without much attention as they were undoubtedly used between ca. 1800-1900 after the abandonment of the site by the Northwest Company. A horseshoe nail, No. 8-4, could date from the fur trade era, but it is more probable that it stems from the reservation period of post 1860. One "clout nail" also probably post dates the fur trade era. Such nails were used in plows, or wagons. A number of large chisel pointed spikes were used in framing structures or in boat building. Many of them were undoubtedly used in the fur trade period. (For examples of nails see Plate 23).

Staples. Nos. 381, 49-6, 363, 9-3, and 15-3; Plate 23. These specimens are hand forged and are from 1 1/8" to 2 1/2" in length. Most of them were probably used to fasten door hooks or window shutters.

Screws. Nos. 12-85 and 210; Plate 23. No. 210 has a flat head, an off center driving slot, and is 1 1/2" long. It was probably used in a window shutter, furniture, or a gun stock. No. 12-85; Plate 23, is a far more massive specimen, and was probably used to fasten a metal plate to wood, or even may have been used as a type of bolt, if used in conjunction with a threaded nut.

TOOLS AND IMPLEMENTS

Chain links. Nos. 62-3, 28, 208, and 48-5; Plate 25.

These items are present in a number of forms and sizes. All of them are hand forged; in general, they are elongated ovals. Two of them are welded together on themselves in a "figure 8" fashion. The end opposite to this constriction is welded together to form the end of the link. One of the links, No. 28, bears an eyed pin through the loop in its constricted end. The entire specimen is 7" long. A similar link which lacks the attached eye, is 4 1/2" long, No. 208. Another link has an elongated oval form, No. 62-3. It bears a "mounting stud" or flared eyed attachment at one end which must have been used for mounting it, perhaps in wood. This object is ca. 6 1/2" long. Also present is an "open end lap repair link" which was used for replacing a defective chain link or to attach a chain to the "tugs" or pulling portions of a wheeled vehicle or sled, No. 48-5; Plate 25.

It is difficult to attribute exact uses to these specimens, but chains were often used in pulling vehicles or on boats. These specimens are too light to have been used in logging operations. As all of them are hand made, they could be of considerable antiquity.

Hoe. No. 487; Plate 26. This item is made of a "laid over" and forged piece of strap iron. It has a simple looped

eye, and is 8" long by 5 1/2" wide. Although not found during the 1936-37 excavations, it was recovered from a depth of 18" in the stockade enclosure. It is the only gardening tool thus far recovered from the site. Perhaps it was made at a local blacksmith shop during the reservation era.

Axe. No. 486; Plate 26. This is a conventional trade axe. It is 7" long and the cutting edge is 4 1/8" wide. There is no data concerning its provenience, but it is illustrated because no other trade axe of this type is present in the collections from the site.

Files and Rasps. Nos. 403, 467, 111, 8-34, 34-4, 21, 48, 34, 395, 49-5, 37-9, 265, 47, 39-7, 1, 4-4, and 311; Plate 27. These specimens break down into two major varieties: metal forming and wood forming tools. By and large, the files with their more delicate finely spaced teeth were used for metal shaping. The coarser toothed rasps were more commonly used for woodworking. Rasps were also used to pare down the hoofs of draft animals such as horses and oxen prior to fitting them with shoes.

Many of these files are hand forged, hand cut specimens which were made before the advent of the machine cut file about 1850. The flat mill bastard type file was used to shape and form metal. The triangular file and some of the

other small files were most probably used to sharpen saws or to shape small metal objects such as gun parts. The large iron rasps were used for the rough shaping of wooden items such as boat parts, framing members of vehicles and sleds, gun stocks, etc. The smaller and more delicate wood rasps such as the half round and U shaped rasps would have been used to shape gun stocks, inlet locks into doors, etc.

One flat mill bastard file is present; it is 12" long. (No. 1). Four examples of the common metal file are present, Nos. 39-7, 4-4, 37-9, and 49-5. Seven examples of relatively coarse iron rasps were found. They are: Nos. 228, 265, 311, 348, 395, 21, and 467. Two half round rasps are represented by fragments, Nos. 34 and 48. Also recovered were a "U" shaped file, No. 8-34, and a triangular file, no. 403. Two files were modified into other tools. No. 21 has been reworked into an iron wedge or a forming chisel. No. 467 has been altered into an unsharpened knife blade.

The number and variety of the files present indicate that they were an essential, much used tool at the site. The reuse of file steel for making other tools, such as knives, is a time honored tradition which is continued today. Most of these examples are incomplete and show signs of hard usage. No statements concerning their antiquity can be made although the more regularly cut files are probably machine

made and would post date 1850. Cruder specimens would presumably pre date this period and could have been well used at the post during the height of the fur trade era.

Saws. Nos. 38-9, 41-6, 41-5, 377, 282, 15-4, and 12-77; Plate 28. All of these examples are incomplete and so badly rusted that no much can be said concerning them. Most of them appear to be from cross cut saws in which alternate teeth are set at opposing angles from each other. Such a saw will cut on both the "push and pull" strokes of a workman. There do not appear to be any rip saws in this collection which would have been used for ripping boards or slabs from logs. On a rip saw, the teeth are raked at a slant away from the workman's hand so that a cut is made only on a "push" stroke. A buck saw blade is present in a fragmentary form, No. 12-77. Such saws were largely in cutting short lengths of wood for a fireplace or a stove. The thin blade was held rigid between the two arms of a wooden bow. Still another form of saw is present in specimens 41-5 and 41-6. This is probably the remains of a meat saw. The thin blade was held rigid within a framework much similar to the modern metal cutting hack saw. It is also possible that these blade fragments are the remains of a predecessor of the modern metal cutting hack saw.

Ice chisel. No. 22; Plate 29. It is 12" long, 5/8" thick, and the blade is 3/4" wide. It may well have been made from scrap iron at a forge.

Wood chisel. No. 25-7; Plate 29. It is 5" long and 7/8" wide at its cutting end. It is of the "tanged" type. A wooden handle would have been driven onto the rat tailed tang.

Cold chisel. No. 6; Plate 29. It is 6 1/4" long and has a shank 1/2" thick.

Forging hammer. No. 37-5; Plate 29. It is of light weight and was perhaps used for light forging of heated iron objects or to chip scale from heated iron. It may well be from a relatively late period. It is ca. 5" in length.

Plane bits. Nos. 129 and 222; Plate 29. These two specimens are about 5" long and 2" wide. They served to plane wood when used in carpenter's planes.

Wrench. No. 100; Plate 29. This item is probably from a late time period.

Hold fast nail. No. 34-2, Plate 29. It is about 1 3/4" long and has a flared head placed at a right angle to the nail shank. Such nails were used to hold down pieces of wood for shaping.

Scythe blade. No. 43-3; Plate 29. This specimen appears to be modern and machine made.

Froes. Nos. 196 and 220; Plate 30. No. 196 was made from an old trap spring. The bottom edge is sharpened; the top face is battered from being driven into billets of wood. The other froe, No. 220, is incomplete. It is forged from iron bar stock, and once bore a hafting hole which was offset so that it was in line with the blade. These tools were of course used to split shakes or shingles from billets of straight grained cedar.

Wagon part. No. 128; Plate 30. This heavy piece of iron was probably used as reinforcing on the tongue of a wagon or sled. It is 11" long by 3" wide and ca. 1/4" thick. Three round drilled holes were used for attachment to wood. A large fourth hole at one end was probably for the insertion of a heavy iron pin which fastened the tongue to the vehicle's running gear.

Trap spring. No. 295; Plate 30. A broken trap spring was in the site collections. No modifications are visible on it, but it may well have been kept as a source of steel for fabrication into a tool.

Barrel Hoop iron. No. 38; Plate 30. Large quantities of what is apparently barrel hoop iron were recovered. Many specimens bear rivets which were used to fasten the hoop ends together. Offhand, this iron scrap would appear to be

rather late in time, but a final decision in this matter must wait on knowledge of when iron hoops supplanted the old style wood hoops. Most of these specimens are about 1 1/4" in width and of varying lengths. The bulk of them are about 1/4" thick.

Punch. No 65-4, Plate 40. This specimen is 5 1/2" in length. It was probably used to "start" a drill bit in metal or for punching through thin metals.

Gimlets. Nos. 57-3 and 6-3; Plate 40. One of them is 5 1/2" long, the other is 3" in length. They were used to make starting holes for the unpointed wood screws which were used up to about 1846 (Mercer, 1929, p. 255).

Unidentified metal objects. Nos. 29-11, 20-4, 367, 17-6, 8-16, and 29-10; Plate 30. Possible uses can be suggested for only two of these specimens. No. 29-11 could be part of a lock. No. 29-10 might have been used as a latch bar stop. Its prongs could have been driven into a wooden door casing.

HOUSEHOLD ARTICLES

Cutlery and Tableware

Spoons and forks. Nos. 20-31, 183, and 319; Plate 31. Spoons and forks are uncommon at the site. No. 20-31 is a rounded pewter fork or spoon handle. No. 183 is a spoon bowl. No. 319 is a long two tined fork with a bolster and a pointed tang. It is 6" in length, and apparently once had a wood, bone, or horn handle. It may well have once been part of a small carving set.

Knives. Nos. 25-8, 48-12, 49, 108, 12-78, 63-5, 8, 35-6, 33-2, 62-6, and 39-11; Plate. 31. Nine unnumbered knives of the "kitchen knife" type are on Plate 32. The majority of these specimens are of the "butcher knife" form with a relatively straight back which turns upward slightly toward the point. The points are of the upswept variety. Complete knives of this type are from 9" to 10" in length. (See Nos. 8, 36-6, 62-6, and the majority of the specimens on Plate 32). Such knives had simple two piece wood handles which were fastened by two or three steel rivets.

One complete knife and a fragmentary specimen have straight backed blades and straight cutting edges with rounded points. Their tangs are of the "rat tailed" variety which were driven into wooden or bone one piece handles.

Only one edge is sharpened on them. (See Nos. 12-78; Plate 31, and an unnumbered specimen, Plate 32).

Still another form of knife is represented by No. 25-8; Plate 31. This is the familiar "bent or crooked" knife of the Woodland Indians which was used for hide dressing, wood carving, splint basketry, etc.

Spatula. No. 326; Plate 33. This is a flattened oval iron spatula with a blade of about 4" in diameter.

Corkscrews. No. 2-3; not illustrated. Two fragments of a hand made corkscrew were recovered.

Hooks. Nos. 138, 167, 251, 53, and 312, Plate 33. A variety of miscellaneous wrought iron pot hooks and a possible kettle handle are illustrated.

Spigots. Nos. 62-21, 273, and an unnumbered specimen; Plate 33. The complete spigot is 6 1/2" long. The portion which was driven into the keg bung is tapered and fluted to make a tight fit with the sides of the bung hole. Its anterior face bears a raised platform which would be hammered on for driving into the bung. Spigots were used for decanting liquids from wooden kegs or barrels. They were customarily used with liquors.

Glass Bottle Fragments

Fragments of a considerable variety of glass bottles are present in the site collections. Much of this material

is late in time and will not be described in this report, but specimens of the fur trade era and up to about 1860 warrant description.

Medicine bottles, lime green. Nos. 331, 25-38, 303; Plate 34 and No. 79; Plate 35. These four lime green blown medicine bottles with wide flared lips probably date from the later 1700's or early 1800's. (Compare with No. 9, Plate 242, p. 431, American Glass, by McKearin, 1941).

Medicine bottles, clear glass. †Nos. 56; Plate 34 and 274; Plate 35. These are flare lipped clear blown medicine bottles and were made ca. 1840-1860. Nos. 57; Plate 34 and 242; Plate 35. These are clear blown medicine bottles with round mouths formed by applique rims added to the bottle necks. Items of this nature were made from ca. 1800-1830.

Square bottomed case bottles. Noa. 93, 54-67, 270; Plate 34. These dark olive green fragments are from the mouths and bases of square gin or rum bottles of the case bottle variety made in the late 18th and early 19th centuries. (American Glass, 1941, No. 7, Plate 223, p. 430).

Applique ring at neck. No. 275; Plate 34. This specimen is of dark green glass. It has a crudely laid applique ring at the mouth of the bottle. Probably was made between

1792 and 1810.

Applique ring, below lip. Nos. 453, 237; Plate 34.

These specimens are of a dark green glass. They have crudely laid applique rings just below the lips. They resemble Types 7 and 8, Plate 221, p. 424, American Glass, and were probably made between 1770-1790.

Round bases, with kickups. Nos. 191, 58, 46-7; Plate 34. These three bottles are made of a dark olive green glass. No. 191 has a slight kick-up¹ which indicates a date of ca. 1840-1860. American Glass, Type 12, Plate 221, p. 424. No. 58 has a medium kick-up. Such specimens are dated at 1760-1770, Ibid, Type 11, Plate 221, p. 424. The third specimen, No. 46-7, has a high kick-up which dates it as from 1760-1770, Ibid, Type 7.

Tooled necks, round collars. Nos. 20-15, 452, 40-14; Plate 35. These three examples have tooled necks with broad round collars. The upper ring is larger than the lower one. They date from ca. 1850-1880. (Compare with No. 19, Plate 259 and No. 9, Plate 260, *ibid.*)

Miscellaneous bottle fragments. Nos. 185, 268, 12-15, 302, 243, 269; Plate 35. No. 185 is the neck of a small medicine bottle of ca. 1840. No. 268 is a clear glass stopper with ground glass sides and a lozenge shaped top. It probably dates from the early 1800's. No. 12-15 is the

neck of a wide mouthed bottle; the neck is ground glass. It probably dates from the early 1800's. No. 302 is the base of a small round light bluish-green mould blown bottle, probably dating from 1820-1840. Nos. 243 and 269 are the bottoms of clear glass mould blown square bottles dating from ca. 1840-1860.

Miscellaneous Glassware

Pitcher fragments. Nos. 18-20 and 18-22; Plate 35.

These are two fragments of light lime green glass decorated with thistle patterns. They are probably from a pitcher, and date from ca. 1800. (Compare: Plate No. 749, p. 71 of Early American Pattern Glass, by Alice C. Metz, 1958, and American Glass, Plate 244, p. 444.

Tumbler bottoms. Nos. 308, 271, 392, 245, and 60-23; Plate 35. These are the bases of five clear flint or lead blown glass tumblers. The exterior base of each specimen bears a pontil mark. They were probably not made before 1750, but the terminal date of their manufacture must remain open. Average capacity, based on base diameter and degree of wall flare, would be between three and four ounces. Neri's Art of Glass, 1662, indicates that lead glass was made as early as 1611. It was not perfected until the middle of the 18th century.

Glazed Earthenware

Glazed earthenware is present in a considerable quantity, and in a variety of wares and decorative patterns. Most of it post dates the fur trade era at Grand Portage, and was made from about 1800-1930. There are, however, a few pieces which could have been used in the late 1700's and up to ca. 1800. All earthenware is illustrated on Plate 36.

French "over the glaze" design. Nos. 297, 39-2; Two soft paste sherds of a cup or bowl are decorated in a Rose and Bee pattern. This design is placed over the glaze. It was manufactured in the late 1700's and early 1800's.

English blue willowware. Nos. 80-2, 463-26, 80-4, 99-1, 203-4, 59, 181-2, 466-26, 105-16, 318-2, 314-4, 61-13, 314, 219, 314-4, 151-14, and 48-21. An off white glazed earthenware bearing a blue English willow design is common at the site. The bulk of these sherds are from cups, saucers, or small bowls. Unfortunately, these designs were manufactured from ca. 1780 to 1880, so it is impossible to assign precise dates to them.

English Lowestoft. Nos. 466-26, 50-10, 50-8, 181-3, 349-10, 99-2, 29-25, 185-4, 280, and 216-3. These designs are on a soft paste porcelain. It is represented by sherds

of many patterns. Cups, bowls, and saucers are present in fragmentary forms. English Lowestoft was made from ca. 1757-1802, so most of these specimens must have been used at the post during the fur trade period.

"Import Blue China." No. 318-2. Parts of a bowl or footed cup are present. This soft paste porcelain was made from ca. 1820-1850.

Wedgewood or a fine French red ware. Nos. 69, and 45-4. This ware was made from ca. 1820-1830.

Bennington Ware. No. 212-6. This brown salt glazed ware is present in the form of the base of a small bowl or crock. It was made from ca. 1830-1860.

Soft Glazed Earthenware. No. 231. This type is present in the form of a crock rim. It is dip or slip glazed in a grey on blue design, and dates from 1810-1860.

Earthenware with incised design. No. 36-15. This finely made fragment is probably English in origin and dates from the early 1800's.

Transfer Print Stoneware. Nos. 8-14, 8-15, and 9-25. These specimens are decorated with blue-green, and white, and are of an indeterminate date.

Stoneware. Nos. 181-5, 181-6, 80-1, 80-3, and 212-5. These specimens are all of a more modern period, probably

from the 1930's. The material is covered with a crazed cream colored slip, and has decorations in orange, green, brown, and yellow.

Trunk, Chest or Cupboard Fittings. Nos. 427, 322, 321, and 55-3; Plate 24. And Nos. 426 and 62-24; Plate 25. Three lightly made locks which have been tentatively identified as trunk, chest, or cupboard locks are present. Nos. 427, 322, and 321; Plate 24. They are from four to five inches long and average about three inches high. Also attributed to a trunk, chest or cupboard is an iron lock plate, No. 55-3; Plate 24, which is three inches in length. Two specimens which can be more definitely assigned to trunks or chests are Nos. 426 and 62-24; Plate 25. These are lightly made iron hasps from two to three inches in length.

TRADE GOODS

Beads

Beads were present in a considerable variety of sizes, forms, and colors at this site. For classification purposes, these specimens are grouped into "seed beads", "cane (canon) beads", and "large beads". Seed beads are by far the most common and form the bulk of the sample. They were customarily used to decorate costume materials. In form, they are oblate spheroids or subcylindrical. Cane or canon beads are relatively common. They were used for costume ornamentation or in pieces of costume jewelry such as earrings. They are cylindrical in shape. The large beads are relatively uncommon at the site. They were used primarily in necklaces. In form they are spherical or subcylindrical. (Examples of beads are shown on Plate 36).

Seed beads. No. 64-1. These specimens range from 4 to 8 mm. in diameter with an average diameter of 6 mm. Many of them are irregular in form. They are present in both opaque and translucent materials. Color frequencies in seed beads are: white, 318; blue, 244, medium blue, 2; turquoise blue, 61; transparent blue, 8; red, 1; red-brown; 18; gray, 28; black, 10; transparent green, 5. Out of a total sample of 695, only 13 specimens are transparent; all others are opaque.

Cane or canon beads. No. 61. Beads of this form are present in moderate quantities. They range from 4 to 12 mm in diameter; average diameter is ca. 6 mm. Lengths vary from 5 to 44 mm, but the average length is about 12 mm. Materials are opaque or translucent, with the opaque specimens greatly predominating. Color frequencies are: white, 48; red-brown, 1; black, 7; transparent blue, 12; two colored, 3; decorated, 2. Of special interest are two dark blue specimens which are decorated with white stripes; two specimens with purple interiors have fused glazes of brown glass; and one specimen has a clear glass interior with a thin red exterior of fused glass.

Large beads

Barrel beads are relatively uncommon. Their diameters vary from 6 to 16 mm. and lengths from 14 to 28 mm. Average lengths are about 14 mm. All of them are opaque. Color frequencies are: white, 3; brown, 2; two colored, 2. Of special interest are a brown clay bead with a turquoise blue inlay, and a large white barrel bead which bears an incised blue sprig design.

Oblate spheroid beads. No. 161. These are not common. One white opaque specimen is 9 mm. in diameter.

— Another white opaque specimen is 5 mm. in diameter; it bears

two red and two green stripes on opposite quarters.

Spherical translucent. This bead is 18 mm. in diameter. It is made of translucent yellow glass and bears a sprigged design in light and dark blue.

Subcylindrical clay. No. 195. Two yellow-brown clay beads are from 10 to 12 mm. in diameter and 34 to 44 mm. long.

Subcylindrical glass, No. 25-4. This specimen is of black glass; it is 10 mm. in diameter and 16 mm. long. Five green glass chips are fused to its surface.

Miscellaneous Ornaments. Nos. 61-12, and 468. Four "bangles" or "jangles" formed of kettle copper or brass rolled into conical forms are illustrated on Plate 36. They were obviously made by local Indians from kettle scraps. No. 61-12 is a small trapezoidal or "keystone" shaped piece of kettle brass. It probably served as an ornament on clothing or in an earring. No. 468 is a small ring with a clear glass set. There are 3 small blue glass sets mounted on each side of the main setting.

Containers (Kettles and kettle fragments)

Brass and copper kettles were of great utility to Indians and Whites alike. The earliest records of trade between these two races invariably mention the kettle. The

Indian was quick to grasp their advantages, and they swiftly supplanted native made pottery vessels. Of course, the Woodland Indians continued to use birch bark containers for many purposes, as they could be made from locally available materials at no cost except their labor. The kettle was a prominent article of trade during the fur trade era, and still can be found in remote Indian camps. Interestingly enough, a kettle's usefulness did not cease once it was punctured or no longer water tight. If repairs were impossible, it became an easily worked source of metal which was transformed into ornaments or utensils. Kettles were expensive, so efforts were made to repair them whenever possible. The kettle fragments from the site are illustrated on Plates, 37, 38, and 39. It is obvious that kettles were present at Grand Portage in many sizes and forms. These surviving fragments are a mute testimonial to the value of these simple containers to the Indians and White occupants of the site.

Kettle Covers. No. 32, and an unnumbered specimen, Plate 37. The complete cover is ca. 10" in diameter, and has a "figure 8" shaped handle which encompasses a circular ring. The incomplete cover fragment is of a similar design. Covers of this nature were used on large, cylindrical kettles. They were first produced in quantity about 1780.

Kettle Lugs. Nos. 292-44, 290, 25-10, 329, 23, 169, 24, 305, and 234; Plate 38. This sample includes a large number of lug forms. The "crimped or eared" variety, (No. 292-44), has been found on French made kettles dating from the mid 17th century. The more massive cast brass or copper lugs, (Nos. 290, 23, 25-10, 329, and 202) are from a later era. Most of them probably date from around 1800 or later. Forged iron kettle lugs with tails are also common at the site, (Nos. 169, 24, 305, and 234). They were used on relatively large capacity vessels, and probably date from about 1850 or later. Such kettles were used in maple sugar operations up to recent times.

Kettle Patches and Rivets. Nos. 19, 14-5, 484, and 11-3; Plate 39. Three segments of kettles patched with hand made rivets, and a variety of rivets in different stages of manufacture are illustrated on Plate 39.

Awls. Nos. 17-7, 65-3, 49-3, 37-6, and 432; Plate 40. These simple devices were of great utility to the Indian and white alike. Four double ended offset centered awls average about 3" in length and have square cross sections. The offset feature kept the awl from working its way into the wooden or bone handle as it was used. The double point allowed the awl to be reversed when one end was greatly worn. A large "canoe awl" 6 3/4" in length, with a rounded

cross section and an offset center, was recovered. Such awls were used to punch holes for fastening a canoe together or for making canoe repairs. Bark lashings were inserted through these holes.

Fishing Equipment. Nos. 214 and 284; Plate 40. An iron fishhook, 2" long, and a rusted harpoon or spear are evidences of fishing at the site. No eye or attachment device is present on the fishhook, and the spear is likewise incomplete. The spear appears to be hand forged and unfinished as the point is not beveled. The common hook or right angle located opposite to the point is not present either. Customarily, it was inserted in a slot in the wooden handle and the spear shaft lashed to the handle. Spears of this type were a popular trade item, and were used for spearing large fish, beaver, and muskrat. Both of these specimens are incomplete so it is impossible to make any statements concerning their antiquity.

Bale Seals. Nos. 32-2, 301-1, 153, and 32-3; Plate 40. Remnants of four lead bale seals are in the site collections. Only one of them is complete. Devices of this nature were much analagous to the modern metal box car seal. They were used to secure outward bound shipments of fabrics such as cloth and blankets against pilferage, and may have also been

used in a similar fashion to protect inward bound bales of furs. Specimen No. 32-2 bears an "I" and an "H". Circles surround these letters. Another "I" is located beneath these letters within what appears to be a shield. Nos. 301-1 and 153 are incomplete, but bear lettering also. No. 301-1 has the letters, "McT" on its stud. This may refer to one of the numerous McTavish's who were prominent in the Northwest Company. No. 153 bears the letters "MTC & C", which apparently relates to the McTavish-Frobisher & Co. in business from ca. 1787 to 1805, or to the McTavish-Fraser Co. of about 1812. This specimen has five perforations through it so it may well have been used by local Indians as part of a "cup and pin" game. No. 32-3 is the lead ring from a bale seal.

Firearms and Components

Gun Spalls and Flints. Nos. 181-1, 162-3, 104, 61-1, 423, and 4 unnumbered specimens; Plate 41.

Wedge shaped gun spalls are the earliest form or predecessor of the gun flint found in this area. They are thought to have been used up to about the time of the American Revolution, and were then supplanted by the conventional prismatic shaped gun flint. Although identifications of such materials are not absolutely positive, present day students of firearms believe that the gun spall was used between

ca. 1675-1775. ("Additional Comments on Gunflints", By T. M. Hamilton, Missouri Archaeologist, Vol. 22, 1960, pp. 73-79).

Four gray gun spalls are in the site sample (Nos. 181-1, 162-3, and two unnumbered specimens). These are apparently made of grey chert. Similar specimens are thought to be of French origin. One beeswax brown spall is present, it is also probably of French origin (No. 104). Four black spalls were recovered (Nos. 61-1, 428, and 2 unnumbered specimens). In general, black flints are thought to be British. Brown or honey colored flints are thought to be French.

Five beeswax brown or honey colored gun flints are in the site collections. (Nos. 162-3, 61-1, and 3 unnumbered specimens). All of them are believed to be of French origin. A diagnostic characteristic of French flints is the brown or honey color. This type also has a prismatic cross section, a rounded or "gnawed" heel, and secondary chipping along the sides and back of the flint.

Although no English gun flints are in the collections from the site, they will be described for comparative purposes. British gun flints are of black flint. They have a prismatic form, were made by primary flaking, and lack the

rounded or "gnawed" heels. They also do not bear the numerous secondary flake scars of the French products. Their outlines are square or rectangular. Most of them bear an elevated back which is flat or concave on their upper faces. Primary flake scars appear on all four beveled faces which commence at this back. These bevels were of course formed by large flakes struck from the back area.

Flintlock Parts. Nos. 63-3, 296-38, 466-23, 26-2, 260-2, 406, 83-6, 402, 63-4, 54-2, 57-2, and 56-4; Plate 41. Nos. 172, 424, 213A, 283, 213B, 113, 315, 285A, 46, 285B, 414, 148, 405, 444, 402, 193, and 441; Plate 42.

A large variety of the component parts of flintlock muskets are illustrated in this report. A definitive study would require a specialist, so no efforts will be made to do more than mention them. At a future date, a student of the minutiae of flintlocks might well provide a valuable discussion of them. The majority of these pieces date from the period of ca. 1770-1850. It must be emphasized, however, that the Indians in the area no doubt continued to use the flintlock musket because of its cheapness and simplicity for some years after this provisional terminal date.

Northwest Trade Gun Butt Plate. No. 63-3, Plate 41. This item is from an early form of the Northwest Trade Gun.

It was attached by 10 nails to the gun butt.

Flintlock Cock Jaw. No. 296-38; Plate 41.

Barrel Fragments. Nos. 466-23; Plate 41 and 172, 424;
Plate 42.

Ramrod Thimble. No. 406; Plate 41. From the forearm
of a trade musket.

Frizzens. Nos. 260-2 and an unnumbered specimen;
Plate 41.

Frizzen Springs. Nos. 83-6; Plate 41.

Butt Plate Hatch Cover. No. 54-2; Plate 41.

Triggers. Nos. 57-2; Plate 41, and 148; Plate 42.

Trigger Guard Segments. No. 56-4 and an unnumbered
item; Plate 41.

Breech Plugs. Nos. 213A, 213B, 285A, and 285B; Plate 42.

Main Springs. Nos. 405, 444, and 193; Plate 42.

Stock Ornament. No. 315; Plate 42. This is probably
a silver inlay from a stock.

Brass "Serpent" Side Plate Fragments. No. 414; Plate 42.

Lock Plates. Nos. 402, 63-4; Plate 41, and 283, 113,
46, 402, and 441; Plate 42.

Only one of these specimens bears a maker's name. This
is No. 63-4; Plate 41. It is stamped, "Wilson" behind the
cock pivot hole. A number of gun makers of this name made

flintlocks from 1733 to 1833, so no quick identification of this lock can be made. No. 441; Plate 42, is a small, light lock, apparently from the right hand side of a percussion ignition shot gun. All of the other lock plates illustrated were probably made from ca. 1770-1850.

Musket ball. No. 26-2; Plate 41. This is .53 caliber.

OBJECTS OF NATIVE SIGNIFICANCE

Very little evidence of the local Chippewa material culture is present in artifacts from the site. Many of the objects discussed in this portion of the report as being of "native significance" are modified trade goods materials. Locally available materials such as stone show many tool marks left by metal saws and files. Artifacts made from bone are largely the only true examples of the vanished native crafts. (These materials are shown on Plate 43).

Bone Hide Scraper. No. 48-38. This unique artifact is made from the long bone of an animal such as a moose or caribou. It is 7 1/2" long and 1 1/2" wide. The rounded tip shows signs of usage.

Cupping Tubes. Nos. 163, 256, and 201-1. Two of these tubes are almost identical in size and form. They are from 1 1/4" to 1 1/2" in length. Tubes of this type were used by native shamans in curing rituals. The third specimen, No. 206-1, is 2" long. Its two sets of paired lines are incised around its circumference. Tubes of this nature were sometimes swallowed by native shamans and then regurgitated.

Bone Awl. No. 176-2. This item is 6 1/2" long and ca. 5/16" in diameter. At one time, both of its ends were sharpened, but they have been blunted through usage.

"Micmac" Pipe Bowl. No. 212-9. This broken artifact has the form of the "Micmac" pipe which is widespread in the Great Lakes region. It is ca. 1 1/2" high and 1" wide, and bears the marks of a metal saw.

Cut Stone Fragments. Nos. 347, 423, 436, and 37-74. These four fragments of worked stone all bear the marks of metal saws and files. Two pieces appear to be a light colored Catlinite. The remaining two are of steatite. All of these items are probably the results of stone pipe manufacture.

Stone Bead. No. 25-3. This item is either a bead or a portion of a stone pipe stem. It is of a dark Catlinite and is 3/4" long by 3/8" wide.

Metal Hide Scrapers. Nos. 209, 48-6, and 29. Three miscellaneous pieces of scrap metal were apparently converted into hide scrapers. No. 209 is a rolled piece of thin scrap iron, 7 1/2" long, with a right angled bend at one end. No. 48-6 is an "S" shaped piece of iron tubing or a gun barrel converted into a double ended scraper or spatula. It is 6 1/2" long. The third specimen, No. 29, is a section of brass or copper tubing with a right angled bend at one end. It is 5 1/2" long and 1" in diameter.

Tweezers. No. 212-3. This object is made from a small

piece of scrap brass, and was probably used for pulling beard hairs by male Indians.

Tray. No. 88. This specimen is apparently made of scrap kettle brass. It is 4 1/2" by 5 1/2". The edges are corrugated around part of it. Perhaps it was used as a tobacco shredding tray.

Spear Point. No. 49-7. This crude spear has an overall length of 7 3/8". Its back edge is battered; the other edge is sharpened. Apparently, it was being made into a knife or was used for splitting small pieces of wood.

DISCUSSION

The varied "white object materials" or artifacts manufactured in Western Europe or North America and found in these excavations offer many clues to life at this important fur trade depot. Although both "Indian" and "White" materials were recovered, the "White" object materials greatly predominate. Also present in considerable quantities are white object materials which are transitional between these two theoretically exclusive classifications. Here, I am referring to white object materials which were modified at the site by either Indians or Whitemen.

Such modifications are of course a testimony to a scarcity of goods, difficulties in access to commercial sources of goods, economic hardship which resulted in a lack of finances to purchase new materials, and to the innate ingenuity of Indians and Whites to adapt available materials to their own particular needs. An especially evident example of this is the reuse of kettle brass which was easily modified with simple tools and which appears to have been a favorite for native adaptations. For instance, it was often reworked into "jangles" or "tinklers" for costume ornamentation. We also have a number of hinges made from this material..

One of the most important questions concerning these collections is the age of a particular specimen or of a group of associated items. This question is indeed difficult to answer as the majority of the materials recovered appear to date from the general time span of 1790-1850. Many of the tools and utensils have been work-worn or broken to a point where they are almost unrecognizable. In addition, there is a dearth of trade marked items which can sometimes be definitely ascribed to a particular manufacturer and accurately dated.

Still another obvious factor which confuses the identification and dating of artifacts is that there has been a long term and complex occupancy of this site. It is possible that LaVerendrye lived here briefly in 1731. Formal habitational occupation ceased here only in 1938 with the removal of two fish houses. Thus, we are forced to deal with materials left by 200 years of human activity during which French traders (ca. 1731-1760), British traders (ca. 1762-1804), American Fur Company fishing activities (ca. 1836-1841), U. S. Indian Reservation personnel (ca. 1860-1890), and modern Indian-White occupancy (ca. 1890-1938) have all left evidences of their daily lives at this location.

Summary and Conclusions

The Northwest Company fur trade depot of Grand Portage is situated in extreme northeastern Minnesota on one of the finest natural harbors on the northern shore of Lake Superior. The depot itself lies on the western bank of Grand Portage Creek where it flows into Lake Superior. Mount Rose, a local landmark, rises about 320 feet above the lake; it is immediately to the rear of the site.

This particular location was chosen by the fur traders as it is in a direct line with a natural glacial valley which provides the most ready access through the surrounding hills to the Pigeon River. The Grand Portage trail of about nine miles in length, commences nearby the depot and follows the creek northwesterly for a number of miles.

The stockade enclosure has an elevation of 608 feet in its southeastern corner and slopes gradually upward to an elevation of 626 feet in its northwestern corner. Most of the enclosure lies between elevations of 610-620 feet above sea level or about ten to twenty feet above Lake Superior.

Grand Portage had undoubtedly been known to Indians for hundreds of years before the first white traders entered this region. The earliest known mention of it was made by a French official in 1722. The famed trader and explorer, LaVerendrye,

landed here in the fall of 1731 and was followed by other Frenchmen who appear to have made intermittent use of the site until about 1760.

Enterprising British traders first came here about 1762, but John Askin, who cleared timber from the spot we are concerned with, began using the site about 1768. A merger of traders called the Northwest Company dominated here up to about 1803. By about 1778, Grand Portage was the major entrepot of traders voyaging into the vast region to the north and west. A more elaborate post was probably commenced at this location about that year. Thereafter, Grand Portage grew in importance up to about 1800. American boundary claims induced the company to move northward to Fort William on Canadian soil in 1803.

Following this exodus, Grand Portage fell into a decline. An American Fur Company fishing station in the late 1830's and early 1840's probably brought a temporary prosperity. An Indian Agency was begun here in about 1860; some of its buildings may have been built on the stockade site. Intermittent usage was made of the location from about the 1830's to 1938 by local Indians who erected log cabins, barns, and fish houses on the site until the stockade was reconstructed in 1938.

The excavation of this unique site commenced without

much preparation in 1936 as an Indian Service Civilian Conservation Corps project. Their major objectives were to accomplish a minimum of archeological work sufficient to provide data for the reconstruction of the stockade and the large meeting place (Great Hall) which was known through tradition. It was only through the insistence of the Minnesota Historical Society that more careful excavations with broader scientific objectives were made.

Excavations were begun here in June of 1936 under the direction of Ralph D. Brown with general supervision provided by Willoughby M. Babcock of the Minnesota Historical Society. Brown largely completed excavation of the stockade outline, and made some limited interior excavations within it during this field season. G. Hubert Smith and Allan Holmberg assisted him as supervisors during September, 1936. During 1937, Brown had exclusive charge of excavations and concentrated on the testing and excavation of large areas within the interior of the enclosure. Many structural features were found during this season.

Some questions of interpretation relating to the gates, defensive features, structures, and the respective dates of construction of portions of the palisades are still unanswered.

The Stockade

The stockade was apparently initially defined entirely by eye to enclose an area of sufficient size in a suitable relationship to the natural topography. Although the enclosure has the appearance of symmetry, it is only roughly quadrilateral in form. Longer sides of the enclosure lie about 45 degrees west of north. It occupies a site approximately 367 feet north-south by 341 feet east-west. In form, it resembles a square with the upper right hand corner missing. Six exterior palisade lines and two interior lines give form to the enclosure of 2.3 acres. The interior is divided into three major sections which may well have been built at different times.

Of course these outlines of the post were defined by the stockade trenches which once held white cedar pickets ranging from 4 to 10 inches in diameter and 15 to 18 feet in length. An unusual means of holding the pickets in the trenches was used in loose sandy soil; double rows of horizontal timbers held them tightly in a vise like grip. Approximately three feet of each picket would have been buried in the ground, thus leaving a picket height of from 12 to 15 feet. Horizontal ties were placed into notches cut into each picket about three feet below its top and held them firmly together. These ties were pinned to each picket with

large wooden dowels.

Structures

Within the stockade a total of fifteen probable structure sites was found. Much of the information concerning them is not of a satisfactory nature. The poor preservation of these structural remains is not surprising when one considers the fact that buildings were undoubtedly modified, rebuilt, razed and burned during the fur trade era. In addition, the American Fur Company probably had a fishing station at this location in the 1830's. There had also been several generations of Indian occupancy in this area from the 1830's to 1938. Materials such as squared stones were no doubt removed from building foundations and fireplaces for reuse in other structures in relatively modern times.

Only five building units can be presently interpreted with confidence. Enough evidence has survived concerning them so that reasonably adequate ground plans can be made of them. A number of structures are represented only by isolated fireplaces. Most of these units were not completely excavated. If all other structural evidence is lacking, it is tempting to speculate that these buildings were constructed of horizontal logs which were laid onto the ground surface, but which have since entirely disappeared. Presumably all units with fireplaces were used as dwellings or workshops

where heat was essential during winter months.

Six, possibly seven buildings, had their outlines formed by narrow foundation trenches. They were apparently built in the French-Canadian "palisade" or "en pile" fashion which involved setting upright logs into trenches. Two units had stone foundations. Little can be said about their superstructures. One building was built in the "notched upright timber, horizontal hewn board" style. One and possibly two buildings are represented by foundation trenches associated with pits. It is difficult to interpret these remains as a single building unit.

At this point, no efforts will be made to "date" the structures. The evidence is simply not adequate for this purpose. Perhaps a detailed study of the scanty artifacts found in them will give some clues in this direction. It must be remembered that the buildings at this site were the accretion of years and had probably been erected by many fur traders in a variety of construction styles over a period of about thirty years between 1768-1800.

An exhaustive interpretation of the evidence relating to the "east gate" is given on pp. 116-129. of this report. This structure, which may well have housed the main gate to the post, was most probably constructed as follows: four large posts about 18" in diameter, were set well into the

earth to form a square about twelve feet on a side. Thereafter, horizontal logs or hewn planks were slipped into place in notches in the vertical corner posts. Two sides of the square would have been enclosed in this fashion. The other two faces of the square would have been left open to receive gates. Two large gates would have been placed on hinges fastened to the two large posts at the northern end of the entrance. The gates would have most probably swung inward. A guard house with a steeply pitched "A" roof would have been erected on top of the foundation of these four large posts. An easy access into the enclosure would have been possible and would have led due east of the Great Hall.

The other known gate was found at Corner X at the mouth of Grand Portage Creek. It consisted of a passageway of about four feet in width and about eighteen feet in length. The passageway was formed by two parallel rows of upright logs. This entrance could have had a roof over it, but hardly a heavy superstructure. No doubt it once had a gate or wicket to bar access when necessary (See Figure 2).

Although these entrances are called "gates" for convenience, they were in reality entryways into the post interior. The gates were merely their more apparent and prominent features. Although defensive structures were probably present at the site, no evidence of "bastions" or blockhouses has

yet been found. Interestingly enough, no evidence of these features is present in the Bouchette illustration of Fort William which is discussed on p. 117.

Artifacts

Artifacts from the site were sorted into major categories in terms of their functional usages. A considerable degree of overlapping of categories is present as obviously an object could fit under "Personal Possessions" and also readily be an example of "Trade Goods". Fortunately, the artifact sampling is large and varied enough so that "Personal Possessions", "Building Hardware", "Tools", "Household Articles" and "Trade Goods" are well represented. There are many fine items here which can be used for comparative purposes and in future museum exhibits.

The "Building Hardware" is of special significance in view of the eventual reconstruction of structures within the enclosure. The "Objects of Native Significance" are relatively scarce and demonstrate either a slight Indian occupancy of the area or a high degree of acculturation and reliance on manufactured articles by the local population. Although an adequate sampling of "Trade Goods" is present, perhaps the most interesting segment of them is the firearms components.

Despite the efforts devoted to the analysis of the

artifacts, more detailed studies can be made of some classes of them by specialists. Such studies would result in a more precise identification of some specimens and a more limited dating of their periods of manufacture. It is also possible that further origin points of manufacture may be ascribed for some of them.

Most of the artifacts were recovered in broken or incomplete forms; they had been work-worn to a large degree. In general, the bulk of these materials can be assigned to the time span of 1790-1850. Unfortunately, this period marks the start of large scale machine manufactured objects, but many of them lack trade marks or significant distinguishing characteristics. Therefore, it is almost impossible to be precise about dates of manufacture for most items. Another factor which confuses the identification and dating of artifacts here is the long term and complex occupancy of the site. Here, we are dealing with a time span of ca. 1731-1938, or slightly more than two hundred years.

Problems

The basic problem encountered in preparing this report resulted from the lack of adequate records of the excavations. The situation was further complicated by the fact that Ralph D. Brown, who had supervised these excavations, in 1936-37, was deceased. G. Hubert Smith, who worked at the site only briefly in 1936, did not have a detailed knowledge of events which took place during the 1937 field season. Furthermore, 25 years had elapsed before this report was begun. Admittedly, it is never an ideal situation for one archeologist to write a report on another's work. My own task has been largely that of a detective in that I had to first assemble all of the available evidence, master it, and interpret it in as lucid a manner as possible.

A detailed study was made of the surviving records preserved in the Manuscripts Department of the Society before a reasonably clear understanding could be had of these excavations. Fortunately, a series of vitally important manuscript maps were found which had been missing from the Society's files since 1938. These provided the answers for many questions concerning the critical 1937 excavations within the stockade enclosure.

Thereafter, it was necessary to reconstruct the methods used in excavating, etc. This was especially critical as I

could not find clear statements of methods of excavation, survey methods used, and so forth. After this groundwork had been laid, I began assembling the jumbled and incomplete portions of this puzzle. I believe that the present report provides an analysis and an interpretation of all significant data which have come to light.

In the present report, the site is described, archeological field work summarized, structural remains described, and an analysis of artifacts recovered is presented. No efforts have been spared to present as complete an interpretation of the data as possible. Special efforts were made to provide graphic explanations by a liberal usage of maps, figures and illustrations. It is hoped that these additions will make the report more readable and intelligible.

Further archeological excavations must be conducted within the stockade well in advance of any structural restorations. Fortunately, there remain a considerable number of unexcavated areas which will be productive of further structural evidence. It will also be possible in some instances to re-excavate structural sites and to recover more information concerning them.

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Data available

The principal problem encountered in the preparation of this report was the lack of detailed data concerning the survey methods used, excavation methods, structural remains found, and the precise locations of artifacts recovered. At the close of the 1937 field season, the artifacts were left at Grand Portage. They were plundered and mis-handled for some twenty years. Therefore, they were in a disordered condition when they were made available for the preparation of this report. Other data were in much better condition as they had been filed at the Society by Ralph D. Brown in 1938.

The materials used in the preparation of this report are listed below. They are: maps, field notes, reports, photographs, artifact catalogs and the artifacts themselves. All of these materials with the exception of miscellaneous photographs and the artifact catalogs are filed in the Manuscripts Department, Minnesota Historical Society. The miscellaneous photographs and all of the negatives are filed in the Picture Department, Minnesota Historical Society. A field artifact catalog was prepared by Ralph D. Brown in 1936. It has since been expanded considerably. An artifact catalog of the materials recovered in 1937 has been prepared under the terms of this contract. Copies of both of these artifact catalogs will

be placed on permanent file in the Society's Manuscripts Department, along with original tracings of the maps of these excavations.

Maps. The eighteen maps consulted in compiling this report are listed below in the approximate order of their chronological preparation. Rather elaborate descriptions of them were made as they are vitally important documents. Included under the general heading of Maps are detailed field maps, soil profiles which were made in the course of excavating a few exploratory trenches, and one diagram.

A total of ten maps are listed in the inventory sheets in the Manuscripts Department. All of these, plus eight other "progress maps" are listed in the present inventory. Four priceless field maps, in pencil, were missing from the Manuscripts Department files when this report was begun. In 1938, they had been loaned to the U. S. Indian Service and never returned. A protracted search located them in outdated records filed in the Federal Records Center, Kansas City, Mo. Tracings have now been made of these items and are filed with the other maps.

Map No. 1. (MHS MS. Dept. A-14). Title: "Approximate outline of stockade enclosure." Date: June 1936. Scale: approximately 1"=54'. "Working plat, Do Not Copy." "Grand Portage Stockade." "Figure 1." Size: 8 $\frac{1}{2}$ " x 10". (Comments: This is merely a working plat and does not show any great detail.

It does, however, give the dimensions of the stockade outline, with measurements; the location of the "East gate area;" the location of the road which ran along the lakefront and the creek sides of the stockade, and the possible site for the reconstruction of the "main building", (Great Hall). The chief value of this map is that it shows the excavator's concepts and his progress as of June, 1936.)

Map No. 2. (Lacks MHS MS. Dept. Accession No.). Title: "Grand Portage/Outline of stockade based on investigation of site to August 22nd, 1936." "Tentative or working map; not to be published or copied." "Figure 4." (Drawn by) Ralph D. Brown and A. Peterson." Scale: 1" = 24'. Size: 18" x 19". (Comments: This map is valuable as Brown makes reference to it in his field notes. It is of much assistance in interpreting his excavations to that date. Eight typewritten notes in the upper right hand corner of this map are titled: "Features Numbered in Green Figures are to Receive Further Consideration." These notes relate principally to the "East gate area", the

stockade along the lakefront, possible gate locations, and possible blockhouse locations. They explain many obscure matters in the site notes. Brown's Datum points are also located on this map.)

Map No. 3. (Lacks MHS MS. Dept. Accession No.) Title: (First Survey of Stockade with data." It is an outline map of the stockade based on investigations of the site to August 22, 1936. Scale: 1"=24'. Size: 19" x 24". (Comments: this is a pencilled field map. It is invaluable for locating Datum points 1, 2, and 3, and many other detailed measurements of the 1936 field season excavations).

Map No. 4. (Detail field map) (Lacks MHS MS Dept. Accession No.). Title: "Grand Portage/Wall Detail in East Gate Section." "Ralph D. Brown, A. Peterson". Date: August, 1936. Scale $\frac{1}{4}$ " = 1' or 1" = 5'. Size: 9" x 11". (Comments: This map shows the horizontal features of the "east gate section" and helps to interpret the confusing arrangement of posts and trenches at this point. The map encompasses an area from ON-2W to 5N-4E. The area

was excavated on a grid system.)

Map No. 5. (Detail field map) (No MHS MS. Dept. Accession No.). Title: "Wall detail in east gate section." Date: August, 1936. Scale: $\frac{1}{4}$ " = 1'. Size 9" x 12". (Comments: This pencilled map is the original of the east gate details shown on the map, A-6 (map no. 14). It is also the original of the map discussed above as Map No. 4. This map has pencilled notes which help materially to explain this area.).

Map No. 6. (Lacks MHS MS. Dept. Accession No.) No title. This is a sketch map in pencil on the inside rear cover of Field Book No. 1, 1936, (MHS MS. Dept. No. BC8.1 / .M665r / Vol. 1). No scale. Size: ca. $4\frac{1}{2}$ " x 5". Date: ca. September, 1936. (Comments: This map shows the general outline of the stockade and has Corners A-H, X & Y located. It also shows the E-W and N-S exploratory trenches through the western one-half of the stockade enclosure, as are two structure sites within the enclosure. Obviously, this map was a working draft used in the field).

Map No. 7. (MHS MS. Dept. A-3). Title: "Working map giving outline of stockade incorporating data to October, 1936; showing in green areas demanding special consideration. A. Peterson." "Scale: 1" = 24'. Size: 18" x 21". (Comments: This map is more advanced than Map No. 2 above. Perhaps the major point shown in it is the North-South stockade line between points A-Y which runs through and bisects the western one-half of the stockade. A number of problematical areas located on the southern or lake side of the stockade have been resolved to some degree. These problematical areas were first shown on Map No. 2).

Map No. 8. (MHS MS. Dept. A-2). Title: "Northwest Company Stockade Site/Grand Portage, Minn." Date: October, 1936. "From data collected by Brown, Smith and Holmberg. Original tracing by Holmberg. Inked tracing by Peterson." Scale 1" = 24'. Size: 18" x 24". (Comments: This is a "cleaned up" version of Map Nos. 2 and 7. It bears the same measurements of the stockade outline as Map No. 2, but does not have the notes relating to problematical features shown on Map Nos. 2 and 7.

Essentially, it shows excavation progress made since late August, 1936. It also shows two long trenches which were excavated through the western half of the stockade enclosure in September, 1936. Other features shown are the drain located about 40' north of "the east gate area" or Corner G, eroded areas along the southern palisade trench line, the roadway which ran across the southern and eastern portions of the stockade enclosure, the puzzling Southeastern Corner "X", and a fireplace found within the interior of the Southern palisade line and about 100' westward from the Southeastern stockade corner. This map is apparently the final map for the 1936 excavations at this site, as prepared by Ralph D. Brown and his assistants.

Map No. 9. (MHS MS. Dept. J/911/.C8967) Title: "Northwest Company's Fur Post showing Layout Plan of Original Stockade (sic) at Grand Portage, Minnesota." "Surveyed and Platted by S. S. Walker, Engr." Scale: 1" = 20'. Size: 21" x 24". A second sheet accompanying this map contains surveying data recorded by Walker. S. S. Walker was an

engineer detailed from the Consolidated Chippewa Agency at Cass Lake, Minnesota to survey this project. He took the notes from which this map was made on October 6-8, 1936. His map shows the dimensions of the stockade outline, angles on interior corners of the stockade, contours, and a wealth of other details concerning these excavations. (Comments: Ralph D. Brown commented in his report on field work for September 5th-October 8th, 1936 to the effect that Walker had mapped the exact courses of the palisade walls (Brown MS., 1936b, p. 4). Obviously, this map must be followed in any subsequent reconstructions of the palisade walls).

Map No. 10. (Detail field map). (MHS MS. Dept. A-7). Title: Grand Portage Stockade / Detail near junction E-W & N-S exploratory trenches showing structure C-1." Date: October 28, 1936. Scale: $\frac{1}{4}$ "=1' or $1\frac{1}{4}$ "=5'. Size: 12" x 19". (Comments: This map was made by G. Hubert Smith. It shows the details of excavations from 20W-30E to 60-105S. Structure C-1 is shown in scale although it was not completely excavated. Fortunately, enough information is

here to relocate this structure with precision, and to obtain its pertinent dimensions. This map also shows the first positive proof of the use of N-S and E-W baselines for the excavation of the stockade enclosure. It is drawn on a 5' grid basis).

Map No. 11. (Detail field map). (MHS MS. Dept. A-8). Title: "Detail at Corner X." Date: October 29, 1936. Scale: $1\frac{1}{4}"=5'$. Size: 12" x 18". This map was made by G. Hubert Smith. It serves to clarify the structural remains found at this puzzling location, but does not fully explain them. Smith found two trenches which ran parallel to each other in a N-S direction at the Southeastern stockade corner, Corner "X". These trenches are 4' apart, measured from their inside edges. They are 6'8" apart measured from their centers. Judging from this evidence, there must have been a passageway between the two trench lines. This map is drawn on a 5' grid basis).

Map No. 12. (MHS MS. Dept. A-4). Title: "Grand Portage / Northwest Company Stockade / Excavation / Made at request of W.M.B. (Willoughby M. Babcock).

Not necessary to copy." "September 20, 1937.

R.D.B. (Ralph D. Brown). Size: 18"x24". Scale 1" = 20'. (Comments: This map was traced from the S. S. Walker map which was roughed out from October 6-8, 1936, and apparently received by the MHS in November, 1936. Its most important features are that it shows the two trenches excavated within the western one-half of the stockade enclosure in September, 1936 and the 1937 exploratory trenches made in the western portion of the enclosure up to September 20, 1937. It also shows a number of structures found by Brown in this area in 1937 and the O-O point and the N-S, E-W baselines on which Brown based his 1937 excavations).

Map No. 13. (MHS MS. Dept. A-5). Title: "Scale Map of Grand Portage Stockade / omitting some of the / rear section of the enclosure / but showing all interior excavations." "Based on 1936 I.S. outline, / road corrected. This map does not show a good deal of the detail found in interior excavations." Date: Sept. 7 - Oct. 27, 1937. Scale: 1"=20'. Size: 18"x24". (Drawn by) R. D. Brown. In pencil.

(Comments: this is a field map; it is the original for the data found on Map No. 17. It is however, of much value as it is an original field map. It has an outline of the stockade enclosure showing base lines, excavated areas, and architectural features to the close of work, October 29, 1937).

Map No. 14. (MHS MS. Dept. A-6). Title: "Detail of East Gate Area, from gate to road, 1936-37 excavations." Scale: $\frac{1}{4}$ "=1'. Size: 18"x23 $\frac{1}{2}$ ". Date: ca. October, 1937. Drawn by R. D. Brown. In pencil. (Comments: this map is invaluable. It is Brown's final field map for this complex area, and contains details of the "East Gate Area", and associated structures. It is the only map to contain this material. With its aid, Brown's field notes of this portion of the excavations can finally be interpreted).

Map No. 15. (MHS MS. Dept. A-9). Title: "Grand Portage Stockade / SW Corner section near road." Date: Oct., 1937. Scale: $\frac{1}{4}$ "=1'. Size: 17 $\frac{1}{2}$ "x24". In pencil. (Comments: this is a field map of great value. It encompasses the area from

100 - 190S / 100 - 140W, and shows the details of Brown's excavations in this area in October, 1937. The principal features of interest are Brown's features B11-B45, and Structure 9. MHS MS. Dept. A-10 is a continuation of this map. It matches up at the 100W line and continues eastward to the 30W line. The southwestern corner of Brown's Section B is depicted on this map).

Map No. 16. (MHS MS. Dept. A-10). Title: "Map of excavations in Section B / 100' - 190S and 30' - 100 (W)." "Excavations limited to quarter as indicated." Date: October, 1937. Scale: $\frac{1}{4}$ "=1'. Size: 18'x24'. (Drawn by) R. D. Brown. In pencil. (Comments: This is a field map of considerable value. It encompasses the area from 100 - 190S/30 - 100W. It shows the details of Brown's excavations in this area in October, 1937. The principal features of interest are Brown's features B-1 - B18. MHS. MS. Dept. A-9 is a continuation of this map. It matches up at the 100W line and continues westward to 140W).

Map No. 17. (MHS MS. Dept. No. BC8.1/.M665r). Title:
 "Consolidated Chippewa Agency / C.C.C.-I.D.
 Proj. No. 1016 C 244 Grand Portage Stockade /
 Scale Map Showing All Interior Excavations."
 "Based on 1936 I.S. Outline-Road Corrected /
 Sept. 7, 1937 - Oct. 27, 1937 / Scale 1" =
 20' / Excavated Areas / This Map Does Not Show
 A Good Deal of the Detail Found in Interior Ex-
 cavations / Dr. by R. D. Brown Tr. by CHO."
 Date: ca. December, 1937. Size: 21"x25".
 (Comments: This map shows the 1936-1937 ex-
 cavations in general terms. Apparently, Brown
 intended to use it as the completed site map
 for 1936-37. It is of considerable value as
 it shows the major excavations and structural
 sites discovered).

Map No. 18. (Detail field map). (No MHS MS. Dept. Accession
 No.). Title: "Discussion of East Gate Area."
 Date: December, 1937. Not drawn to scale. Size:
 8 $\frac{1}{2}$ "x11". (Comments: This map was apparently drawn
 by Ralph D. Brown in December, 1937 as a last ef-
 fort to interpret the puzzling "east gate area").

Profiles

1. (MHS MS. Dept. A-11). Title: "Profiles in 1N, 2N, 3N, 4N in E gate area, 1936." Scale: $1\frac{1}{2}" = 5'$.
(Comments: These profiles when compared with the field notes, may aid materially in interpreting the complex series of features in this area. Size: $9\frac{1}{2}" \times 12"$).
2. (MHS MS. Dept. A-12). Title: "North-South Exploratory Trench Profile, SW face, using H.I. at O East line, Oct. 28, 1936. Scale: $\frac{1}{4}" = 1'$ or $1\frac{1}{2}" = 5'$.
(Comments: This profile runs from OS-180S; it will be of some aid in interpreting this excavation. Size: $12" \times 19"$).
3. (MHS MS. Dept. A-12) Title: "Profile at 80S between 10W and 30E, Dec. 21, 1936." Scale: $1\frac{1}{2}" = 5'$. Size: $12" \times 18"$. (Comments: This profile will be of value in interpreting the soil profiles in this area of the 1936 excavations).
4. (MHS MS. Dept. A-13). Title: "N-S Exploratory trench 9 W profile, using H.I. at O-E line. October 29, 1936. (G.H.S.) Scale: $1\frac{1}{2}" = 5'$. Size $12" \times 18"$.
(Comments: This profile will be of value in interpreting soil profiles, and in locating exploratory

trenches.

5. East-West Exploratory Trench Profile. 89'S face, using H. I. at 90' S line. October 28, 1936. Scale: $\frac{1}{8}$ " = 1'. Size: 12"x19". It runs from 40E - 89S - 120W - 89S.

Diagrams

1. (MHS MS. Dept. A-15). Title: "Diagram of sub-surface construction of W stockade wall." January, 1938. Scale: ca. $\frac{3}{4}$ " = 1'. (Comments: This diagram is schematized, but gives a clear conception of the appearance of a cross section of the stockade trench line, and the use of horizontal logs to lock the palisade pickets into the trench).

Field notes, reports, etc.

1. "Report of Work at Grand Portage, 1936"; by Ralph D. Brown. (Read at the Minnesota Historical Society, October 12, 1936) (This paper contains 13 typescript pages; After a historical introduction of 4 pages, Brown devoted the remainder to a synopsis of events in the excavation project at Grand Portage, 1936. Although not as detailed as some other records, notably field notes, this paper is of value in interpreting the work at this site). (Hereafter cited as Brown, MS. 1936d). (On file in the MHS MS. Dept., FF604.2/.C89G8).
2. "Report of Work at Grand Portage, August 10-21, 1936," by Ralph D. Brown, August 31, 1936. This report is 4 pages in typescript. It contains a summary of Brown's work at the site from August 10-21st, 1936, and is of value in lieu of more detailed field notes. Hereafter cited as Brown, MS. 1936a). (On file at the MHS MS. Dept. BC8.1/.M665r).
3. "Report of Work at Grand Portage, Sept. 5 - Oct. 8, 1936," by Ralph D. Brown, October 19, 1936. This report is 5 pages in typescript. It contains a summary of the work of G. Hubert Smith and Allen Holmberg at the site within those dates, and is of value in lieu of more detailed field notes.

Hereafter cited as Brown, MS. 1936b). (On file at the MHS MS. Dept. BC8.1/.M665r).

4. "Report of Work at Grand Portage, Oct. 19-29, 1936." By Ralph D. Brown, November 10, 1936. It contains a summary of the excavations at the site for those dates, and is of value in lieu of more detailed field notes. Hereafter cited as Brown, MS.1936c). (On file at the MHS MS. Dept.; FF604.2/.C89G8).
5. (MHS MS. Dept. No. BG8.1/.M665r/Vol. 1). This is Brown's 1936 field notebook, "Field Book No. 1". A number of leaves have been removed from the front of this volume. pp. 29-30, list of 1936 photographs; pp. 31-35, blank; pp. 36-72, "Catalogue of objects found at Grand Portage in the course of excavations, 1936." On the inside rear cover there is a valuable sketch map of the general outline of the stockade. It is discussed fully as Map No. 4 under Maps. Hereafter cited as: Brown, 1936d.
6. "Miscellaneous excavation notes by Ralph D. Brown, 1936;" There are 17 pages in this sequence which were apparently copied in typescript from Brown's field notes. (MHS MS. Dept. BG8.1/.M665r, and FF604.2/.C89G8). These notes pertain to the stockade wall profiles; measurements on survey points and walls; characteristics of the wooden drain found

about 40' north of the East gate area; measurements of pickets; excavation progress on the stockade trench lines; statement of status of the Grand Portage stockade excavation as of September 27, 1936; miscellaneous correspondence relating to the excavations in 1936; and a list of slides used to accompany Brown's report of October 12, 1936.

Hereafter cited as: Brown, 1936e.

7. (MHS MS. Dept. No. BG8.1/.M665r/Vol. 2). "Field Book No. 2" (1936-37). pp. 1-9, Catalogue of 1936 materials, continued from Vol. 1; pp. 10-20, blank; pp. 21-32, notes on 1937 excavations; pp. 33-50, blank; pp. 51-60, description of features in gate section, "E and C"; pp. 61-64, blank; pp. 65-69, description of features in "B" Section; pp. 70-99, blank; p. 100, "Data for alignment of 1936 gate area base lines with 1937 base lines;" pp. 101-115, blank; pp. 116-118, Photographs, 1937; pp. 119-120, blank. Hereafter cited as: Brown, 1937a.
8. "Catalogue of Artifacts - Grand Portage - 1936", by Ralph D. Brown, January 13, 1937. Ca. 37 pages in typescript. Twenty-five pages list the artifacts recovered from June 10, 1936 to September 27, 1936. The remaining pages are title pages, and lists of the same artifacts by types. This data was transcribed from Items 5 and 7 above. Hereafter

- cited as: Brown, 1937b.
9. "Journal of Grand Portage Excavations, 1937," by Ralph D. Brown. This journal runs from September 3, 1937 to October 29, 1937. There are 12 pages in this sequence. There is also a list of features found in the SW corner of B Section, 1937, and a description of features in "the east gate area" or Corner G. Together they comprise 6 pages. These materials were transcribed from Item 7 above. Hereafter cited as: Brown, 1937c.
 10. "Revised Report of Archeological Work on the Site of the Northwest Company Post, 1936-37," by Ralph D. Brown, January 15, 1938. The report consists of 37 pages; two sketch maps are included. Hereafter cited as: Brown, 1938a.
 11. "The Building at Grand Portage", (The Great Hall) by Willoughby M. Babcock. A 7 page typescript paper by W. M. Babcock on the details for the reconstruction of the Great Hall. Cited as Babcock, 1938a.
 12. "The Grand Portage Stockade Project", by Willoughby M. Babcock. A 7 page typescript report paper by W. M. Babcock which summarizes the Society's work at Grand Portage up to October 10, 1938. Hereafter cited as Babcock, 1938b.

13. "The Grand Portage Stockade." by Willoughby M. Babcock.
A 5 page typescript report by Babcock which summarizes the Society's work at Grand Portage up to May 7, 1940. Hereafter cited as Babcock, 1940a.
14. "Rebuilding the Grand Portage Stockade; Some Problems in Historical Reconstruction," by Willoughby M. Babcock. A 9 page typescript paper by Babcock which summarizes the problems involved in the reconstruction of the Grand Portage Stockade." Presented at the American Association of Museums, Detroit, Michigan, May 22, 1940. Hereafter cited as Babcock, 1940b.
15. "Descriptive Catalog of Artifacts found at Grand Portage in 1936, and which were present in 1962," by Nancy L. Woolworth, April 1962. The artifacts recovered at Grand Portage in 1936-37 were left in storage at this site. Over the years they were disarranged and plundered. The surviving artifacts were cataloged in 1962 by Nancy L. Woolworth.
67 pp.
16. "Descriptive Catalog of Artifacts found at Grand Portage in 1937, and which were present in 1963," by Loren C. Johnson. 39 pp.

Photographs. Fortunately, there are numerous photographs of the 1936-37 excavations at this important site. Ninety

mounted and identified photographs relate to the 1936 excavations; eighty-four mounted and identified photographs relate to the 1937 excavations. These materials are filed with Brown's other records of the project in the MHS MS. Dept. as: BC8.1/.M665r.

Numerous other photographs relating to excavations at the site are filed in the MHS Picture Department, as are all of the negatives from this project.

EXPLANATION OF PLATES

Plate 1

The site. a, The site from Mount Rose. Hat Point is on the horizon. The Cook County Historical Society museum building is in the center. View is northeast. May 9, 1936. b, The northwestern, northeastern, and southern portions of the site as viewed from Mount Rose. Brown's "cross trenches" along the northern portion of the western palisade trench line are in the lower right hand corner of the photograph. View is northeast. June, 1936.

Plate 2

The site. a, A ground level view of the northwestern portion of the site. The western palisade trench line is in the center foreground. May 9, 1936. b, A ground level view of the western portion of the site. The western palisade trench line is being exposed. The road which ran across the southern part of the site is in the foreground. Mount Rose is in the background. View is west. June, 1936.

Plate 3

The palisade trenches. a, The furrow marking a portion of the western palisade trench line is in the lower portion of the photograph. View is southeast toward Lake Superior. May 9, 1936. b, A path cleared through heavy brush along the course of the eastern palisade trench line. View is southeast. June, 1936.

Plate 4

The palisade trenches. a, A portion of the furrow marking the course of the northern palisade trench line. View is northeast.

June, 1936. b, A cross section of the western palisade trench line. The outline of the trench can be seen in profile. It was about two feet wide and three and one half feet deep. June, 1936.

Plate 5

Excavation techniques. a, The North-South exploratory trench. View is northwest looking toward Mount Rose. September, 1936. b, An East-West exploratory trench excavated on the 100 South line. View is southwest. September, 1937.

Plate 6

Excavation techniques. a, Excavations in the "east gate area". View is northeast. August, 1936. b, A profile of the "east gate area". Profiles of trench outlines are shown. October 4, 1937.

Plate 7

Wooden structural remains. a, Parallel horizontal support timbers in the palisade trench line. They held the vertical pickets in a vise like grip. August, 1936. b, A portion of the drain trench. It was found about 40 feet north of Corner G. September, 1936.

Plate 8

Wooden structural remains. a, Horizontal and vertical timbers found in a palisade trench before cleaning. June, 1936. b, Vertical picket butts as found in a palisade trench. June, 1936.

Plate 9

Wooden structural remains. a, Ralph D. Brown and G. Hubert Smith holding one of the better preserved palisade pickets. September, 1936. b, Detail of a palisade picket and a tie beam. October 28, 1937.

Plate 10

Wooden structural remains. a, A spruce "gate post" 18 inches in diameter. It was found in the "east gate area". June, 1936. b, Profile of decayed post butts in the "east gate area". East profile, Square OS/120E. September, 1937.

Plate 11

Stone foundation walls. a, Southern foundation wall of Structure No. 6. The eastern portion of the wall was formed of slate slabs laid in courses. The western portion of the wall was composed of round field stones. View is southwest. October 7, 1937. b, Northern wall of the Great Hall. It was made of squared slabs of slate from Mount Rose, and was 95 feet in length. View is southwest. September, 1937.

Plate 12

The Great Hall. a, A corner detail within the Great Hall near the center of the eastern end of the building. Note the burned boulders and ash. View is southeast toward Lake Superior. September 5, 1938. b, Stone platform or base measuring 7 by 9 feet; found near the east center of the building. It probably served as a fireplace footing. View is southeast. September 5, 1938.

Plate 13

Stone structural remains. a, A "stone mound" in the northwestern portion of the stockade enclosure. (Structure No. 7). View is southwest. September 15, 1937. b, A possible stone fireplace. It is probably from Structure No. 15 which was found in the north central portion of the stockade enclosure. September 15, 1963.

Plate 14

Fireplaces. a, Detail of a fireplace (Feature A-1) which was the eastern fireplace in Structure No. 6. It was formed of coursed slabs of slate from Mount Rose. September 14, 1937. b, Detail of a fireplace (Feature A-3) which is the western fireplace in Structure No. 6. It was made of natural boulders and slate slabs. The western wall of this building is in the lower right portion of the photograph. View is southeast toward Lake Superior. October 12, 1937.

Plate 15

Fireplaces. a, Detail of a fireplace found in an exploratory trench along the 100 South line. (Structure No. 8). View is northwest. September 21, 1937. b, A fireplace (Feature B-26), found in the northern wall of Structure No. 9. October 22, 1937.

Plate 16

Structural features. a, Well found at the rear of the Great Hall. Vertical wooden cribbing is visible to the left of the workman. View is northeast. October 25, 1937. b, Wooden door found in the cellar of Structure No. 13. This door measured about 39 inches by 7 feet. October 13, 1937.

Plate 17

The excavations. a, The northern portion of the site from Mount Rose. View is east. August, 1936. b, General view of the excavations from Mount Rose. View is northeast. April 15, 1938.

Plate 18 (Personal Possessions)

Top Row: Numbers 29 - 14 and 391, oval fire steels. Numbers 433 and 173, "D" shaped fire steels. Numbers 443 and 239, "O" shaped fire steels.
 Second Row: Numbers 288, 73, 16 - 5, 371 and 29 - 17 are razors. Numbers 35 - 4, B, and C, are clasp knives.

Plate 19 (Personal Possessions)

Top Row: 1st item, a shoe buckle, no provenience. Numbers 4, 29 - 19 and 12 are shoe buckle fragments.
 Second Row: Numbers 8 - 8, 62 - 22, 39 - 12, 48 - 18, 361 and 336 are shoe buckle fragments.
 Third Row: Numbers 299 (?), 445, 32 - 9, 21 - 4 and 61 - 2 are fragments of uniform suspender buckles.
 Fourth Row: Number 446, a brass jew's harp. Number 212 - 3, a slate pencil. Number 25 - 2, a copper clad glass inkwell.

Plate 20 (Personal Possessions)

Top Row: Numbers 10 - 2, 12 - 5, 12 - 6, 12 - 7 and 18 - 6 are buttons.
 Second Row: Numbers 19 - 6, 28 - 14, 32 - 5, 44 - 2, 42 - 10, are buttons.
 Third Row: Numbers 158, 343, 365, 366, 385 and 459 are buttons.
 Fourth Row: Numbers 25 - 26, a whittled pipe stem (clay). Numbers 35 - 28, and 61 - 4 are pipe bowls with shortened, whittled stems (clay). Numbers 3 - 10, clay pipe bowl fragments with oak leaf decoration. Numbers 216 - 1, clay pipe

bowl fragments with embossed stand of arms. Numbers 32 - 35, clay pipe bowl fragments with embossed fluting. Fifth Row: Numbers 32 - 68, a red-painted clay pipe stem fragment. Numbers 32 - 40, 35 - 29, 48 - 22, and 135 - 9; clay pipe bowl fragments with T D brand. Numbers 28 - 15, clay pipe bowl fragment with "-ADDELEY" brand. Numbers 44 - 13, 36 - 36, 37 - 75, 38 - 24, 62 - 25; scored clay pipe stems. Numbers 123 - 1, 26 - 19, 26 - 18 and 26 - 20 are clay pipe bits. Bottom Row: 63 - 18, GW pipe stem (clay). No provenience, clay pipe bowl with GW brand. Number 358, ceramic marble.

Plate 21 (Building Hardware)

Numbers 481 and 482, iron strap hinges. Numbers 29 - 12, 28 - 4, iron strap hinges with rose head nails in situ. Numbers 28 - 12, 36 - 13, 12 - 13 are light copper hinges. Numbers 404 and 384 are two part welded pintles. Numbers 22 - 4, 136, and 49 - 2 are single piece pintle pins. Number 229 is a hook eye for door.

Plate 22 (Building Hardware)

One shutter fastener (no number).

Plate 23 (Building Hardware and Fastening Devices)

Numbers 381, 49 - 6, 363 (?), and 9 - 3 are iron staples. Number 15 - 3 is an iron staple with attached ring. Number 29 - 2 is a rose head nail hammered into a loop. Number 8 - 4 is a horseshoe nail. Number 11 - 2, a rose head nail wrapped with round iron wire. No numbers; chisel pointed rose head boat nail. Number 470 is a clout nail. Numbers 310 and 353 are chisel pointed spikes. Number 179 and 37 - 4 are copper rivets. Numbers 12 - 85 and 210 are iron screws. Also on this plate is a series of rose head nails showing the graduated size range.

Plate 24 (Building Hardware)

Numbers 427, 322, 321, 248, 32 - 8, are lock mechanisms. Numbers 48 - 4, and 55 - 3 are key hole cover plates. Numbers 32 - 4, 29 - 9, and 286 are keys. Number 287 is a lock bolt.

Plate 25 (Building Hardware)

Numbers 62 - 2, 62 - 3, 28 and 208 are iron links. Number 426 is a bolt latch. Number 4 - 3 is a latch bar keeper with rose head nail in situ. Number 45 - 3 is a copper latch bar keeper. Numbers 114 and 50 are latch bar keepers. Numbers 426 and 62 - 24 are trunk hasps. Numbers 36 - 7 and 123 - 20 are iron door hooks. Numbers 29 - 8 and 475 are bolt link eyes. Number 48 - 5 is an open end lap repair link.

Plate 26 (Building Hardware and Tools)

Number 487 is a crude hand made hoe. "? 1937" is a door handle with thumb latch probably from the 1937 excavations. Number 485 is one of the few iron axes recovered from the site.

Plate 27 (Tools)

Number 403 is a triangular file. Number 111 and 8 - 34 are 2/3rds round iron files. Numbers 48, 34 and 34 - 4 are round iron rasps. Numbers 49 - 5, 37 - 9, 265, 47, 39 - 7 and 1 are flat files. Numbers 395, 4 - 4, and 311 are flat rasps. Numbers 467 and 21 are modified files.

Plate 28 (Saws)

Tools. Saws.

Plate 29 (Tools, Miscellaneous)

Number 22 is an ice chisel. Number 37 - 5 is a light forging hammer. Number 100 is an open end wrench. Number 6 is a cold chisel. Number 25 - 7 is a forming chisel. Numbers 129 and 222 are plane irons. Number 34 - 2 is a small iron hold down nail. Number 43 - 3 is a fragment of scythe.

Plate 30 (Miscellaneous Metal Objects)

Numbers 29 - 11, 20 - 4, 367, 17 - 6, 8 - 16, and 29 - 10 are unidentified metal objects. Number 295 is a fragment of trap spring. Number 196 is a froe manufactured from trap spring. Number 220 is a froe. Number 212 is an ice creeper. Number 38 is a piece of strap iron with rivet. Number 128 is a wagon tongue re-inforcing plate.

Plate 31 (Cutlery and Tableware)

Number 20 - 31, handle for fork or spoon. Number 183, spoon bowl. Number 319, two tined fork. Number 25 - 8, bent knife. Number 108, knife handle. Numbers 48 - 12, 63 - 5, 8, 36 - 6, 62 - 6, are knife blades. Number 49 is a tip of large knife. Number 12 - 78 is a knife blade with round tang. Number 33 - 2 is a modified knife blade. Number 39 - 11 is a tang and fragment of knife blade. Numbers 13 - 24, and 51 - 2 are scissors. Number 175 is a tip of a large shearers.

Plate 32 (Cutlery and Personal Possessions)

No numbers; no provenience, 13 knife blades and 1 razor.

Plate 33 (Kitchen Ware)

Number 326 is a spatula. Numbers 62 - 21, 273, and an unnumbered bung tap (all bung taps). Numbers 138 and 167 are pot hooks. Numbers 251, 53, and 312 are handles from drawers. Number 59 - 2 is an iron strap door handle.

Plate 34 (Glass Bottles)

Numbers 331; 25 - 38 and 303; lime green blown glass medicine bottles with wide flared lips. Late 1700's and early 1800's. Reference source: McKearin's American Glass, plate 242, No. 9, p. 431. Number 56; neck of clear glass medicine bottle. Flare lipped, c. 1840 - 1860 (?). Number 57; neck of clear glass blown medicine bottle. Applique round mouth forming flare of lip. c. 1800 to 1830. (?) Numbers 93; 54 - 67; and 270; No. 93: mouth, neck and shoulder of square gin or rum bottle. Late 18th or early 19th century case bottle. Reference source: American Glass, no. 7; plate 223, p. 430. No. 54 - 67: lip and neck fragment from a dark olive green blown glass bottle probably of the case type. Similar to No. 93. No. 270: bottom from old blown dark olive green color bottle. Probably a case bottle used for rum or other spirits. American Glass, plate 223, Nos. 4, 7 & 9, p. 430. Number 275; mouth and neck fragment of dark green color blown glass bottle. Crude laid on ring at lip. Atypical type, probably dating 1792 - 1810. Number 453; mouth and lip of dark olive green blown glass bottle. Crude rounded applique ring just below lip similar to type 8. American Glass, plate 221, p. 424. Dating c. 1770 to 1790. Number 237; neck and mouth fragment of round dark olive green blown glass bottle with laid on ring just below lip. c. 1760 - 1770. American Glass, type 7, plate 221, p. 424. Number 191; bottom of dark olive green blown wine or spirit bottle. A slight kick-up indicates date c. 1840-1860. American Glass, type 12, plate 221, p. 424. Number 58; bottom of round, dark olive green blown glass bottle. Medium kickup indicates period c. 1820 - 1830. Type 11, plate 221, p. 424, American Glass. Number 46 - 7; bottom of blown dark olive green wine or spirit bottle. High kick-up indicates period c. 1760 - 1770. American Glass, type 7, plate 221, p. 424.

Plate 35 (Glass Bottles and Tumbler Bottoms)

Numbers 20 - 15; 452; and 50 - 14; mouths and necks of small bottles. They have tooled necks with broad rounded collars. The upper ring is larger than the lower. Dating from 1850 to 1880. See examples no. 19, plate 259 and no. 9, plate 260 for examples of mouth type; American Glass. Number 185; small

necked bottle probably of medicine type. Small appliqued rim on lip. Probably dates c. 1840. Number 274; neck and mouth of wide flare lip bottle similar to No. 56 on plate 40, Grand Portage collections. Number 242; mouth of an appliqued, flared lip bottle similar to No. 57, plate 40, Grand Portage collection. Number 79; neck and lip fragment of a dark lime green flared lip blown bottle probably dating c. the late 1700's and early 1800's. Number 268; stopper for bottle clear glass blown and moulded with ground glass base. Lozenge shaped top. Probably dating from early 1800's. Number 12 - 15; fragment of neck of frosted ground glass blown bottle with a wide flared lip. Probably dates from early 1800's. Numbers 18 - 22 & 18 - 20; fragments of light lime green non-flint glass, probably from a pitcher. Thistle pattern glass. Reference: Plate no. 749, p. 71 of Early American Pattern Glass by Alice H. Metz; also, Americau Glass, p. 444, plate 244. Number 302; bottom of a small round light bluish-green, mould blown bottle, probably dating c. 1820 - 1840. Numbers 243 and 369; bottoms of clear mould blown square glass bottles. c. 1840 - 1860. Numbers 60 - 23; 245 (?); 271; 308; & 392 (?); lead or flint glass. These tumbler bottoms are of a good clear lead glass. The exterior base of each bears a pontil mark. It is probable that they were not made before 1750, however, the terminal date of their manufacture must remain open. Their average capacity would have been from 3 to 4 ounces predicated upon base diameter and degree of flare.

Plate 36 (Glazed earthenware and beads)

Number 64 - 1 consists of 96 white seed beads, average 6 mm diameter; 17 white cane beads, 7 mm diameter; 130 blue seeds, average 6 mm diameter; 10 transparent blue cane beads, 5 mm diameter; 5 black cane beads, 6 mm diameter; 19 grey seed beads, 5 mm diameter; 7 red brown seed beads, 5 mm diameter; 9 black seed beads, 5 mm diameter; 5 much eroded transparent green seed beads, 5 mm average diameter; 2 opaque white seed beads 4 mm diameter; 1 brown clay barrel bead, 6 mm diameter, 14 mm length; 1 brown clay barrel bead, 8 mm diameter and 16 mm length with turquoise blue inlay design. Number 61 - 2; 18 white seed beads, 4 - 6 mm diameter; 25 blue seed beads, 4 to 7 mm diameter; 1 grey seed bead, 5 mm diameter; 1 red brown seed bead, 5 mm diameter; 1 transparent light blue seed bead, 6 mm diameter; 1 white cane bead, 41 mm long, 9 mm diameter; 1 transparent medium blue seed bead, 5 mm diameter; 1 brown red cane bead, 41 mm long and 11 mm diameter; 7 white cane beads from 4 - 8 mm diameter, average length of 8 mm; 1 transparent blue cane bead 14

mm long, 6 mm diameter and 1 white wire wound barrel bead, 15 mm diameter and 15 mm wide. Number 195 - 7; 1 dark blue transparent glass cane bead with thin white stripes; 9 mm wide and 28 mm length; 4 white cane beads, average diameter is 6 mm; 8 white seed beads, 6 to 8 mm diameter; 2 turquoise blue seed beads, 6 mm diameter; 1 medium blue seed bead, 6 mm diameter; 2 clay beads, 1 is 44 mm length, 10 mm diameter, and the other is fragmentary, 34 mm in length, diameter is 12 mm, color is yellow-brown. Number 161 - yellow glass bead, round, light and dark sprigged blue design on it, 18 mm diameter and 17 mm long - not complete. Number 149 - barrel shape, white clay (ceramic) bead with blue incised sprig design, 16 mm diameter and 28 mm in length. Number 25 - 4; one half of a composite bead, split longitudinally, 5/16" in length; black with five green chips fused to the surface of the bead. 16 mm long and has a diameter of 10 mm. Number 61 - 12 - 1 copper dangle; trapezoidal 9/16" long; pierced at the apex. Number 468; small ring with glass (?) setting. Center stone looks like glass, clear with three small dark blue sets on each side, one missing. Could be brass or copper. Beneath numbers 61 - 12 and 468 on plate 39 there are 4 copper bangles pictured; reading from left to right they are No. 162 - 3; and No. 430; the center bangle is with its knotted leather suspending thong and is No. 22 - 3. The right hand bangle is No. 12 - 10. Lower half of plate 39 consists of pictured fragments of glazed earthenware as follows: Number 297 - soft paste sherds of porcelain cup or bowl. French over-the-glaze design of late 1700's early 1800's; rose and bee. Numbers 80-2; 463 - 26; 406 - 26; 80 - 4; 99 - 1; 203 - 4 and 59: off-white earthenware with blue English willow design. c. 1780 - 1880's. Slightly dimpled glazed enamel. Sherds from cups or bowls. Numbers 466 - 26; 50 - 10; 50 - 8; 181 - 3; 349 - 10; 99 - 2; 29 - 25; 185 - 4: English Lowestoft on soft paste porcelain; sherds of different patterns, c. 1757 - 1802. Numbers 49 - 17; brass re-inforcing lip used on china dish or bowl. Numbers 318 - 2; import "Blue China", c. 1820 - 1850. Soft paste porcelain. Parts of bowl or footed cup. Number 231; soft earthenware about the consistency of sun-baked clay, dip or slip glazed, grey with blue design, rim of crock, c. 1810 - 1860. Numbers 69; 45-4; fragments of wedgewood or French fine red ware. c. 1820-1830. Number 212 - 6; Bennington Ware, made in Vermont, c. 1830 - 1850's. Bottom of small bowl or crock. Brown salt glaze finish. Number 36 - 15; fine pottery with incised design. Probable English from early 1800's.

Plate 37 (Containers)

Number 32 is a kettle cover handle lug and an un-numbered copper kettle cover.

Plate 38 (Container Parts)

Number 292-44 is a sheet copper kettle lug. Number 25 - 10 is a fish tailed kettle lug. Numbers 290, 329, 202, and 23 are brass flange kettle lugs. Numbers 169, 24, 305, 234, and two un-numbered are tailed iron kettle lugs.

Plate 39 (Container Parts)

Numbers 19, 14 - 5 and 484 are copper kettle patches. Number 11 - 3 are formed and unformed copper kettle rivets.

Plate 40 (Trade Goods)

Numbers 17 - 7, 65 - 3, 49 - 3, 37 - 6, and 432 are off set double end awls. Number 214 is a fish hook. Number 284 is a fish spear tine. Numbers 57 - 3, and 6 - 3 are gimlet awls. Number 65 - 4 is an awl. Numbers 32 - 2, 301 - 1, 153, and 32 - 3 are bale seals.

Plate 41 (Fire arms components)

Numbers 61 - 1, 162, 188 - 1, 29 - 34 and 104 are gun flints. Number 296 - 38 is a lower vice jaw from flint lock cock. Number 466 - 23, is a musket muzzle. Number 26 - 2 is a musket ball. Number 406 is a brass ramrod keeper. Number 260 - 2 and an un-numbered piece are frizzens. Number 83 - 6 and an un-numbered item are frizzen springs. Number 402 is a flint lock lock plate with cock, frizzen and frizzen springs. Number 63-4 is a flint lock lock plate. Number 57 - 2 is a flint lock

trigger. Number 56 - 4 and an un-numbered item are trigger guard finials. Number 63 - 3 is a brass butt plate. Number 54 - 2 is a butt plate hatch cover.

Plate 42 (Firearms Components)

Number 172 is the breech section of a trade gun barrel. Number 424 is a fragmentary gun barrel. Numbers 213A, 213B, 285A and 285B are breech plugs from trade guns. Numbers 405, 444, and 193 are gun springs from trade guns. Numbers 283, 113, 46, and 402 are flintlock lock plates. Number 441 is a small lock plate probably from a percussion shotgun. Number 414 is a fragment of a Northwest trade musket "Serpent or Dragon" side plate. Number 315 is a silver ornament probably from a gun stock. Number 148 is a firearm trigger.

Plate 43 (Objects of native significance)

Number 48 - 38 is a bone hide scraper. Numbers 209, 48 - 6, and 29 are metal hide scrapers. Number 88 is a flat copper dish or tray. Numbers 163, 256 and 206 - 1 are bone cupping tubes. Number 176 - 2 is a bone awl. Number 212 - 9 is a fragment of mic - mac pipe bowl. Number 25 - 3 is a fragment of catlinite pipe stem. Number 212 - 3 is a scrap copper tweezers. Number 347 (?) sinker of catlinite like material. Number 423 is a block of catlinite like material. Numbers 436, and 37 - 74 are fragments of steatite. Number 49 - 7 is a modified trade spear.

Plate 1.



a



b

Two views of the site from Mount Rose



a



b

Two ground level views of the site

Plate 3.



a



b

Courses of the palisade trench lines



a



b

The palisade trenches



a



b

Plate 6.



a



b

Excavation techniques in the "east gate area"



a



b

Wooden structural remains



2



6

Wooden structural remains



a



b.

Wooden structural remains; details of pickets



a



b

Wooden structural remains; "east gate area"



a



b

Stone foundation walls



a



b

Stone structural remains; the Great Hall



a



b

Stone structural remains; structural sites

Plate 14.



a



b

Fireplaces; Structure No. 6



a



b

Fireplaces; Structures 8 and 9



a



b

Wooden structural remains; the well and a wooden door

Plate 17.



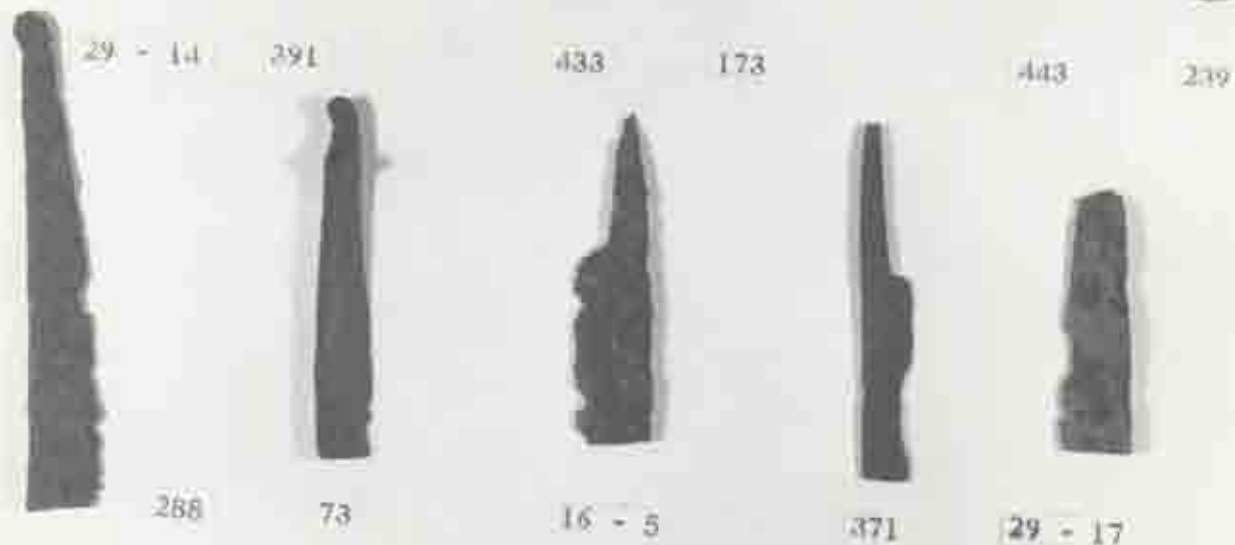
6



6

Views of the excavated site from Mount Rose

Plate 18



Personal possessions. Firesteels, razors, jack knives.

Plate 19



4

29 - 19

12



6 - 8

62 - 22

39 - 12

48 - 18

361

336



299 (9)

445

32 - 9

21 - 4

61 - 2



446



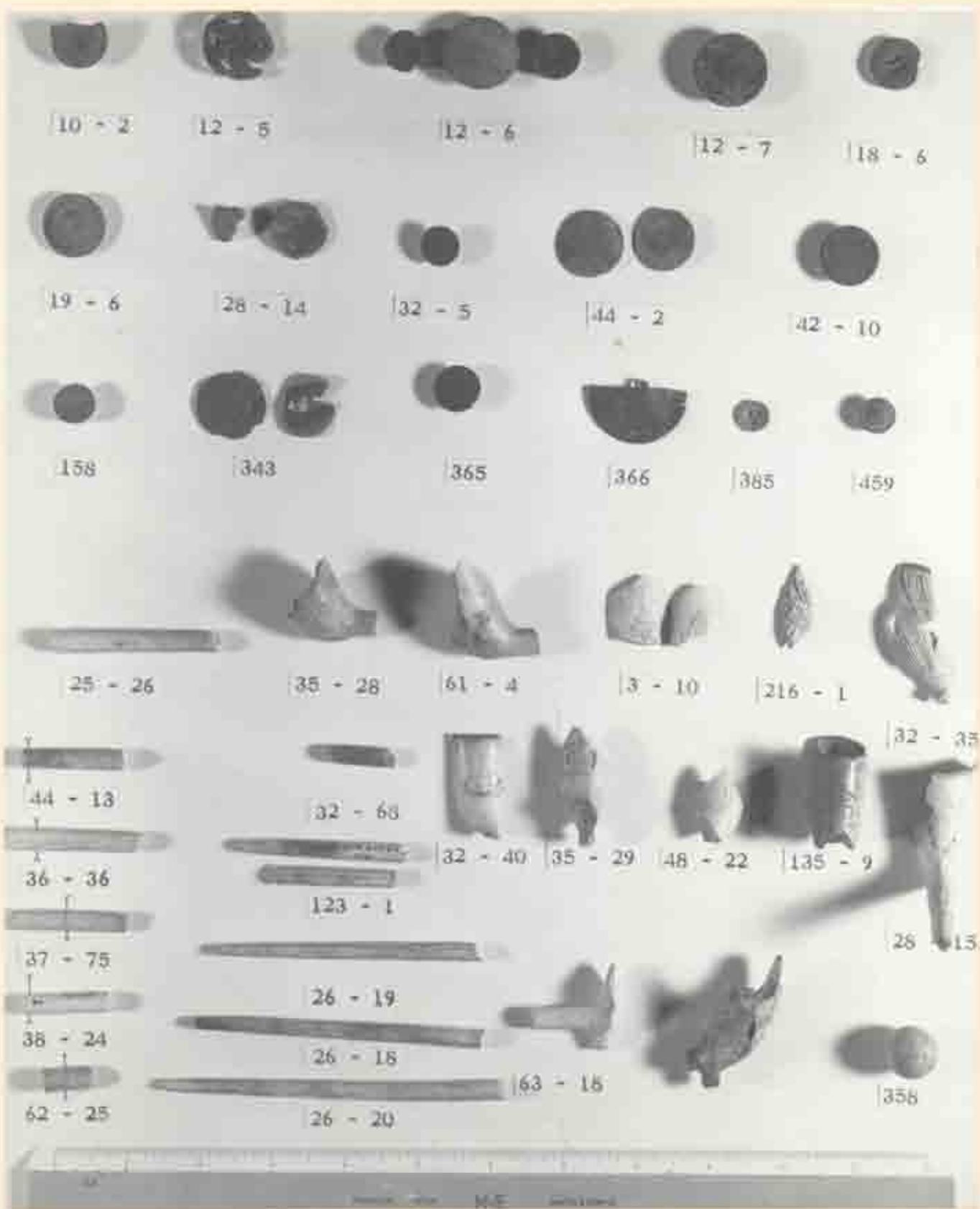
212 - 3



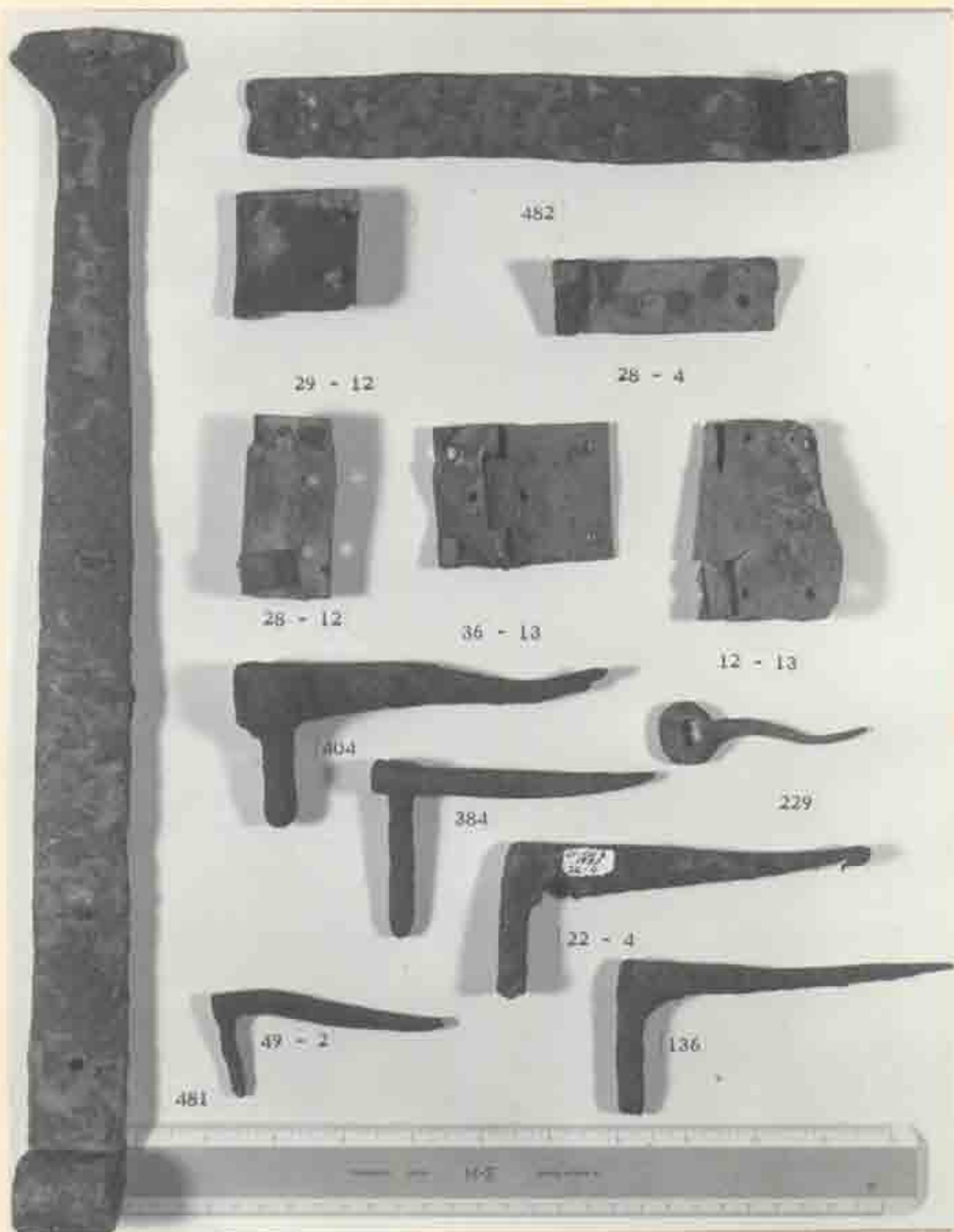
25 - 2

Personal possessions. Buckles, uniform buckles, jew'a harp, slate pencil, copper covered inkwell.

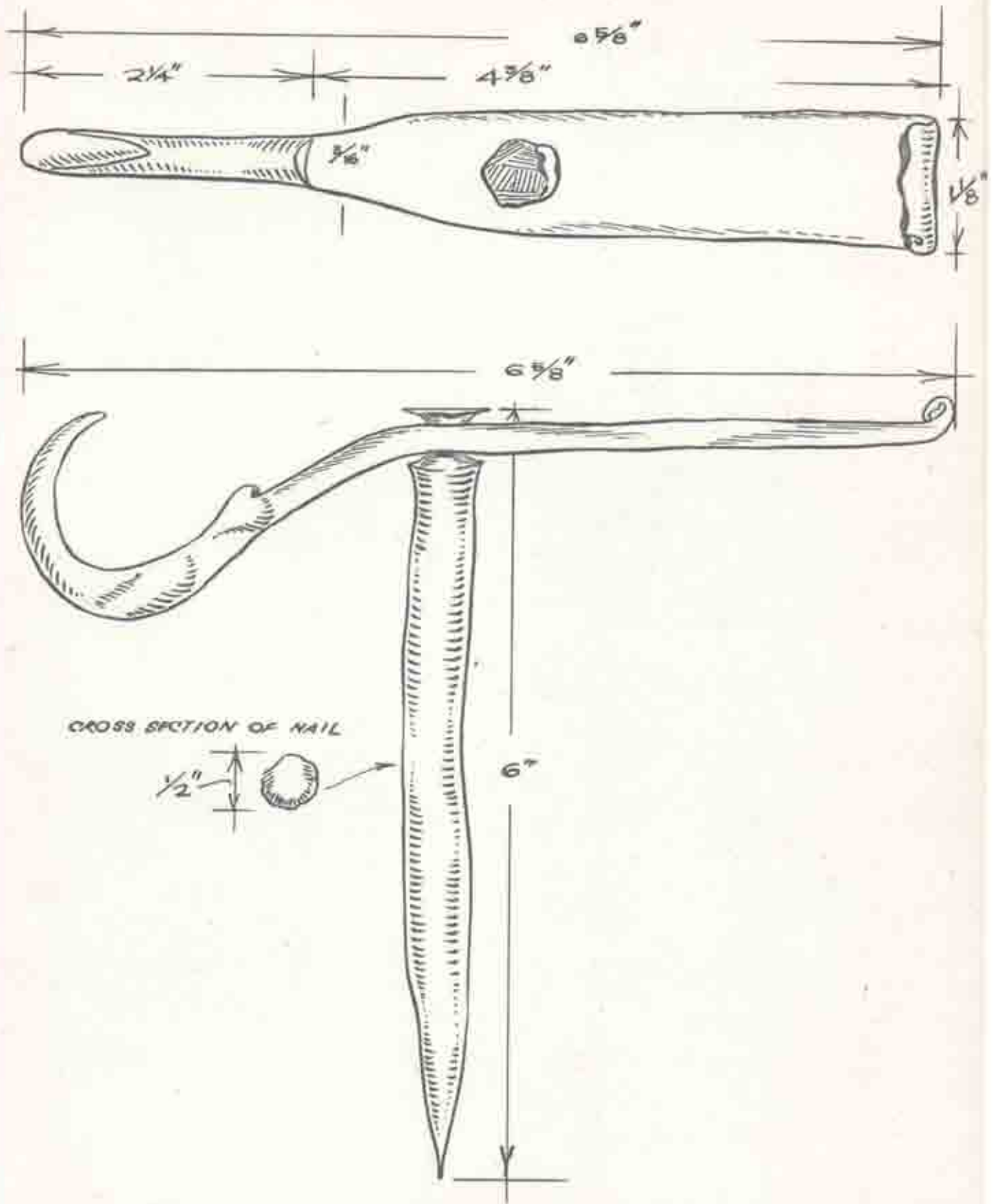
Plate 20



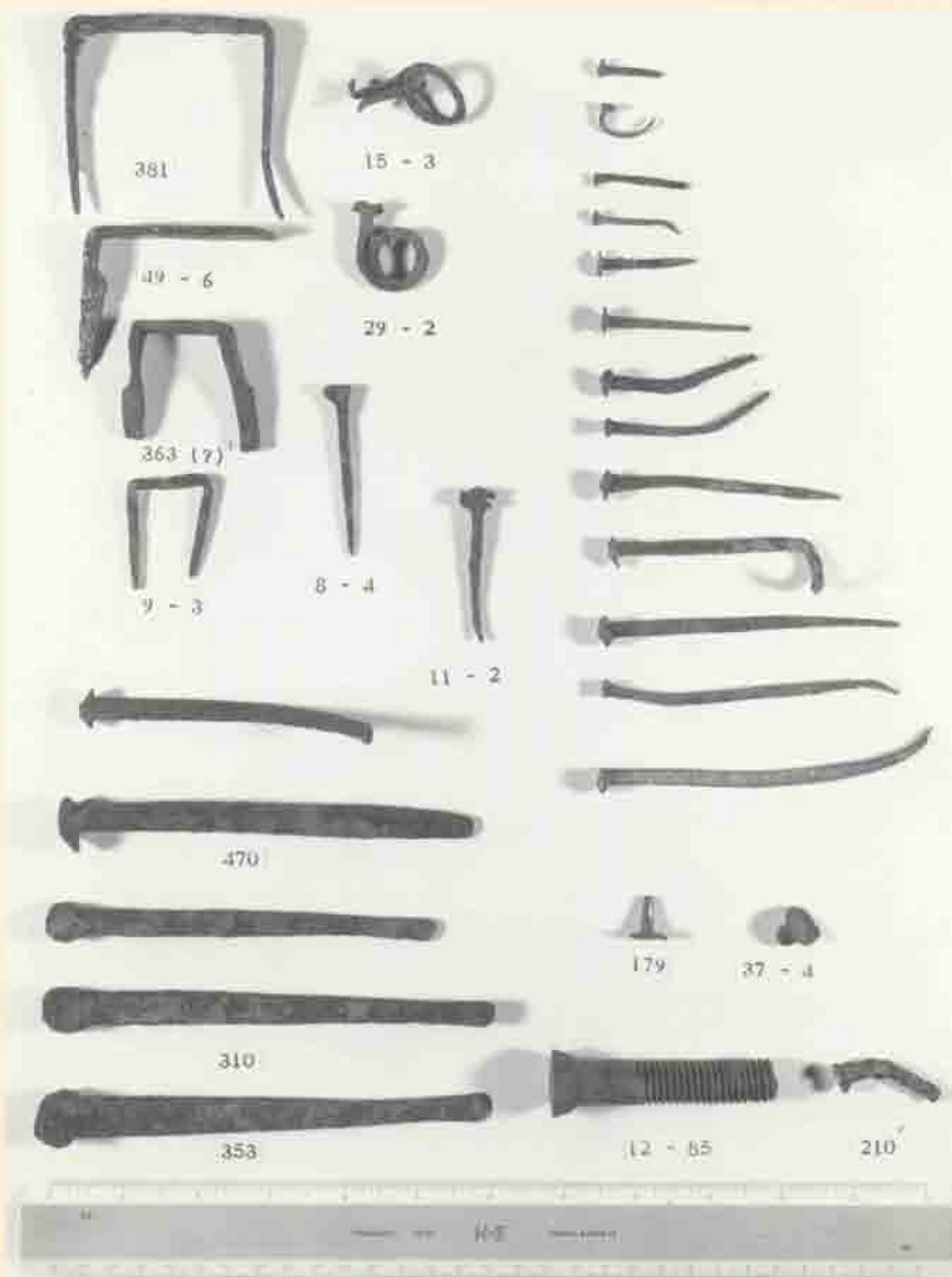
Personal possessions. Buttons, clay pipe stems and bowls.



Building hardware. Hinges, pintles, and a hook.



Building hardware. Shutter fastener.



Building hardware and fastening devices.
Nails, screws, and rivets.



427



48 - 4



32 - 4



322



55 - 3



29 - 9



286



321



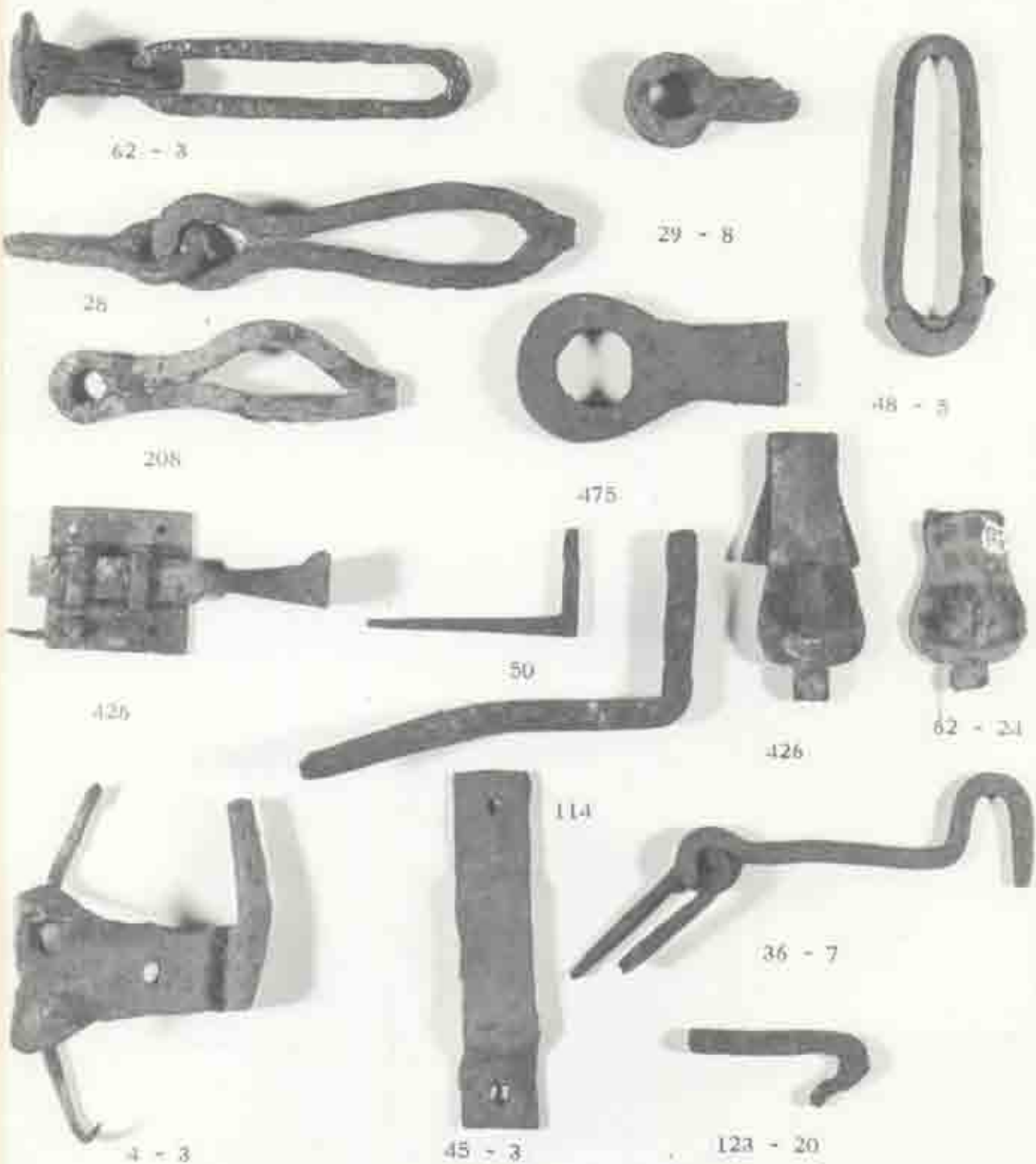
32 - 8



248

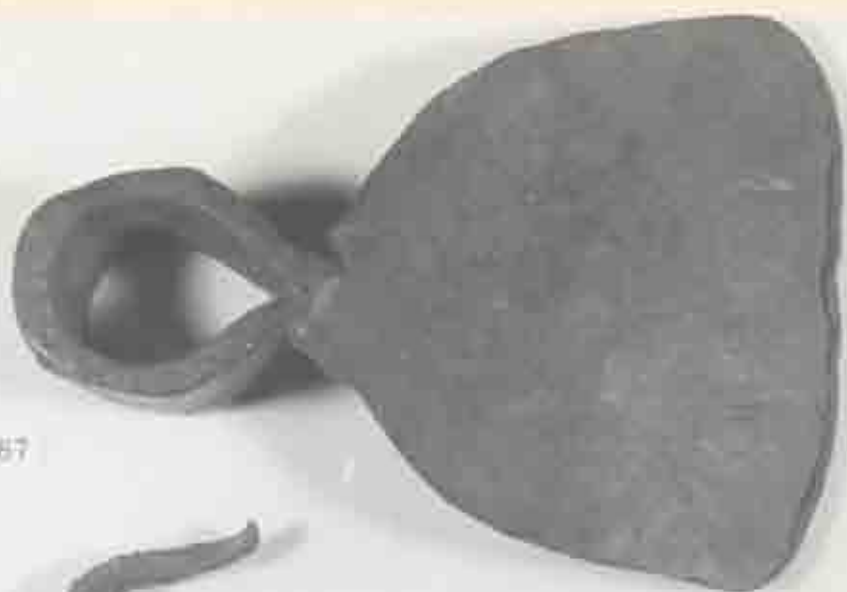


287



Building hardware. Chain links, latches, and hasps.

487



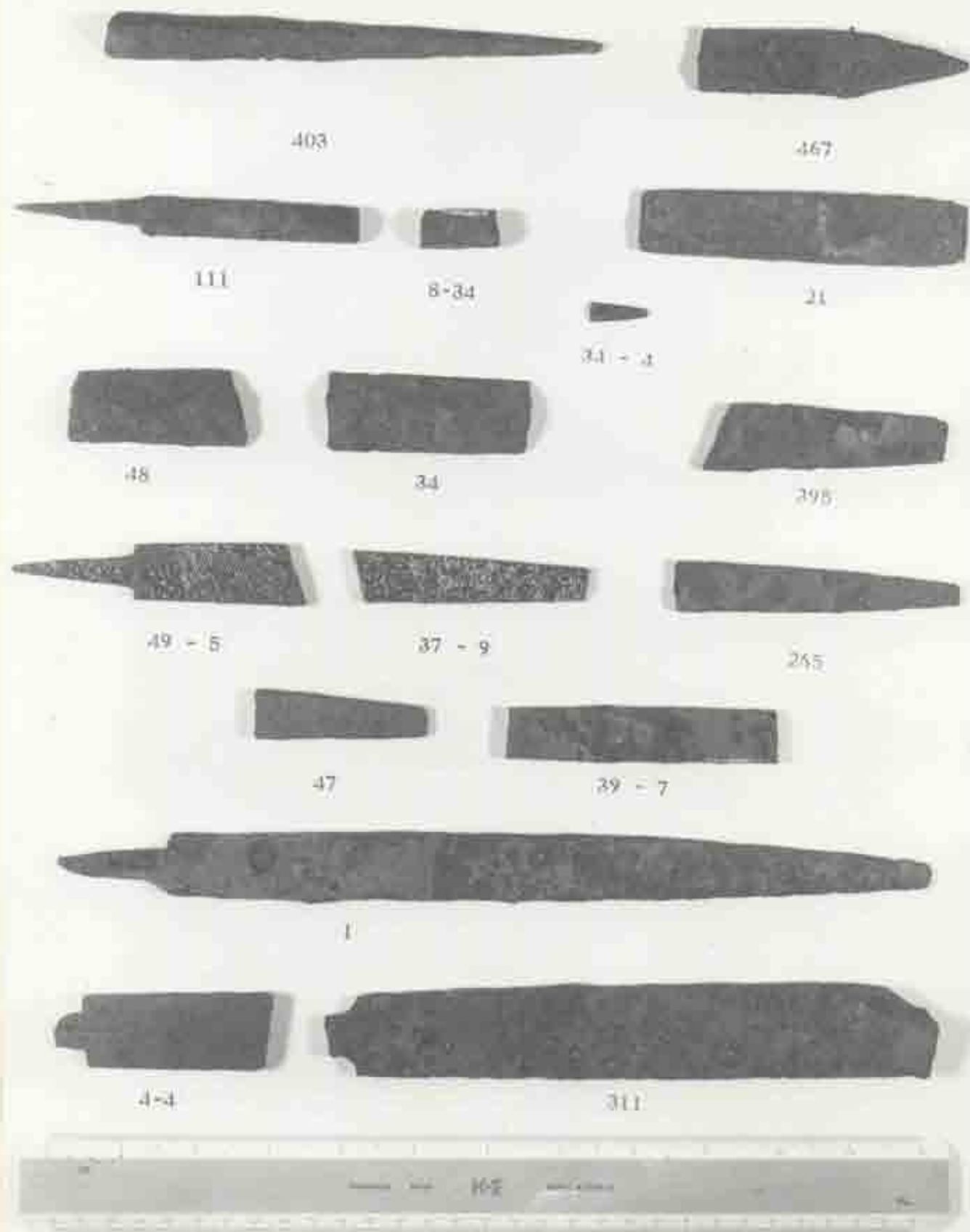
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488



Plate 27



Tools. Files and rasps.

Plate 28



38 - 9



41 - 6



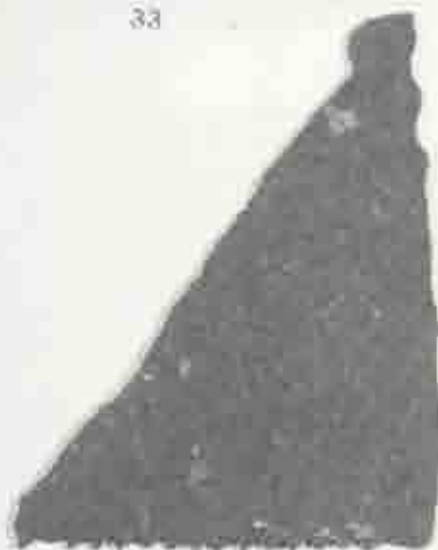
41 - 5



33



377



282 (?)

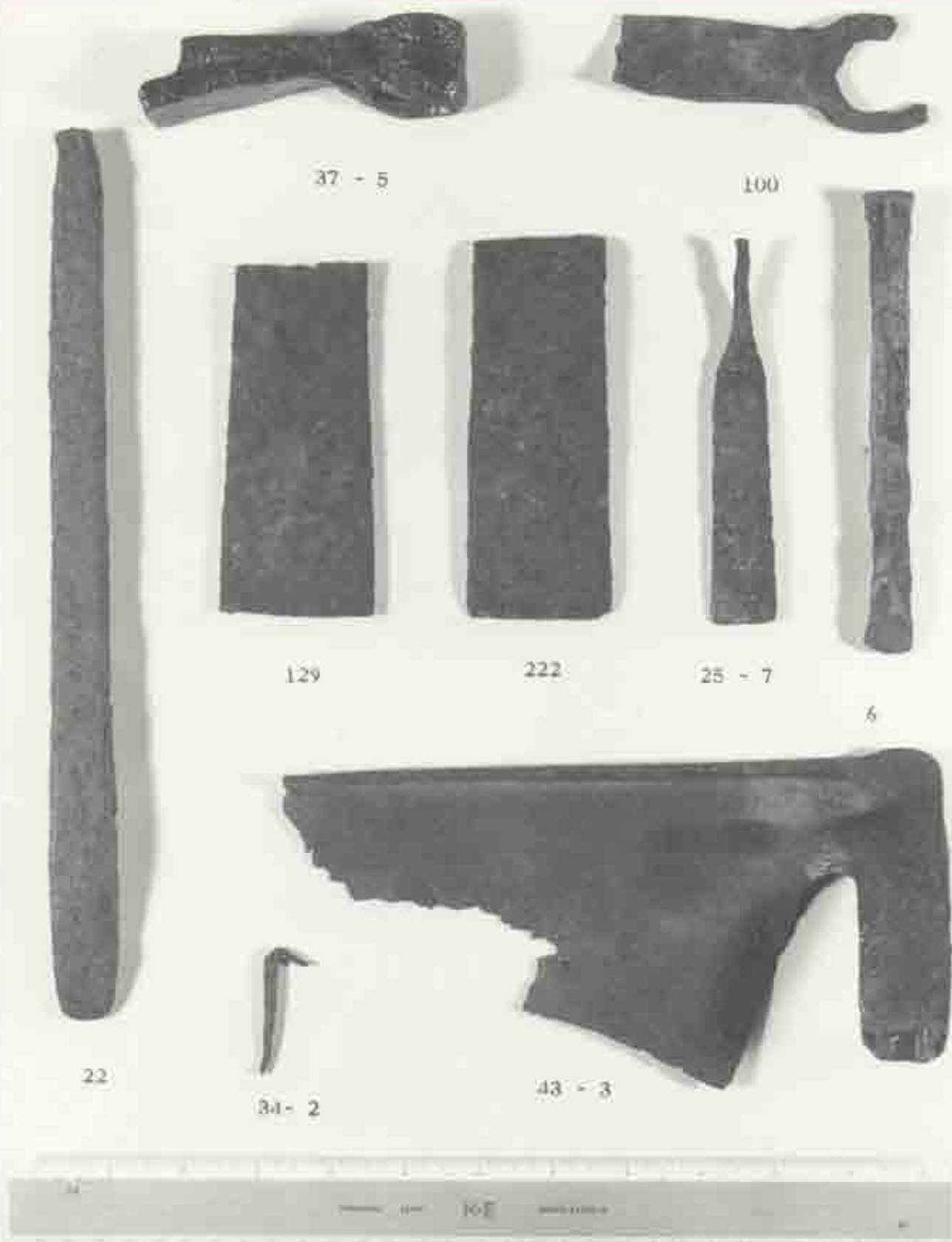


15 - 4



12 - 77





Miscellaneous tools. Ice chisel, forging hammer,
plane bits, and scythe.

Plate 30



29 - 11



20 - 4



367



17 - 6



295



8 - 16



196



29 - 10

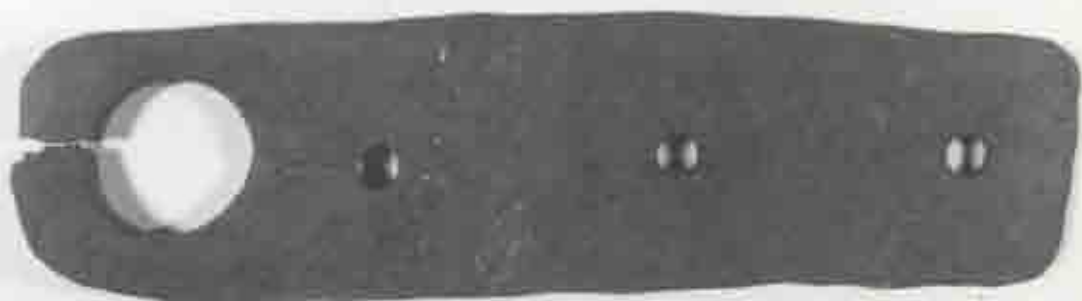
312



220



38

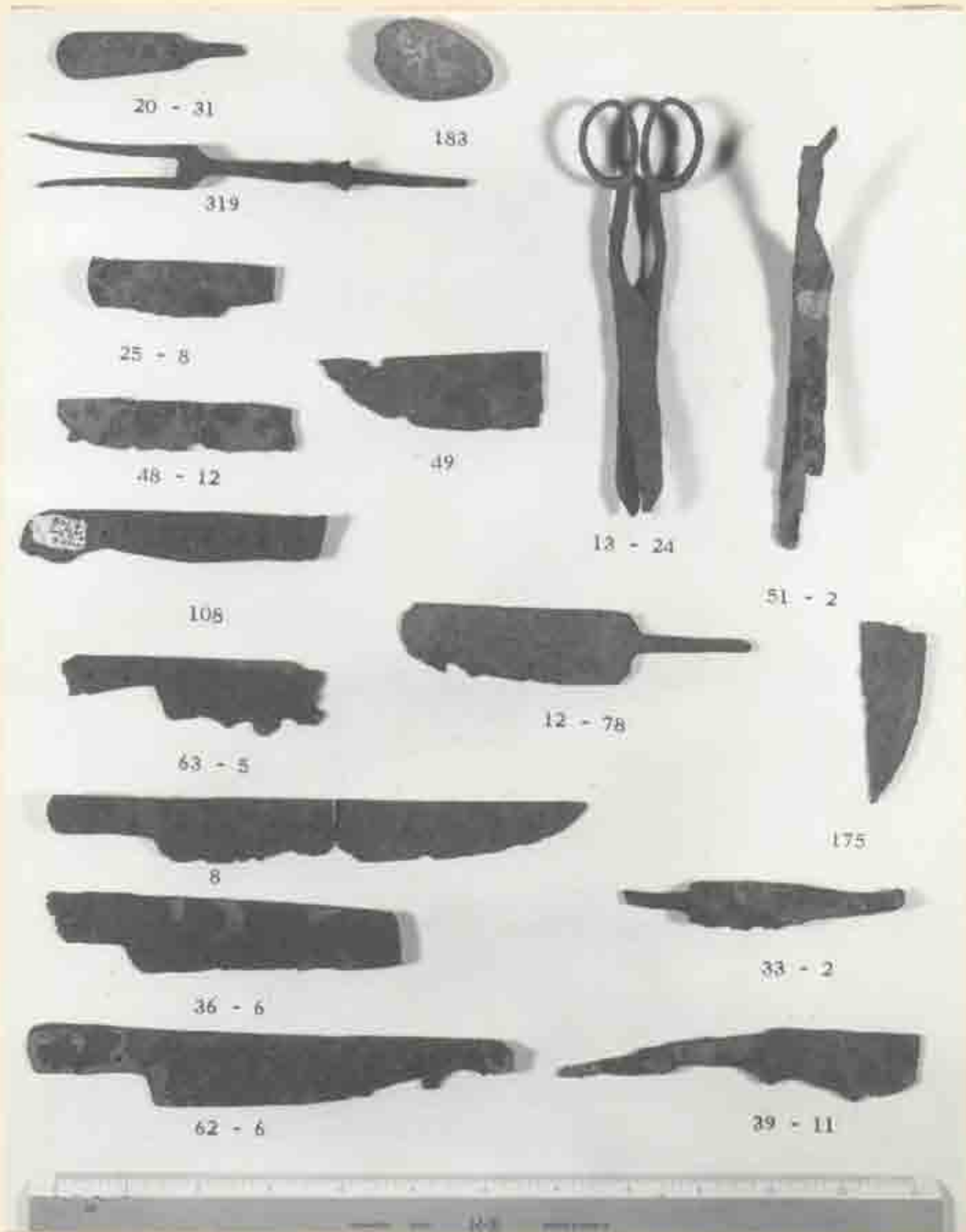


128



Miscellaneous metal objects.

Plate 31

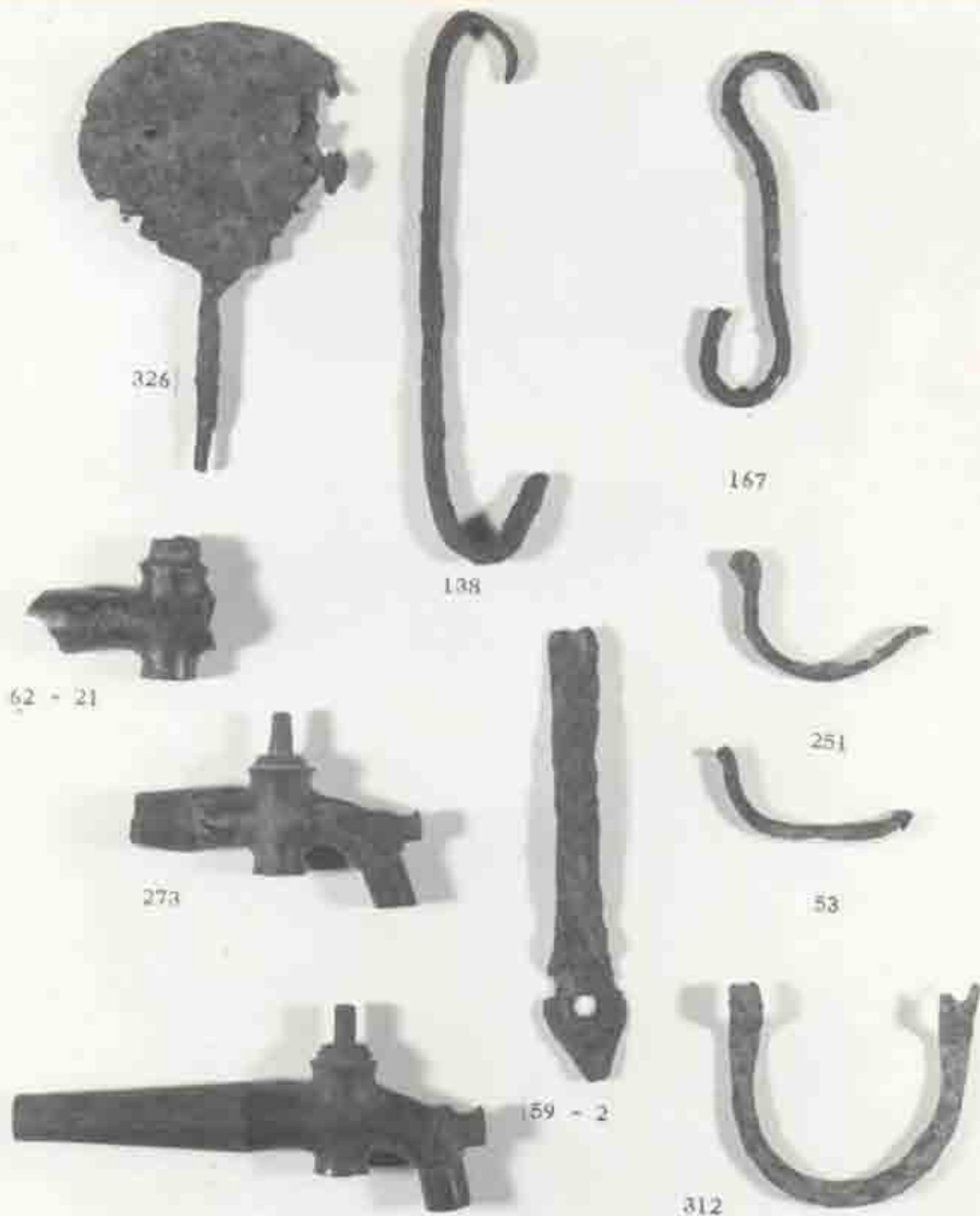


Cutlery and tableware. Spoon, fork, knives, scissors.



Outlery and personal possessions.
Knife blades and a razor.

Plate 33



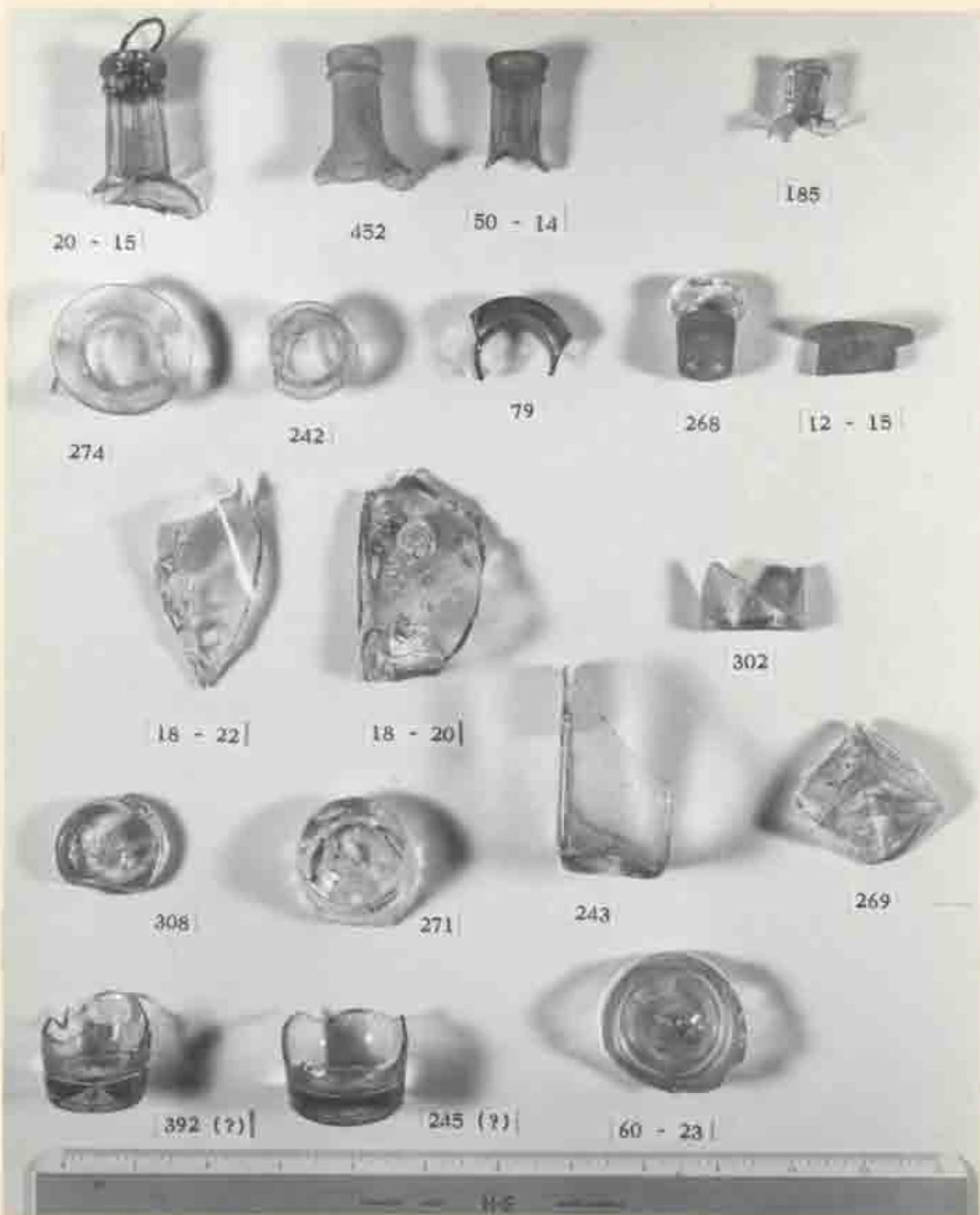
Kitchen ware. Utensils, handles, and bung taps.

Plate 34



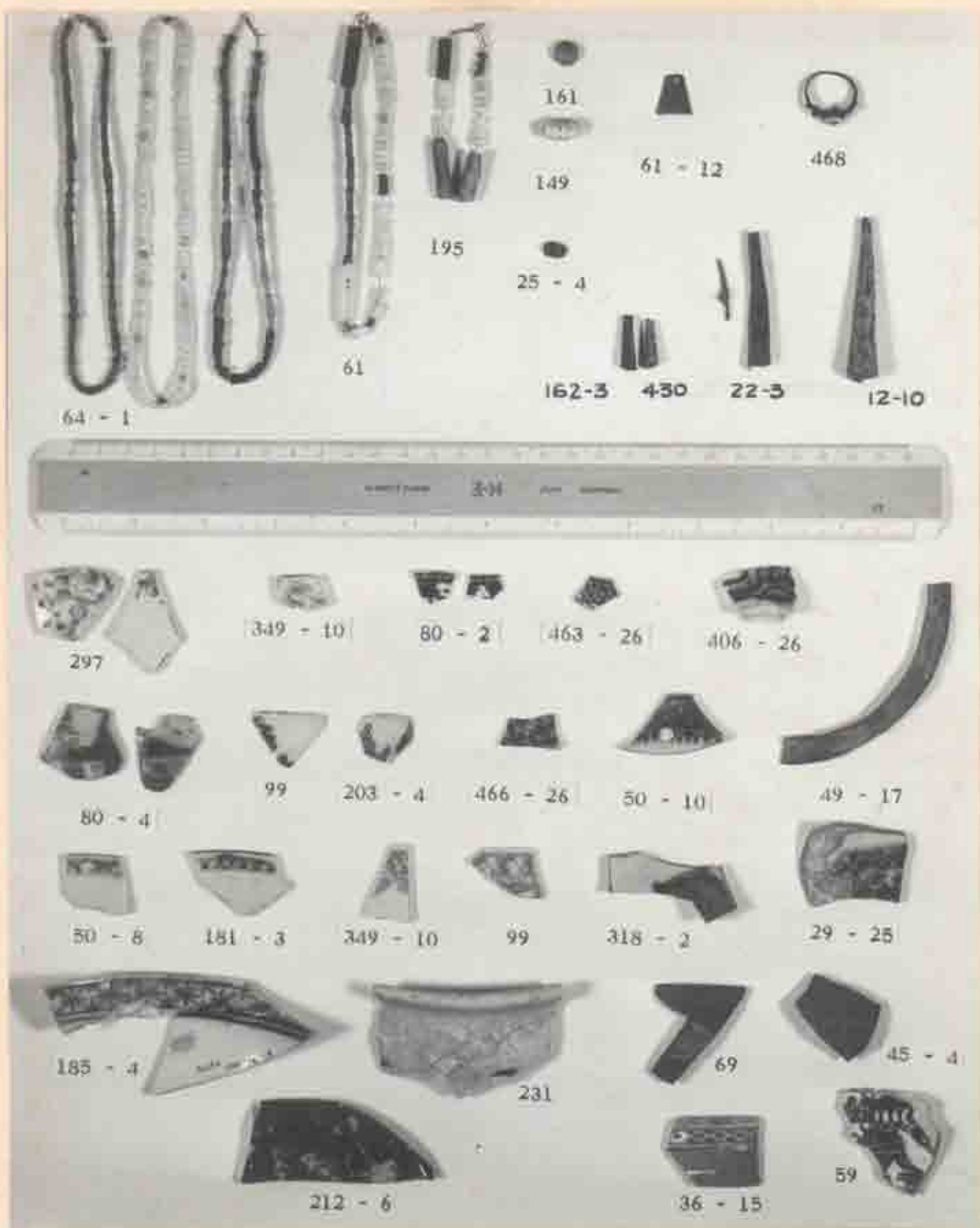
Glass bottle fragments.

Plate 35



Glass bottle fragments and tumbler bottoms.

Plate 36



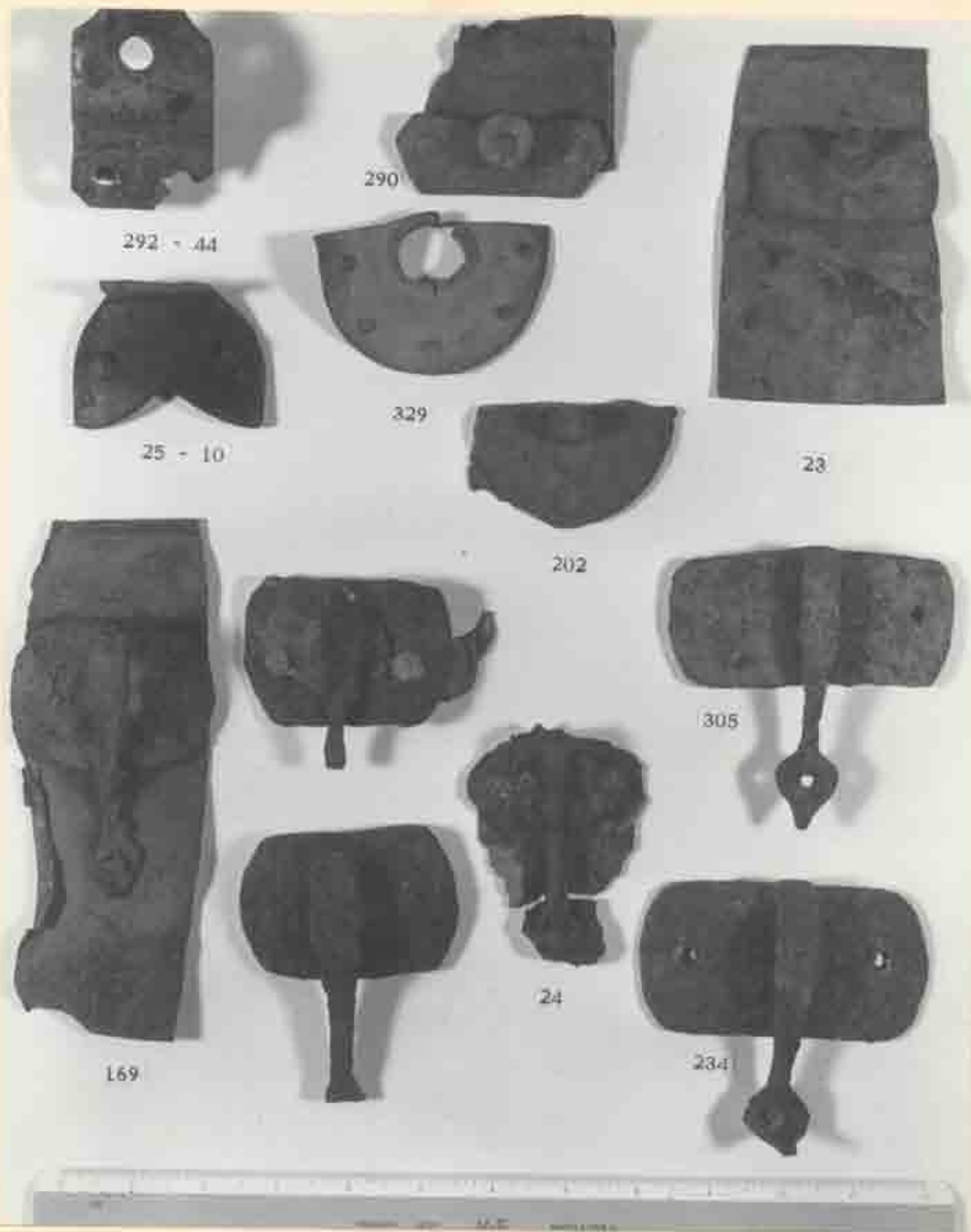
Glazed earthenware and beads.



32



Containers. Kettle cover handle and brass kettle cover.



Container parts. Kettle lugs.



19



14 - 5



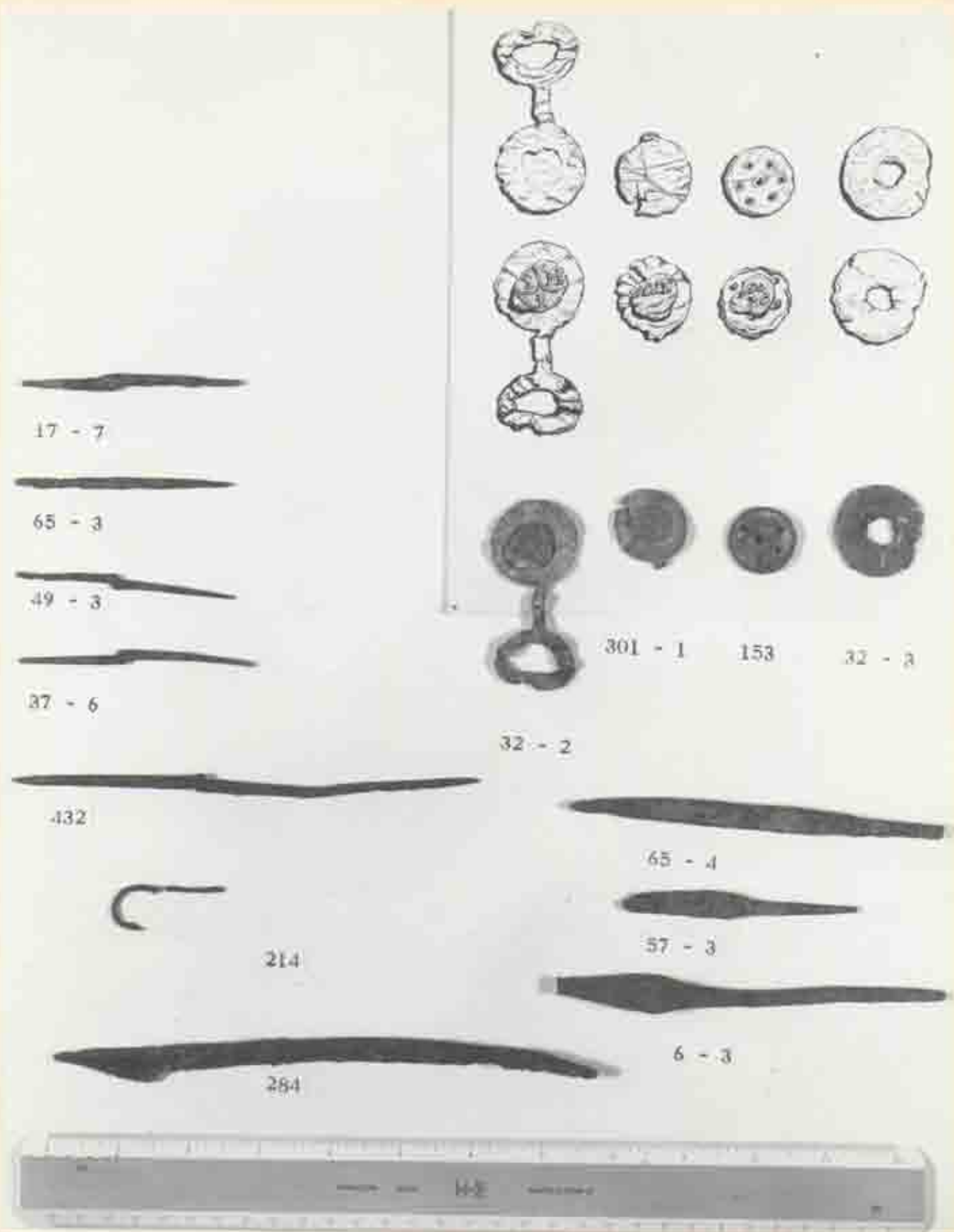
11 - 3



484

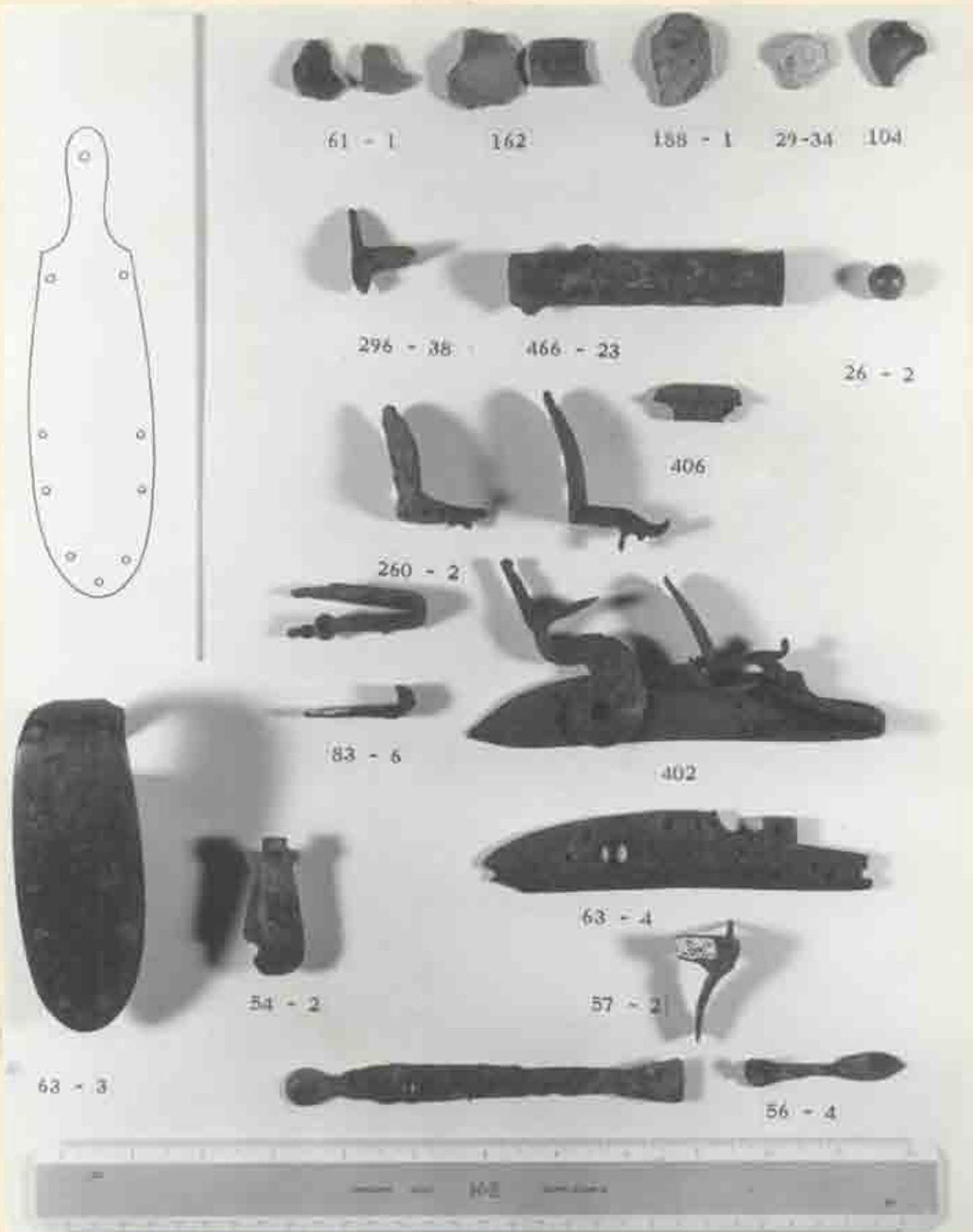


Container parts. Kettle patches and rivets.



Trade goods. Awls, bale seals, spear, fishhook, and gimlet.

Plate 41



Firearms components.



172



213 A |



283

121



213 B |



113



315



285 A |



46



285 B |



414



109



405



402



444



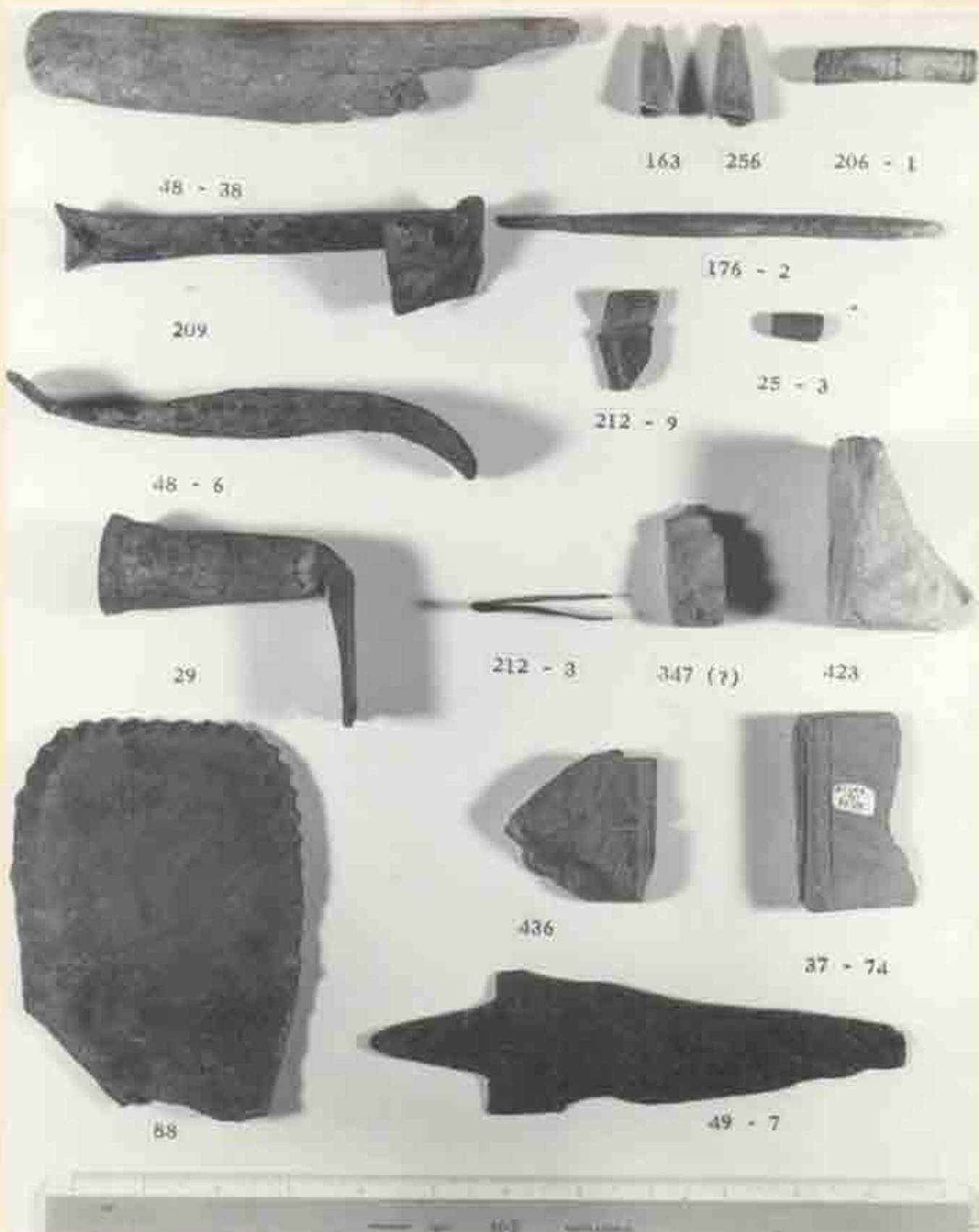
193



441

Firearm components.

Plate 43



Objects of native significance.

CATALOGUE OF OBJECTS FOUND AT GRAND PORTAGE

IN THE COURSE OF EXCAVATION, 1936.

(Revised and expanded for extant items, 1963)

CATALOGUE OF OBJECTS FOUND AT GRAND PORTAGE IN THE COURSE OF
EXCAVATION, 1936. (Revised and amended as articles on hand,
1963)

1936

- June 10
1. Flat iron file; mill bastard type; 1' long, depth 8" found west stockade wall.
 2. Copper Kettle bottom; 13" diameter; depth 8"; trench excavation.
- June 11
3. Ornamental iron piece with loops; 6½" long; has cast in letters on shank D R A (small bits of fabric adhering).
 4. Fragment of shoe buckle, original was about 3" x 2½" iron. Found in stockade trench.
 5. Discarded, 1936.
 6. Cold chisel; 6½" long, ½" shank. Found in excavation trench depth 13".
- June 12
7. Wooden wedge or pin, 8" long; depth 3'; from bottom of excavation in west stockade wall.
 8. Iron knife-blade; 7½" long over all; ¾" from back to edge with a deep rounded choil and short flat tang 1½" long. Found at depth of 1' from top soil of stockade enclosure near the road. Add: 1 handle rivet in situ in 2 fragments.
 9. Not extant (clay pipe).
 10. Bone hide-working tool; 8" long; depth 1'; from topsoil of enclosure near road.
 11. Beaver Incisor, 5" long (curved) from enclosure near road (worked?).

12. Buckle fragment ($\frac{1}{2}$ buckle) originally 2- $\frac{5}{8}$ " wide and 4" long. Either yellow copper or brass. Crudely worked. Depth of 10" from west stockade trench.
13. Strap iron, riveted, 12" long, $1\frac{1}{4}$ " wide; depth 10" from excavation in west stockade trench.
14. Clay pipe fragment; depth about 8"; from west stockade trench; (not extant).
- June 15 15. Gimlet (not extant).
16. Bone tube or bead (not extant).
- June 16 17. Iron band (not extant).
18. Strap iron with holes; $8\frac{1}{2}$ " $1\frac{5}{8}$ " long from beneath road in old topsoil.
19. Kettle copper piece $3\frac{3}{4}$ " x 4" with riveted patch $2\frac{1}{4}$ " x 3" secured by 8 hollow rivets. Depth $2\frac{1}{2}$ ', lakeside fill west of the dock.
20. Fragment of strap iron; $1\frac{1}{2}$ " x 2", depth 2' from lakeside fill west of dock.
21. Iron wedge; $4\frac{1}{2}$ " x $\frac{7}{8}$ " x $\frac{1}{4}$ " made from rasp, depth 2' from lakeside fill west of dock.
- June 17 22. Probably small iron ice chisel; 12" long, maximum thickness $\frac{5}{8}$ "; width $\frac{3}{4}$ "; from depth 6" - $1\frac{1}{2}$ ', west trench 6' - 15' from road.
23. Copper or brass kettle fragment with one crimped edge; lug is cast copper and secured with 3 rivets $\frac{1}{2}$ " head diameter from section 6" - $1\frac{1}{2}$ ' depth; west trench, 6' - 15' from road.
24. Kettle copper piece with riveted, hand forged iron lug (for handle) $2\frac{1}{2}$ " x $3\frac{1}{4}$ "; from section

- 6" x 1½' depth, with trench, 6' - 15' from road.
25. Strap iron fragment, 4" long. From section 6" to 1½' depth, west trench, 6' - 15' from road.
 26. Tapered iron pin, 5" long; from section 6" to 1½' depth, west trench, 6' - 15' from road.
 27. Sack No. 27 - 6" deep, west trench, 6' - 15' from road.:
 1. 1 piece of clay pipe bowl, no spur, hole 3 mm.
 2. 1 brass kettle rim fragment, 1" x 4½".
 3. 1 fragment of forged iron, 3" x ¾".
 4. 1 piece of scrap iron, 1" x 3½".
- June 17 - 28. Iron link, roughly figure 8 in appearance; elongated; attached ring on smaller eye; 7" long; from section (black band) 16" - 18" depth, within 6' of gatepost.
- 18
29. Section of copper or brass tube or spout; 5½" long, 1" - 1½" diameter, right angle bend, may have been hide scraper. From section (black band) 16" - 18" within 6' of gatepost.
 30. Fragment of tusk (probably pig) 3½" long; from section (black band) 16" - 18" depth, within 6' of gatepost.
 31. Looped strap iron band, 7" long; 1 3/8" wide from section (band) 16" - 18" depth, within 6' of gatepost.
 32. Copper kettle fragment, 4½" x 2½" riveted to 2 3/4" dumbbell shaped segment from section (black band) 16" - 18" within 6' of gatepost.
 33. Section of iron hand-saw; rip saw type; 6" long; teeth spaced 3/16th" apart. From section (black band) 16" - 18" depth, within 6' of gatepost.

34. Section of half-round iron wood rasp, 3" long x 1 1/8" wide, hand cut teeth, from section (black band) 16" - 18" depth, within 6' of gatepost.
35. End section of iron kettle or crane hook, .5" long. From section (black band) 16" - 18" depth within 6' of gatepost.
36. Pointed iron fragment (not extant).
- ** 37. Section of gun barrel (not extant).
38. Sections of strap iron with riveted sections 1 1/8" wide; overall 4 1/2" long from section (black band) 16" - 18" depth, within 6' of gatepost.
39. Sack: from section (black band) 16" - 18" depth within 6' of gatepost as follows:
1. 11 pieces of clay pipe stems.
 2. 1 piece of china, pink flower design, bottom.
 3. 2 pieces of fused glass.
 4. 1 large forged iron spike, 4" long.
 5. 7 wrought iron nails, 3 1/4" long.
 6. 2 square nails, 1/2" long; 2/3" long.
 7. 1 piece of broken file 3 3/4" x 10/16" x 3/16"
 8. 1 piece of broken chisel 1/2" x 11/16".
 9. 21 brass kettle fragments.
 10. 15 pieces of animal bones.
 11. 1 piece of rodent jaw with teeth.
 12. 1 piece of moose antler with knife marks on it.
 13. 1 piece of iron stripping, 4 15/16" x 1 1/4".
 14. 1 piece of sheet iron, 3" x 3".
 15. 1 piece of forged iron, 1 3/4" x 2".
 16. 1 piece of cast iron fragment, strip iron, 2 1/2" x 1 14/16" x 3/16".
 17. 1 piece of broken iron file, 2" x 7/16".
 18. 1 piece of scrap iron, bent, 2" x 1/8".
 19. 1 piece of scrap iron, 15/16" x 2 1/2".

- June 18
40. Copper or brass piece, irregular shape, riveted; from topsoil, 2' S of trench, 28' from gatepost on E side.
41. Fragment of clay pipe bowl (not extant).
42. Iron drift pin, 10" long; from topsoil about 10' from gatepost on E wall, about 10" deep.
43. Sack: from topsoil about 10' from gatepost on E wall, about 10" deep.
1. 1 piece of brass kettle, 4½" x 2½".
- †
44. Sack: from S end of N section of E wall; 12' from end.
1. 1 piece of scrap iron, 2½" x 1½" in 2 pieces.
2. 1 square nail, 2 3/4" long.
3. 1 piece of forged iron, 7" x 2" x 1".
4. 1 piece of fired glass, 7/16" x ½".
- Aug. 10 - 45. Sack: From Square 4N 2W.
21
1. 1 piece of brass or copper kettle, ½" x 1" folded down.
2. 1 piece of pottery, ½" x ½", with blue line on it.
3. 1 vial of assorted seed beads - blue, white, red and grey.
- 8 blue 6 mm diameter average
1 transparent blue 6 mm
1 white cane head 7 mm diameter
8 white seed heads at 6 mm
1 red transparent at 5 mm
1 grey at 4 mm
- ** 46. One lockplate from flintlock-musket; unbridled pan. . . .
47. Section of iron rasp; hand cut teeth; 2½" long; Sq. 4 N 1W.

48. Section of half round iron rasp; $2\frac{1}{2}$ " long, $1\frac{1}{8}$ " wide, hand cut teeth; Sq. 4N 1W.
49. Point section of iron butcher knife, $3\frac{1}{8}$ " long, $1\frac{1}{8}$ " deep back edge. Back edge is straight. Sq. 4N 1W.
50. Iron latch bar keeper from light cupboard door, or shutter keeper end $1\frac{1}{4}$ " long and nail end is $2\frac{1}{2}$ " long. Sq. 4N 1W.
51. Iron pintle pin, from heavy shutter. Hinge pin is $1\frac{1}{2}$ " long, nail end is 3". Sq. 4N 1W.
52. Heavy copper strap, $\frac{1}{8}$ " thick with holes, 4" long, Sq. 4N 1W.
53. Section of iron handle, probably from drawer or trunk, a pivoted iron strap, 3" long. Sq. 4N 1W.
54. Pointed iron, kettle lug, $3\frac{1}{4}$ " long; Sq. 4N 1W.
55. Section of curved iron rod; 4" long, $\frac{5}{16}$ " diameter. Sq. 4N 1W.
56. Short $\frac{1}{2}$ " neck of blown glass bottle; broad shouldered wide, flat lipped, clear glass, water white, Sq. 4N 1W.
57. 1" neck of clear blown glass bottle, $1\frac{1}{2}$ " diameter mouth, wide flattened shoulders with flattened, filleted lip; Sq. 4N 1W.
58. Bottom of blown glass bottle, dark olive green, very thick, no mark, 3" diameter and 3" high. Sq. 4N 1W.
59. Sherd of blue and white printed willoware. Sq. 4N 1W.
60. Flat clear glass medicine bottle with embossed letters $\frac{7}{8}$ " by $1\frac{1}{4}$ " Sq. 4N 1W (May belong to #63, #102, #189)(cf. N.O. after #340).

Aug. 10 - 61. Sack: Sq. 4N 1W
21

1. 1 vial with 2 gunflints, 1 black and 1 tan.
2. 1 vial with:
18 white and 25 blue seed beads
5 cane beads
2 glass beads
1 barrel bead, wire wound, 15 mm wide, 8 mm diameter
1 grey and 1 red brown seed
1 transparent light blue seed bead
1 transparent medium blue seed bead
1 white cane head, 41 mm long
1 red-brown cane head 41 mm long
7 white cane heads
1 transparent blue 14 mm long
3. 9 clay pipe stem fragments.
4. No spur and stem carved to fit wood, but 1 clay pipe bowl fragment.
5. 9 pieces of animal bones.
6. 2 rodent jaws and 2 teeth.
7. 8 pieces of kettle copper.
8. 21 pieces of earthenware pottery, brick red in color.
9. 2 wrought iron nails, one 3" and 3 3/4" long.
10. 22 pieces of clear window glass fragments and 2 olive green fragments.
11. 4 pieces of white pottery.
12. 1 piece of copper dangle trapezoidal 9/16".
13. 1 ~~shard~~ shard of willoware/ long pierced at apex.
14. 1 piece of forged iron screw driver, 2" x 3/16".
15. 1 piece of forged iron wood chisel, 2" x 1 1/2" x 3/16".
16. 1 piece of scrap iron, 1" x 1 1/2" x 1/16".
17. 1 piece of forged iron wood scraper (?) 1 1/2" x 1/2" x 1/4".
18. 1 piece of scrap iron 2 1/2" x 1/2".
19. 1 piece of forged iron scraper (?), 2 1/2" x 1/4".
20. 1 piece of forged iron wood scraper (?), 1 1/2" x 1/2" x 1/4".

21. 1 piece of forged iron, $1\frac{1}{2}$ " x $\frac{1}{2}$ " x $\frac{1}{2}$ ".
22. 1 piece of forged iron wood chisel, 2" x $\frac{3}{4}$ " x $\frac{1}{2}$ ".
62. Heavy forged iron pin; $5\frac{1}{2}$ " long; Sq. 4N OE.
- See 60,
102, 189
63. Fragment of water white glass with embossed letters. Diameter $1\frac{1}{2}$ ". Sq. 4N OE
64. Glass and clay beads, 32" long:
- 96 white seed beads, average 6 mm
 - 17 white cane head, average 7 mm
 - 130 blue seed beads, average 6 mm
 - 10 tubular transparent blue beads, average 5 mm
 - 10 transparent blue seed beads, 6 mm
 - 5 black cane beads, average 6 mm
 - 18 grey seed beads, average 5 mm
 - 7 red brown seed beads, average 5 mm
 - 9 black seed beads, average 5 mm
 - 5 (much eroded) transparent green seed beads, average 5 mm
 - 2 opaque white heads, average 4 mm
 - 1 brown clay barrel head, 6 mm x 14 mm
 - 1 brown clay barrel head, 16 mm, 8 mm diameter, with turquoise blue inlay
65. Sack: Sq. 4N OE 1 vial of seed, barrel, cane beads. (Other objects listed in 1936 report, such as copper, nails, earthenware, etc. are not extant.)
66. Rim fragment of large iron vessel. Sq. 4N 1E 5 " long, 4" wide.
67. Fragment of fabric (not extant).
68. Sack: Sq. 4N 1E.
- 1. 1 piece of iron kettle, $2\frac{3}{4}$ " x 2" x $\frac{1}{8}$ ".
 - 2. 2 pieces of forged iron, 2" x 2" x $\frac{1}{8}$ ".
 - 3. 1 piece of burned glass.
 - 4. 1 piece of sheet iron, 3" x $2\frac{1}{2}$ ", digging tool?

5. 1 piece of forged iron door latch (?)
2" x 1 1/4" x 7/16".
69. Fragment of jasper ware or wedgewood (?)
Sq. 4N 3E.
70. Sack. Sq. 4N 3E.
1. 1 clay pipe stem fragment.
2. 1 vial with 2 white seed beads.
3. 3 pieces of blown amethystine bottle
glass.
4. 3 wrought iron nails, 1 nail, 3 3/4" long;
2 nails are 3" long.
5. 1 piece of white pottery.
71. Fragment of iron wire, 6" long, Sq. 3N OE.
72. Section of heavy iron pin or unheaded nail,
4 1/2"; Sq. 3N OE.
73. Section of iron hollow ground razor, with war-
ranted stamp, 3N OE, 3 5/8" long, 9/16" from
back to straight edge.
74. Square nail (not extant).
75. Square nail (not extant).
76. Chunk of glass slag; Sq. 3N OE.
77. Gun Flint (Not extant).
78. Fragment of pipe bowl (not extant).
- See 63 & 189 79. Portion of neck of blown lime green glass
bottle, 1 3/4" diameter, flattened, filleted
lip. Sq. 3N OE.
- q #370 80. Box: Sample sherds of earthenware, Sq. 3N OE.
1. 5 pieces of brown, green and yellow earth-
enware in sack.
2. 4 fragments of blue striped earthenware

(one willowware).

3. 4 fragments of orange and blue earthenware.
4. 4 fragments of English delftware (?).

81. Head of copper button (not extant).
82. Brass Brooch (?) 3/4" diameter (not extant).
83. Sack: Sq. 3N OE
 1. 1 vial of 1 blue seed bead.
 2. 4 animal teeth.
 3. 3 pieces of animal bone.
 4. 2 pieces of brass or copper stripping.
 5. 1 wrought iron nail, 3" long.
 6. 1 piece of forged iron gun spring, 2 1/2" x 1/16".
 7. 1 piece of strap iron at right angle (from chest) (?) 2 1/2" x 2".
 8. 2 pieces of iron kettle.
 9. 21 pieces of decorated china (3 pieces of willow-ware) in sack.
 10. 15 pieces of clay pipe stems and 3 pieces of clay pipe bowls.
 11. 36 pieces of undecorated china in sack.
 12. 19 pieces of burned or white glass and 1 green glass.
84. Portion of scalloped copper or brass piece; 4 1/2" x 5 1/2" Sq. 5N 2W; topsoil, to 6" depth.
85. Sherds of heavy reddish earthenware; Sq. 5N 2W; topsoil to 6".
86. Iron square nail, 4 1/2" long; Sq. 5N 2W; topsoil, to 6" depth.
87. Iron square nail, 4" long, Sq. 5N 2W; topsoil to 6" depth.
88. Copper tray (?) 4" x 5 1/2" with corrugated rim. Fabricated from kettle copper, unfinished.

See 151,
162, 255
& 266

89. Iron square nail, 3" long, Sq. 5N 2W topsoil to 6" depth.
90. Fragments of heavy dark olive green glass bottle. Sq. 5N 2W; topsoil.
91. Chunk of cellular stalactite (?) (Not extant).
92. Sack: Sq. 5N 2W; 6" from top.
1. 2 pieces of copper scrap, broken circle.
 2. 3 wrought iron nails and fragments.
 3. 6 pieces of animal bones.
 4. 3 pieces of window glass.
 5. 3 pieces of burned or fused glass.
 6. 1 piece of kettle brass.
 7. 1 piece of forged iron chisel, 2"x1"x3/16".
 8. 2 clay pipe stem fragments.
 9. 1 fragment of clay pipe bowl.
 10. 1 piece of strap iron, 4 1/4" x 1".
 11. 1 piece of forged iron awl, 1 1/2" x 3/16".
 12. 1 piece of forged iron bar, 2 1/4" x 3/4 x 1/2".
 13. 1 piece of forged iron, 4" x 1 3/4" x 1/16".
93. Neck and bottom fragments of green bottle glass; from E Wall, 27' S of corner H, depth 8" - 1'.
94. Fragments of red cedar timber, from S wall fill under road, about 3' S of corner A; depth 2 1/2'.
95. Section of Indian Pipe Bowl (not extant).
96. Blade of clasp-knife, from trenching along E wall; 4" blade, slight slanted point 4" long; 3/4" wide. V-Grind. Flange at bolster end of blade.
97. Section of brass or copper plate (not extant).
98. Fragments of pipe stems, bowl. (not extant).
99. Fragments of earthenware; sq. 3N 1W.

100. (Section of iron wrench (?) 4" long, Sq. 3N 1W. Type used for bicycles).
101. Section of iron cold chisel, 2" long, Sq. 3N 1W.
- See 60,
63, and
189
102. Neck fragments of small glass bottle (not extant).
103. Bottom section of dark green glass bottle. Two corners extant. Sq. 3N 1W.
104. Gun Spall, Sq. 3N 1W.
105. Sack: Sq. 3N 1W
1. 4 wrought iron nails.
 2. 5 pieces of animal bones.
 3. 3 pieces of clay pipe bowls.
 4. 20 fragments of clay pipe stems.
 5. 6 pieces of kettle brass.
 6. 2 animal teeth.
 7. 5 pieces of clay earthenware.
 8. 3 pieces of forged iron kettle.
 9. 2 pieces of fire steel, 2" x 1 1/4".
 10. 1 piece of scrap iron, 2" x 3/4".
 11. 3 pieces of clear window glass.
 12. 11 pieces of clear bottle glass.
 13. 1 piece of olive-green bottle glass.
 14. 2 pieces of flint in a sack; 1 piece of red jasper and 1 piece of grey chert.
 15. 8 pieces of wrought iron nails in a sack.
 16. 18 pieces of pottery or china (2 willoware) in a sack.
 17. 7 small pieces of window glass and 3 pieces of olive green bottle glass in a sack.
106. Group of glass and clay beads, from cross trench, 103' E of corner A; near fireplace. 1 white barrel bead 3/8" long; possible wire wrapped and with 4 inlaid dots on median line. The 2 remaining inlays are turquoise blue and are on opposing sides of the barrel. One white cane bead; one translucent blue cane bead; one translucent green seed bead and

reddish brown seed bead; 21 light turquoise blue seed beads and 37 white seed beads.

107. Tip of iron rasp (not extant).
108. Section of iron knife composed of handle section and forged bolsters. 4½" overall. From cross trench 103' E of corner A; near fireplace.
109. Section of iron latch, from cross trench, 103' E of corner A; near fireplace.
110. Sack: From cross trench, 103' E of Corner A.
 1. 1 wrought iron nail, 3" long.
 2. 1 piece of scrap kettle brass, 5" long.
 3. 3 pieces of clay pipe stems.
 4. 5 pieces of clear glass.
 5. 1 scrap piece of kettle brass.
111. Small iron wood rasp, a shallow "U" in cross section, 4 ¾" long with tang, toothed both flat and convex sides; from shoreline excavations.
112. Iron pot hook; from shoreline excavations.
- ** 113. One broken lock plate; from flintlock musket.
114. Iron latch bar keeper 7" long from shoreline excavation.
- Aug. 21, 1936
 cf #220
115. Tip of shear blade, 2" long from shoreline excavation (between corners).
116. Iron piece, 3" long, from shoreline excavations (not extant).
- ** 117. Iron double end awl, 3" long, from shoreline.
118. Iron square nail (not extant).
119. Unidentified scrap of iron, 2½" long from shoreline excavation.

120. Section of clay pipe stem (not extant).
121. Bottom of blown glass tumbler, 1½" diameter, from shoreline excavations.
122. Sherds of white and colored earthenware, from shoreline excavations.
123. Sack: From shoreline excavations.
1. 33 clay pipe stem fragments.
 2. 1 piece of clay pipe bowl with T. D. brand.
 3. 3 fragments of olive-green bottle glass.
 4. 1 piece of clear round bottom bottle glass.
 5. 1 piece of rectangular bottom lead bottle glass.
 6. 1 piece of plate glass, 3/8" thick.
 7. 3 pieces of clear window glass.
 8. 2 fragments of window glass (older?).
 9. 1 white glazed earthenware sherd.
 10. 17 brass kettle fragments (mostly long narrow strips).
 11. 1 fragment of brass kettle rim.
 12. 2 pieces of brass fastened by a rivet from kettle.
 13. 1 piece of cast iron kettle fragment with foot.
 14. 3 pieces of wrought iron bar stock, 2½" x 3/4" x ½".
 15. 4 miscellaneous scraps of sheet iron 1/16" thick.
 16. 1 piece of wrought iron 6½" x ½" x 1/8". (strap iron).
 17. 3 fragments of iron.
 18. 3 hand forged nails, 1 nail 3" long, 2 nails, 4½" long.
 19. 1 piece of latch stop fragment (?).
 20. 1 latch hook fragment.
 21. 1 vial of 9 seed beads and one barrel bead.
- q. #26? 124. Sherds of cream colored earthenware, from Sq. 2 N 1W, trench at Feature 1.
125. Miscellaneous (sacked): Sq. 2N 1W.

See below
& 250 and
265

201. Sherds of heavy white earthenware, "drain trench" E of E wall, 10' - 20'.
202. Fragment of kettle copper secured to brass or yellow copper lug with 3 rivets. Found in trench, E of S wall, 10' - 20'.
203. Sacked: "Drain trench" E of E wall, 10' - 20'; topsoil to 8".
1. 1 vial of seed, barrel and cane beads
Seed beads: 8 white, 4 blue, average
6 mm
Barrel beads: 16 mm L.; 8 mm diameter,
white
Cane beads: 8 mm diameter & 4 mm white
 2. 1 sack with 2 flint fragments, 1 marble fragment; 2 clear glass window fragments
 3. Wrought iron nails in a bag
 4. 1 sack of 13 china fragments (1 willoware)
 5. 3 clay pipe bowl fragments (T.D.) (W.G.) on spur, 3 mm)
 6. 1 iron door hinge, 3½" x 1 3/4" x 1/16"
 7. 1 piece of iron wire, 6" long
 8. 1 fragment of knife handle, 2 3/4" x ½" x 1/16"
 9. 2 fragments of smoked glass
 10. 1 piece of green-tinted glass
 11. 3 pieces of animal bone
 12. 6 pieces of kettle brass
 13. 20 fragments of clay pipe stems
 14. 2 stones
204. and 205 (Not extant).
206. 1 vial with an Indian hollow carved bone, cupping tube decorated (2' long) Sq. 5N 1W, top 8".
207. Heavy iron pin 9" long; Sq. 5N 1", top 8".
208. Iron link, 4½" overall length, constricted toward one end to form 2 loops. Found Sq. 5N 1W, top 8".

209. Rolled iron piece, 7½" long, fabricated from scrap iron and probably used as hide scraper. Found Sq. 5N 1W, top 8".
210. Iron screw, 1½" long, Sq. 5N 1W, top 8".
211. Rim sherd (Not extant).
212. Sacked: Sq. 5N 1W, top 8".
1. Wrought iron nails in a bag
 2. 5 seed and cane beads in a vial
 3. 1 vial with 2 slate pencils and 1 brass tweezers (?)
 4. 1 fish vertebrae in sack
 5. 4 pieces of blue, white and black striped pottery in sack
 6. 1 piece of Bennington ware in sack
 7. 4 pieces of gray glazed earthenware
 8. 14 other fragments of pottery in a sack
 9. 1 fragment of micmac Indian pipe in sack
 10. 6 fragments of clay pipe bowl (W.G.) in sack
 11. 1 triangular piece of brass kettle
 12. 1 square headed nail, 2½" long
 13. 1 large cotter pin, forged 4" x ¼"; head 1" and nut 1"
 14. 1 piece of strap iron, 5" long x 11/16" wide
 15. 1 piece of kettle brass
 16. 1 iron awl
 17. Broken fragment of iron chisel
 18. 2 pieces of fused glass
 19. 2 pieces of olive green bottle glass (rim)
 20. 4 pieces of lead glass burned
 21. 8 pieces of clear bottle glass
 22. 25 pieces of greenish clear window glass
 23. 10 fragments of clay pipe stems
 24. 1 piece of stone
 25. 34 pieces of animal bones
- ** 213. Two tanged breech plugs from flintlock muskets.
214. Iron fishhook, 2" long; Sq. 5N 1W, 8" - 16"

215. Two copper beads (not extant).
- see 259 216. Sacked: Sq. 5N 1W 8" - 16"
1. 2 clay pipe bowl fragments - 1 has stand of arms; no decor on 2nd (commemorative pipe).
 2. 6 clay pipe stem fragments (one T.D. on spur 3 mm).
 3. 5 pottery fragments (2 English delftware?)
 4. Wrought iron nails in a bag.
 5. 1 piece of kettle brass rim.
 6. 3 pieces of hinge scraps from trunk (?)
 7. 1 piece of wrought iron (?) $3\frac{1}{2}$ " x $\frac{1}{4}$ ".
 8. 1 piece of iron kettle rim, 4" x $\frac{1}{2}$ ".
 9. 1 piece of iron strapping, 4" x $\frac{1}{2}$ ".
 10. 3 pieces of light olive green bottle glass.
 11. 1 piece of dark olive green bottle glass.
 12. 2 pieces of clear bottle glass.
 13. 1 piece of lead glass bottle.
 14. 5 pieces of clear window glass.
 15. 1 piece of animal skull.
 16. 1 animal tooth.
 17. 27 pieces of animal bones.
 18. 2 stones.
217. Brass piece (not extant).
- Sept. 9 & 10, 1936 218. Two brass tinklers (not extant).
219. Round wooden piece (not extant).
- Sept. 11, 1935 see 115 220. Section of iron frow 4" long. 0-25' E of corner C, top 8" or 10" - slag heap.
221. Iron knife-blade, 9" long (not extant).
222. Planing iron, 5" long, 0 - 25' E of corner C top 8" or 10" - slag heap.
223. Heavy iron spike, $3\frac{1}{2}$ " long. 10 - 25' E of corner C, top 8" or 10", slag heap.
224. Split section gun barrel (not extant).

225. Cylindrical copper or brass ferrule $3/4$ " long. 0 - 25' E of corner C, top 8" or 10", slag heap.
226. Rolled iron link or loop $2\frac{1}{2}$ " long, 0 - 25' E of corner C, top 8" or 10", slag heap.
- Sept. 11, 1936 227. Sacked: 0-25' E of corner C, 8" - 10" from top "slag heap".
1. 32 pieces of scrap kettle brass
 2. 4 pieces of scrap kettle rims
 3. 1 piece of scrap kettle lug
 4. 1 piece of thick brown glass bottle
 5. 1 piece of olive green glass bottle
 6. 1 piece of clear window glass
 7. 9 pieces of clay pipe stems
 8. 3 pieces of animal bone - one tooth
 9. 2 pieces of iron riveted together, $3\frac{3}{4}$ " x $1\frac{1}{2}$ " x $3/16$ ".
 10. 2 pieces of iron riveted together, $3\frac{1}{2}$ " x $1\frac{1}{2}$ " x $3/16$ ".
 11. 3 pieces of strap iron, one 4", one 2", one 1"; width $1\frac{1}{16}$ ".
 12. 1 piece of scrap iron, $2\frac{1}{2}$ " x 1" x $\frac{1}{2}$ ".
 13. 1 broken piece of file, $2\frac{1}{2}$ " x $\frac{1}{2}$ " x $3/16$ ".
 14. 1 piece of scrap iron, $2\frac{1}{2}$ " x $3/4$ " x $3/16$ ".
 15. 1 piece of scrap iron, $5\frac{1}{4}$ " x $1\frac{1}{2}$ " x $3/16$ ".
 16. 1 piece of scrap iron, 3" x 1" x $7/16$ ".
 17. 1 piece of bar iron, 4" x 1" x $\frac{1}{2}$ ".
 18. 1 piece of scrap iron, $1\frac{1}{2}$ " x $12/16$ " x $6/16$ ".
 19. 1 piece of iron cylinder closed at one end; $1\frac{1}{2}$ " x 1" x $3/4$ ".
 20. 1 piece of scrap iron, 3" x $\frac{1}{2}$ " x $\frac{1}{2}$ ".
 21. 1 piece of scrap iron 2" x $7/16$ " x $\frac{1}{2}$ ".
 22. 1 piece of hinge fragment.
 23. 1 piece of screwdriver(?) 3" x $\frac{1}{2}$ ".
 24. 1 piece of scrap iron, 3" x $3/4$ " x $\frac{1}{2}$ ".
 25. 2 pieces of scrap iron $1\frac{1}{2}$ " x $1\frac{1}{2}$ " x $\frac{1}{2}$ ".
 26. 3 pieces of sheet iron.
 27. 3 iron spikes, $3\frac{1}{2}$ " x $8/16$ " wide, $3/16$ " with chisel points.
 28. 1 piece of iron washer, $1\frac{1}{2}$ " in diameter.
 29. 1 piece of rounded scrap iron, $1\frac{1}{2}$ " x $\frac{1}{2}$ ".
 30. 1 round piece of iron wire, $\frac{1}{2}$ " diameter, with 1 shaped bend and oval eye in one end.

31. 1 piece of round iron bar, stock,
1½" diameter; 2" long.
32. 1 bag of wrought iron nails, 16.
228. Section of iron rasp, 3" long, 45° - 60° W of
Pt. 3, in center trench, top 8" - 10".
229. Iron pin with eye 3½" long, 45° - 60° west of
Pt. 3 in center trench, top 8" - 10".
230. Sherds of reddish, earthenware jug; 45° -
60° W of Pt. 3, in center trench, top 8"
- 10".
231. Sherds of white earthenware, 45° - 60° W of
Pt. 3, in center trench, top 8" - 10".
- Sept. 10, 232. Sacked: 45° - 60° W of Pt. 3 center trench,
1936 top 8" - 10".
1. 3 pieces of strap iron, 4½" long, 1"
wide.
 2. 1 piece of iron wire, ¼" in diameter,
9 ¾" long.
 3. 1 piece of broken staple (?), 1" in
diameter.
 4. 1 brass kettle fragment.
 5. 2 pieces of olive green glass bottle, 1
bears pontil mark.
 6. 1 light green bottle fragment.
 7. 1 piece of clear bottle glass.
 8. 1 piece of smoked clear bottle glass.
 9. 1 rim of a clear bottle.
 10. 1 piece of clear window glass.
 11. 1 piece of white pottery.
 12. - 15. 4 clay pipe bowl fragments (T.D.).
 - 16.- 27. 12 pieces of clay pipe stems.
 28. 5 pieces of animal bones.
 29. 2 animal teeth.
 30. 70 wrought iron nails in a bag.
 31. Beads: 31 white seed beads }
6 blue seed beads } all 6 mm
7 red-brown seen beads } diameter

- 233.
- Sept. 10, 1936 234. Iron tailed kettle lug, 1 copper rivet, 4" broad, 25' - 35' E of corner C top 10".
235. Copper or brass kettle fragment, sheet rolled edge around a core $\frac{1}{4}$ " diameter, has sheet copper lug secured inside and out by two rivets. Found 25' - 35' E of corner C top 10".
236. Kettle copper or brass cut piece, 2" x $2\frac{1}{2}$ " 25' - 35' E of corner C, top 10".
237. Fragment of neck of heavy green glass bottle, 25' - 35' E of corner C, top 10" Neck slopes from 3" to abrupt shoulder. Mouth is made of 2 appliqued lips.
238. Sacked: 25' - 35' E of corner C, top 10".
1. 1 large coil of kettle brass, 20" x $2\frac{1}{2}$ ".
 2. 17 scraps of sheet brass.
 3. 1 piece of strap iron with hole, 2" x $1\frac{1}{2}$ " x $\frac{3}{16}$ ".
 4. 2 pieces of strap iron, 5" x $1\frac{1}{2}$ " x $\frac{3}{16}$ ".
 5. 6 pieces of bar iron, 4" x $\frac{1}{2}$ " x $\frac{1}{4}$ ".
 6. 1 piece of rolled iron rim, 3" x $2\frac{1}{2}$ ".
 7. 2 pieces of strap iron riveted together, $4\frac{1}{2}$ " x 1".
 8. 1 iron spike fragment, 2" x $\frac{1}{4}$ ".
 9. 1 iron pan handle, 9 $\frac{3}{4}$ " x $1\frac{1}{2}$ " x $\frac{1}{16}$ ".
 10. 1 piece of sheet iron, $5\frac{1}{2}$ " x $2\frac{1}{2}$ ".
 11. 1 piece of cold chisel, 3" x $\frac{1}{2}$ " x $\frac{7}{16}$ ".
 12. 1 piece of chisel, 3" x 1" x $\frac{1}{2}$ ".
 13. 1 piece of file, 1" x $\frac{3}{4}$ " x $\frac{3}{16}$ ".
 14. 1 broad spike with chisel point, $3\frac{1}{2}$ " x $\frac{7}{16}$ " x $\frac{1}{4}$ ".
 15. 1 spike, $2\frac{1}{2}$ " x $\frac{1}{4}$ "⁴.
 16. 1 piece of round bar iron, $\frac{1}{4}$ "⁴.
 17. 1 bag of 17 wrought iron nails.
 18. 1 piece of clear window glass.
 19. 1 piece of thick clear bottle glass.
 20. 1 piece of green and white china.
 21. 1 piece of white and blue china.
 22. - 23. 2 pieces of pink earthenware.
 24. 1 clay pipe stem with spur (T.D. on spur) 3 mm.

- 25. 2 clay pipe stems fragments.
- 26. 1 clay pipe bowl fragment.
- 27. 2 animal bones.

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- 239. Fire steel, 3½" oval, from center stockade wall excavation 62' x 80' of corner D.
- 240. Sacked: 62' - 80' E of corner D.
 - 1. 1 bottom with pontil mark of olive green glass bottle.
 - 2. 1 piece of white creamware.
 - 3. 1 fragment of iron hinge, 2" x 1".
 - 4. 1 piece of scrap iron in scimitar circle, 2 ¾" x 1".
 - 5. 5 pieces of scrap iron, 3" - 4" long x 1" wide.
 - 6. 1 piece of iron staple, 2" x 1" x 3/16".
 - 7. 12 wrought iron nails in bag.
- 241. Fragment of Indian pipe bowl (Not extant).
- 242. Neck of blown glass bottle, 1½" diameter; from the center stockade wall excavation, 60' - 37' W of point 3 to 1' depth.
- 243. Bottom of small square blown glass bottle; 1½" square; center stockade wall excavation; 60' - 37' W of Point 3 to 1' depth.
- 244. Sacked: Center stockade wall excavation; 60' - 37' W of Point 3 to 1' depth.
 - 1. 2 bags of wrought iron nails.
 - 2. 2 pieces of strap iron riveted together.
 - 3. 2 iron wire rims.
 - 4. 6 assorted pieces of strap iron, 1½" x 3" x 1" long.
 - 5. 1 top part of file, 3" x 1".
 - 6. 4 pieces of animal bones.
 - 7. 1 animal tooth.
 - 8. 11 pieces of clay pipe stems.
 - 9. 1 side of olive green glass bottle.
 - 10. 1 piece of a square necked olive green glass bottle; thick.

11. 10 pieces of olive green glass bottle; old.
 12. 8 pieces of light green bottle glass; newer.
 13. 4 pieces of clear window glass (?).
 14. 5 pieces of green tinged window glass (?).
 15. 14 pieces of clear bottle glass.
 16. 3 pieces of thick clear bottle bottoms.
 17. 3 pieces of pasteware with white glaze.
 18. 3 pieces of creamware.
 19. 3 pieces of earthenware with red glaze.
 20. Dark blue translucent cane bead with thin white stripe, 7 mm diameter and 25 mm length.
245. Bottom of small blown glass tumbler, 1½" diameter; from area just N of drain.
246. Wooden pin, 10" long, area just N of drain (not extant).
247. Sacked: Area just N of drain.
1. 17 wrought iron nails in a bag.
 2. 1 fragment of bottom of olive green glass bottle.
 3. 1 piece of thick bottle glass, burned.
 4. 1 piece of clear window glass.
 5. 1 piece of red-glazed earthenware.
 6. 1 piece of strap iron, 1" x 4½".
 7. Bottom of 1 flattened spike, 2½" x 7/16".
 8. 1 modern staple, 1 3/4" x ½" x 3/16".
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248. Iron lock 9" long; 30' N of corner D, just under sod.
249. Iron wedge; 5" long; excavation of stockade wall, N of corner D.
250. Sacked: Miscellaneous (Not extant).
- Sept. 11, 251. Iron handle, 4" long; from central wall excavation.

- See 191.
252. Sacked: E stockade wall, about 4' S of corner F, top 8".
1. 1 piece of bottom of glass bottle.
253. Sacked: Center wall stockade excavations, 121' - 136' E of corner D.
1. 1 bag of 10 wrought iron nails.
 2. 1 bag with animal tooth.
 3. 2 pieces of greenish tinged window glass.
 4. 1 piece of thick clear bottle glass.
 5. 2 clay pipe stem fragments.
 6. 1 animal bone.
 7. 2 pieces of wrought iron fire box or legging.
 8. 3 pieces of brass kettle rims.
 9. 1 piece of iron strap, with spike driven through it, 2½" x 1".
 10. 1 piece of scrap iron, 1½" x ¾".
254. Irrescent bottom of small blown glass tumbler, 1½" diameter. Drain trench fill, to 10' W of E stockade wall.
255. Sacked: "Drain trench" fill, to 10' W of E stockade wall.
1. 1 bag with two wrought iron nails.
 2. 1 piece of earthenware with red glaze.
 3. 1 piece of animal bone.
 4. 1 piece of iron strap, 1" x 1".
 5. 1 piece of blue and white china.
 6. 3 clay pipe stem fragments.
256. Bone tube (Indian), 1½" long; Sq. SN 1E, 1' - 18' depth.
257. Sacked: Sq. 5N 1E, 1' - 18' depth.
1. 1 bag of 15 wrought iron nails.
 2. 1 large spike, 5" long, x 7/16" square.
 3. 1 epiphysis.
 4. 1 bottom of china dish.
 5. 1 piece of blue china.
 6. 1 piece of light green bottle.
 7. 3 clay pipe stem fragments.

- Sept. 11, 1936 258. Sacked: 12' - 21' N of corner G in stockade wall, depth of 8".
1. 10 wrought iron nails in a bag.
 2. 1 piece of red glazed earthenware.
- See 85
3. 1 piece of scrap iron, probably used as hinge.
 4. 1 piece of cast iron kettle.
 5. 2 clay pipe stem fragments.
259. Sacked: Sq. 5N 1W; below 1'.
1. 1 bag of 14 wrought iron nails.
 2. 1 piece of coiled brass kettle scrap, 3" long.
 3. 1 rounded punch, 5" long, $\frac{1}{4}$ " diameter.
 4. 1 chisel end (?) $1\frac{3}{4}$ " x 1".
 5. 1 piece of strap iron, $1\frac{3}{4}$ " x $\frac{3}{4}$ ".
 6. 1 piece of bar iron with hook, $1\frac{3}{4}$ " x $\frac{3}{4}$ " x $\frac{1}{4}$ ".
 7. 1 piece of scrap iron, $2\frac{3}{4}$ " x $1\frac{1}{2}$ " x $\frac{3}{16}$ ".
 8. 1 piece of iron, rounded, 1" ².
 9. 2 pieces of animal ribs.
 10. 1 animal tooth.
 11. 1 piece of greenish tinged glass - window.
 12. 3 pieces of clear window glass.
 13. 2 pieces of clear bottle glass.
 14. 1 piece of red-glazed earthenware.
 15. 3 pieces of white china.
 16. 2 pieces of clay pipe bowl.
 17. 4 clay pipe stem fragments.
- 259~~0~~. Sacked: Sq. 5N 1W; below 1" (not extant).
260. Sacked: 12' - 21' N of corner G in stockade wall, depth to 8".
1. 21 wrought iron nails in a bag.
 2. 1 frizzen of flintlock gun.
 3. 1 piece of scrap iron, 4" x $1\frac{1}{2}$ " x $\frac{3}{16}$ ".
 4. 1 piece of strap iron, $\frac{3}{4}$ " x $\frac{1}{2}$ ".
 5. 1 clay pipe stem fragment.
261. Iron hinge piece (not extant).

1. 1 piece of dark olive-green bottle glass.
 2. 1 piece of animal bone.
 3. 1 piece of red earthenware.
 4. 10 pieces of clay pipe stem fragments.
 5. 2 pieces of clay pipe bowls (one W. G. on spur, 3 mm hole).
- Aug. 21, 1935
126. Pitch, from brevet, corner under road (corner A) in trench fill, 1½' - 2' depth (not extant).
127. Sacked: Center wall trench.
1. 1 vial of blue and white seed beads, average 6 mm diameter. 2 white seed beads and 11 blue seed beads.
 2. 1 piece of clay pipe stem.
 3. 1 piece of clay pipe bowl (T.D.).
 4. 2 pieces of animal bones.
 5. 2 pieces of china (one willoware).
128. Wagon tongue plate with holes, 10½" x 2 & ¾" wide. Sq. 2N OE.
129. Section of planing iron, 4½" long, Sq. 2N OE.
130. Section of iron musket barrel, 4½"-long, split? Sq. 2N OE.
- cf. #231 & 244 (in sand box)
131. Sherds from neck of small earthenware jug; sq. 2N OE.
132. Iron hinge piece. (Not extant).
133. Sacked; Sq. 3N 1E.
1. 1 vial of one blue seed bead.
 2. 1 clay pipe stem and bowl (T.D. on spur).
 3. 1 piece of olive-green bottle glass.
134. Sq. 3N 2E Sacked
1. 1 piece of clay pipe bowl.
 2. 3 pieces of clay pipe stem.
 3. 1 piece of white ceramic ware.

135. Sacked: Sq. 5N 1E, top 6".
1. 1 vial of one white seed bead.
 2. 2 pieces of animal bones.
 3. 1 clay pipe stem fragment.
 4. 1 piece of white pottery.
 5. 2 pieces of cast iron kettle.
 6. 1 piece of fused glass.
 7. 1 piece of scrap metal, 1½" x ¾".
 8. 1 piece of fused glass.
 9. 1 clay pipe bowl fragment (T.D.) in sack.
 10. 5 nail fragments.
 11. 2 pieces of bark.
 12. 4 pieces of clear bottle glass.
 13. 6 pieces of clear window glass.
136. Iron Pintle, 4½" long, Sq. 5N 2E, depth 6".
137. Sacked: Sq. 5N 2E.
1. 1 piece of animal foot bone (moose).
 2. 2 pieces of kettle brass.
 3. 2 pieces of cast iron kettle.
 4. 1 piece of forged iron clevis (?).
 5. 1 wrought iron nail fragment.
 6. 1 piece of clay pipe stem.
- Sept. 6 138. Iron pot hook, 7" long. Sq. 5N 2W, from 6" 1'. Both ends have same size hook.
- ** 139. thru 148. (Not extant).
149. Barrel bead 16 mm diameter, 28 mm length. Barrel shape white clay (ceramic) and blue sprig (incised) design.
150. (Not extant).
151. Sacked: Sq. 5N 2W, 6" - 1'.
1. 2 pieces of clay pipe bowl (T. D.) in sack.
 2. 1 stone and scraper.
 3. 2 pieces of stone in sack.
 4. 1 piece of fish vertebrae and rodent tooth, in sack.
 5. Wrought iron nails and fragments in a bag.

6. One vial of seed and cane beads:
 - 22 white seed beads, 6 to 8 mm diameter
 - 1 black cane bead 8 mm
 - 1 red seed bead 6 mm
 - 3 translucent blue seed beads 6 mm
 - 1 opaque sky blue seed bead 7 mm
 - 3 turquoise blue seed beads 7 mm
 - 8 white cane beads, average 6 mm
 7. 17 pieces of animal bones
 8. 13 pieces of clear window glass
 9. 15 pieces of dark green bottle glass
 10. 1 piece of fused clear bottle glass
 11. 1 piece of olive green bottle glass
 12. 1 piece of olive green window glass
 13. 14 clay pipe stem fragments
 14. 8 pieces miscellaneous
 15. 1 piece of clay pipe bowl
 16. 4 copper kettle scraps
 17. 2 iron fragments
 18. 1 piece of lead
 19. 1 fragmentary forged iron spike
 20. 1 piece of brass wire, $2\frac{1}{2}$ " x $\frac{1}{2}$ "
 21. 2 fragments of flattened nails or screw drivers (?)
-
152. Decorated iron handle (not extant).
 153. Lead bale seal possibly from McTavish-Frobisher & Co. Seal has been perforated for possible use in cup and pin game. $\frac{3}{4}$ " diameter. SQ 5N 2W 6" - 1' depth. ca 1787 to 1805 or McTavish-Fraser Co. about 1812.
 154. Gun flint, Sq. 5N 2W, 6" - 1' depth (not extant).
 155. Lead ball, Sq. 5N 2W, 6" - 1' depth (not extant).
 - Sept. 6, 1936 156. Sacked? Sq. 5N 2W, 6" - 1' depth
 1. 1 piece of projectile point in sack
 2. 3 fish vertebrae in sack
 3. Wrought iron nails and fragments
 4. 15 pieces of clay pipe stems

5. 1 piece of clay pipe bowl (T.D.)
 6. 1 vial of glass cane beads (red and blue) and 4 seed beads.
 7. 1 piece of copper wire (used as a button hook) (?).
 8. 4 pieces of animal bones.
 9. 1 wood chisel, 2" x 3/4" x 1/4"
 10. 5 pieces of olive green bottle glass
 11. 4 pieces of fused glass
 12. 2 pieces of clear, burned peppermint bottle
 13. 6 pieces of china, 1 with black glaze
 14. 15 pieces of clear window glass
 15. 1 piece of earthenware crockery
 16. 7 rocks
- Sept. 8, 1936
157. Strap iron with small rose head nail in situ, 4" long, Sq. 5N 2W below 1' depth.
 158. Copper or brass button, 1/2" diameter and slightly oval, may be eroded, with loop in back, Sq. 5N 2W, below 1' depth.
 159. Copper ornament. (Not extant).
 160. Molded glass bead, in shape of rose (not extant).
 161. Yellow glass bead. 1 vial of round bead with a sprig blue, light and dark, design on it; 1 cm x 17 mm long, Sq. 5N 2W. 1' below surface.
- See 85 & 151
162. Sacked: Sq. 5N 2W below 1'.
 1. Wrought iron nails in a bag
 2. 1 Vial of seed and barrel beads
 3. 1 Vial; 1 tinkler copper 3/4" length
 4. 1 piece of lead
 5. 1 piece of quartzite
 6. A sack of china fragments
 7. 2 fragments of glass
 8. 5 pieces of fused glass
 9. 3 pieces of light olive green bottle glass
 10. 8 pieces of clear bottle glass

11. 9 pieces of dark olive green bottle glass
 12. 16 pieces of clear window glass
 13. 4 pieces of clay pipe bowl (T.D.)
 14. 18 pieces of clay pipe stems
 15. 11 pieces of red brick earthenware
 16. 1 piece of hollowed out wood
 17. 34 fragments of animal bone
-
163. Tapered bone tube, $1\frac{1}{4}$ " long, Sq. 5N 1E; 6" - 1" depth.
 164. Sacked (Not extant)
 - Sept. 165. Oak barrel head piece, 9" long, from middle trench
8, 1936 44' E of W end (corner D), 18" depth.
 166. Fragment of Indian pipe bowl (not extant).
 167. Iron pot hook (?) from topsoil trenching near fireplace S wall. $4\frac{1}{2}$ " length, 1 and $\frac{1}{8}$ " wide, $\frac{3}{16}$ " diameter. Wide hook at either end.
 168. Square nail from topsoil trenching near fireplace, S wall.
 169. Kettle copper $7\frac{1}{4}$ " long; 2 $\frac{3}{4}$ " wide; top edge rolled and crimped with large tailed iron lug. Found topsoil trenching near fireplace, S wall.
 170. Sacked: Miscellaneous (not extant).
 171. Copper or brass cover, high domed, with handle, 10" diameter, dumbbell shaped lug with suspension ring. Found along Section 80' - 90' E of corner A, along trench; topsoil just beneath sod.
 - Sept.* 172. Section of gun barrel with breech plug.
9, 1936
 173. Fire steel, broken, D shaped, 3" long, $1\frac{5}{8}$ " deep, striker bar is $1\frac{1}{2}$ " wide and $\frac{1}{8}$ " thick. Found in trench S of fireplace in stockade fill, topsoil to 8" depth.

174. Bottom of small, rectangular green glass blown bottle from trench S of fireplace in stockade fill, topsoil to 8" depth.
175. Brass trigger-guard (Not extant).
- Sept. 9, 1936
176. Sacked: Stockade fill to 8".
1. 1 piece of cast iron kettle
 2. 1 bone awl
 3. 4 pieces of fused glass
 4. 1 piece of dark green bottle glass
 5. 3 pieces of animal bone
 6. 4 clay pipe stem fragments
 7. 1 piece of clay pipe bowl
 8. 1 piece of coiled copper
 9. 2 wire nails, 2½" and 3½"
 10. 1 iron fishhook
 11. 2 wrought iron nails, 3½" long
 12. 1 wrought iron nail, 1½" long
 13. 1 square headed nail fragment, ½" diameter
 14. 5 pieces of window glass clear and burned
 15. 9 pieces of kettle brass
 16. 1 piece of forged iron, screwdriver (?)
3 3/4" x ½"
 17. 1 piece of wrought iron wash 1" in diameter
 18. 1 piece of probable file tang, 1 3/4" x ½" x ½"
 19. 1 piece of iron strapping, 2½" x 1"
 20. 1 piece of iron scrap, 2 3/4" x 1"
 21. 1 piece of bar iron, 1½" x 1" x ½"
 22. 1 piece of broken brass trigger guard,
1½" x ½" x 1/16"
 23. 1 top jaw of flintlock 3/16" x ½"
 24. 1 large forged iron spike, 3½" x ½" x ½"
 25. 1 bottom jaw of flintlock cock, 1" x ½" x 3/16"
177. Brass decorative piece for gun stock (not extant).
178. Brass or copper brooch (not extant).
179. Solid copper rivet, head diameter is ½", shank 3/16" diameter; ½" long; in trench S of fireplace in stockade fill, below 8".

- Sept. 9, 1936
180. Sacked: Trench S of fireplace, in stockade fill, below 8".
1. 2 pieces of animal leg bone
 2. 2 pieces of clay pipe stems
 3. 1 piece of brass kettle
 4. 4 wrought iron nails
 5. 1 wrought iron nail
 6. 2 stones
181. Sacked: "drain trench" about 10' - 20' W of E wall.
1. 9 small pieces of white pottery in sack
 2. 1 sack with 2 pieces of blue willoware
 3. 1 sack of 7 pieces of blue-edged china
 4. 1 sack of blue edged pottery with blue design with blue design on back
 5. 1 sack of 4 pieces of orange and blue design pottery
 6. 1 sack of 3 pieces of yellow, brown and green china
 7. 53 pieces of cream ware in a sack
 8. 1 piece of clay pipe bowl
182. Pewter spoon, bowl, broken at base, 1 5/8" long, 1 1/8"; overall 5" long; found in "Drain Trench", about 10' - 20' W of E wall.
183. Bowl of pewter spoon, 1 1/2" long, "drain trench" about 1' - 20' W of E wall (not extant).
184. Bottom fragment of bottle vial of 3 pieces of clear glass bottle "Drain trench".
185. Neck of small green glass bottle, 1/2" diameter, found in "drain trench", about 10' - 20' W of E wall.
186. Fragments of dark green glass blown bottle; "drain trench", about 10' - 20' W of E wall.
187. Fragment of Indian pipe (not extant).

188. Sacked: "Drain trench) about 10' - 20' W of E wall.
1. 1 piece of fired gun spall, 1 3/8" breadth, extends 5/16" from heel forward
 2. 2 seed beads and 1 barrel bead in a sack
 3. 1 piece of hollowed out cedar bark, 3" x 1 1/4"
 4. 1 piece of musket or fusil barrel
 5. 1 piece of kettle brass
 6. 1 piece of clay pipe bowl
 7. 5 pieces of clay pipe stems
 8. 2 pieces of rusty nails
 9. 1 piece of granite
 10. 2 pieces of scrap iron
 11. 7 pieces of live green bottle glass
 12. 7 pieces of clear bottle glass
 13. 2 pieces of lead glass (?)
 14. 38 pieces of clear window glass
 15. 11 pieces of animal bones
 16. 12 animal teeth

See 60,
63, and
102

189. Fragment of glass with lettering. Found in "Drain trench" about 10' - 20' W of E wall.
190. Fragment of pewter; "drain trench" (not extant).
191. Bottom of heavy green blown glass bottle, with slight kick up; found in "drain trench" 10' W ; 10' E of E wall.
192. ~~Not Extant (?)~~ *193. Frissen spring from flintlock musket, 2 1/4"
194. Not Extant (?)
195. Sacked: "drain trench" (2 sacks) 10' W to 10' E of E wall.
1. 9 pieces of kettle brass
 2. 4 animal leg bones
 3. 1 piece of clear bottle glass
 4. 7 pieces of iron scraps - barrel hoops
 5. 1 bag of wrought iron nails
 6. 4 clay pipe bowl fragments in sack
 7. 1 vial of beads, seed, cane and clay:
1 dark blue transparent glass cane head with thin white stripes, 9 mm

Part I

Part II

wide and 28 mm length

4 white can-beads, average 6 mm diameter
 8 white seed beads - 6 to 8 mm diameter
 2 turquoise blue seed beads, 6 mm diameter
 1 medium blue seed bead, 6 mm diameter
 2 clay beads - 1 is 44 mm length with
 10 mm diameter and 1 is fragmentary,
 34 mm length with 12 mm diameter and
 both are yellow-brown color.

8. 1 sack of 17 pieces of china (1 blue design)
9. 1 iron door latch fragment
10. 1 triangular file, 5 13/16" overall
11. 1 piece of door hinge, 2" x 1 1/2" x 3/16"
12. 3 pieces of scrap iron
13. 1 piece of fused glass
14. 3 pieces of animal bones
15. 2 pieces of animal teeth
16. 4 pieces of clear bottle glass
17. 2 pieces of marble
18. 1 piece of clear window glass (old)
19. 1 piece of a nail bar, 7 1/2" long
20. 1 bar of limestone, 1 1/2" x 1/2" x 1/2"
21. 33 clay pipe stem fragments (W.G. on spur, 3 mm hole)

Sept. 10, 1936 196. May be main spring from a large trap that has been re-worked into a lightweight splitting froe with opening 8" long. Found at 0-35' east of corner C.

197. Iron punch, tapering from 1/2" x 3/4" at head to a blunted point, overall length, 3 5/8". Found at 0 - 35' E of Corner C.

See 85,
151 & 162.

198. Sherd of crazed white ironstone, excavation for corner post (meander corner or land office B. M.), 0 - 35' E of corner C.

199. Sacked: Miscellaneous (Not extant).

200. Fragment of clay pipe bowl (Not extant).

262. Sacked: 20' - 30' E of N $\frac{1}{2}$ of E stockade wall, in "drain trench" below 8" depth.
1. 22 wrought iron nails.
 2. 2 pieces of brass kettle rim.
 3. 1 thick piece of brass 6" x $\frac{6}{16}$ ".
 4. 1 piece of burned and carbonized iron.
 5. 2 pieces of iron wire, 15" long x $\frac{1}{2}$ " in diameter.
 6. 2 iron hooks (?), 5" x $\frac{1}{2}$ " in diameter.
 7. 1 piece iron wire, 6" x $\frac{1}{2}$ " in diameter.
 8. 1 piece of bottom of bottle.
 9. 2 pieces of animal bone.
 10. 11 pieces of creamware and 1 blue and white china in bag.
 11. 8 fragments of clay pipe stems.
 12. 1 iron handle, 14" x 1" x $\frac{3}{16}$ ".
263. Sacked: Middle stockade wall fill, about 10' from corner D.
1. 1 piece of olive-green bottle at neck.
264. Copper or brass button (not extant).
265. Flat iron rasp section 4" long, $\frac{3}{16}$ " thick and tapers from $\frac{3}{4}$ " to $\frac{1}{2}$ " in width. Found Sq. 5N 1W to depth 8".
- See 85 & 201. 266. Sacked: 20' - 30' E of stockade E wall, in "drain trench", top 8".
1. 52 pieces of red-glazed earthenware.
 2. 1 piece of clay pipe stem.
 3. 1 piece of blue and white china.
- Sept. 9 - 10, 1936 267. Sacked: Center stockade excavation, 89' - 91' E of corner D.
1. 7 wrought iron nails.
 2. 3 pieces of kettle rims.
 3. 1 piece of iron wire, 5 $\frac{3}{4}$ " long and $\frac{1}{2}$ " in diameter.
 4. 1 bottom of white china cup.

268. Ground glass stopper, 1 3/8" long, top finial structure, rectangular with rounded edges 1" in length 1/2" wide and 1/2" high. Center stockade wall excavations to 1" depth.
269. Bottom sq. blown glass bottle. 1 1/2" sq. (found same as above).
270. Bottom of square mold blown bottle, 1 3/8" square; 60' - 37' W of Point 3, center stockade wall excavation to 1' depth.
271. Bottom of blown glass tumbler, 1 1/2" diameter; 60' - 37' W of Point 3, center stockade wall excavation, to 1' depth.
- See 131. 272. 60' - 37' W of Point 3, center stockade wall excavation to 1' depth. Sacked:
1. 1 bag of about 30 nails of wrought iron.
 2. 1 white glass cane bead in a vial.
 3. 1 olive green bottle neck.
 4. 1 olive green bottle bottom, 1 pontil.
 5. 26 pieces of olive green bottle glass.
 6. 1 piece of scrap iron, 4 1/2" x 1/2" x 3/16".
 7. 1 fragment of a door pintle (?) 2" x 1/2".
 8. 1 piece of buckle iron 1 1/2".
 9. 1 piece of iron pintle, 3" long.
 10. 1 piece of knife blade, 4 1/2" x 1/2".
 11. 1 piece of kettle brass.
 12. 10 pieces of olive green square bottles.
 13. 2 pieces of bottom of clear glass bottle.
 14. 2 pieces of the top of clear glass bottle.
 15. 25 pieces of clear bottle glass.
 16. 1 piece of clear bottle or glass rim.
 17. 20 pieces of clear window glass.
 18. 2 pieces of green bottle glass, modern.
 19. 3 pieces of fused or burned glass.
 20. 3 pieces of white glazed pasteware.
 21. 3 pieces of blue and white china.
 22. 6 pieces of creamware.
 23. 8 pieces of red glazed earthenware.
 24. 1 copper tack, 3/4" long.
 25. 2 animal teeth.
 26. 6 animal bones.
 27. 13 clay pipe stem fragments, one T.D. on spur, 3 mm in hole.

- Sept. 11, 1936.
273. Copper or brass spigot; long .4", for barrel-bung, could be yellow copper or brass. Found 46' W of Point 3 in middle trench excavation; depth 8".
274. Neck of blown glass bottle, 1 7/8" diameter; 45' - 65' W of Point 3 in middle-trench excavation depth below 8" or 10". Neck 1/2" long, flaring abruptly into shoulder, wide flat lips, clear white lead glass.
275. Fragment of neck of olive green blown glass bottle. 1 1/2" diameter, single applique ring around mouth. Found at 45' - 60' W of Point 3 in middle wall excavation; depth below 8" or 10".
276. Neck of small light clear green glass bottle, 7/8" diameter, found 45' - 60' W of Point 3, in middle wall excavation; depth below 8" or 10".
277. Fragment of neck of earthenware jug (not extant).
278. Fragments of glass tumbler (not extant).
279. Sacked: (not extant).
280. Sherds of white and colored earthenware; 45' - 60' W of Point 3, in middle wall excavation; depth below 8" or 10".
281. Large headed square nail (not extant).
282. Section of iron cross cut saw, teeth are rip saw type, 1/4" from tip to tip; tooth section 4 1/8" long; 5 3/8" from teeth to back of blade. Found "slag fill" in wall of stockade, 15' - 25' E of corner C, top 8" - 10".
283. Broken lock plate from flintlock[?] musket.
284. Section of iron harpoon, 7 1/2" long, unfinished, the point has not been beveled. From "slag

fill" in wall of stockade, 15' - 25' E of corner C, top 8" - 10".

285. Two tanged breach plugs (not extant).
286. Heavy, massive section of iron key, 2 3/4" long, found "slag fill" in wall of stockade, 15' - 25' E of corner C, top 8" - 10".
287. Portable latch bar for lock, iron 8 1/2" long. Found "slag fill" in wall of stockade, 15' - 25' E of corner C, top 8" - 10".
288. Section of iron straight razor 5" long, V-grind; from "slag fill" in wall of stockade, 15' - 25' E of corner C, top 8" - 10".
289. Copper or brass piece (not extant).
290. Kettle copper with brass kettle lug secured with 2 rivets. 3" broad from "slag fill" in wall of stockade, 15' - 25' E of corner C, top 8" - 10".
291. Parts of clay pipe (not extant).
292. Sacked: From "slag fill" in wall of stockade, 15' - 25' east of Corner "C" top 8" - 10" (3 bags).
1. 3 pieces of window glass.
 2. 1 fragment of a large round shouldered clear glass bottle.
 3. 1 fragment white glazed earthenware with blue feather edge underglaze design. Could be a saucer fragment.
 4. 9 fragmentary clay pipe stems.
 5. 1 clay pipe bowl fragment. Letters G/W on spur.
 6. 1 broken bird bone.
 7. 1 fragment, mammal bone.
 8. 1 lower jaw of flintlock hammer vise.
 9. 2 iron bars, 3/8" wide, 5 1/4" long with diamond prints.
 10. 1 iron spring from frizzen or battery of flintlock.

292. Sacked: Continued

11. 1 pointed piece of iron, 5/16" thick, 2 3/4" long.
12. 1 pointed piece of iron 1/4" thick, 3/8" wide, 5" long.
13. 1 gouge (?).
14. 1 offset gouge.
15. 1 ladle handle broken.
16. 1 fragment of scrap iron.
17. 1 fragment of scrap iron.
18. 1 flattened piece of bar stock 9/16" in dial, 3 1/2" long.
19. 1 fragment of scrap iron.
20. 1 piece of flat iron stock, 1" wide, 1/8" thick, 5" long!
21. 9 pieces of scrap iron.
22. 3 pieces of flat iron stock, 1 1/4" wide, 1 1/2" long with holes 1/4" in diameter, center.
23. 4 pieces of sheet iron which have serrations on one edge and have round holes, 1/16" in diameter punched in them.
24. 1 piece of scrap iron.
25. 2 pieces of scrap iron.
26. 2 nails with chisel points, 3" long.
27. 1 piece scrap iron with hammer marks on end.
28. 1 flat piece of iron, 1/2" wide, 1/16" thick and 3/4" long.
29. 3 pieces of scrap iron.
30. 1 piece of scrap iron with point, spike (?).
31. 1 piece of curved iron, 5/8" wide, 1/16" wide, 1/16" thick, 4" long, curved (knife blade?).
32. 1 chisel end, small.
33. 1 piece round iron rod, 1/4" in diameter x 6" long.
34. 1 door hook (?).
35. 1 piece of scrap iron (?).
36. 1 broken spear point.
37. 1 piece of sheet iron, with crimped edge.
38. 1 piece of iron screwdriver.
39. 19 wrought iron nails in a bag.
40. 40 pieces of scrap kettle brass.
41. 47 fragments of wrought iron nails.
42. 1 piece of kettle brass, 1 1/2" x 2 3/4" hole, punched in it.

292. Sacked: Continued

43. 3 pieces of kettle brass with rolled rim.
44. 2 kettle lugs, 1 3/4" wide x 3 1/4" long, lug ears are crimped toward bale holes are 1/2" diameter.
45. 1 piece of kettle brass, 3 1/2" long, 2 1/2" wide, has 2 paired sets of 4 holes punched through it, probably used as a patch.
46. 1 kettle lug, 3" long, 1 1/2" wide, bale hole, 1/2" in diameter.
47. 1 piece of kettle brass, 1 1/2" wide x 3" long, contains 4 holes probably a patch.
48. 1 piece of kettle brass, 2" wide 2 1/2" long, contains 4 holes, probably a patch.
49. 1 piece of kettle brass 2" wide, 4 1/2" long, has a patch of brass 1 1/2" wide, 2" long which has eight small brass rivets to hold to kettle.
50. 1 piece kettle brass 2" wide, 2 3/4" long, it consists of 2 strips joined by a seam.
51. 1 piece of kettle brass, 1 1/2" wide, 6" long which is re-enforced by a patch of the same dimensions, patch held on by 3 rivets.
52. 1 piece kettle brass, 1" wide @ 7" long, re-enforced by brass patch.
53. 2 pieces of kettle brass, 3/8" wide x 4" long contained 2 rivet holes in each probably brass binding from knife.
54. 2 brass rivets.
55. 1 cylindrical brass casting, 1" long, 1" in diameter outer edge has 3 milled marks on it, and a square hole.
56. 10 pieces of scrap iron.
57. 1 fragmentary triangular iron file, 1 1/2" x 3/4" ³.
58. 1 leaf spring, 2 1/4" long x 5/8" wide.
59. 1 curved piece of iron, 1 1/2" wide x 2 1/2" long.
60. 2 pieces scrap iron, 1/16" thick.
61. 1 triangular piece of scrap iron, 4 1/2" long.
62. 1 broken piece of iron 2" long x 1 1/2" thick 11/16" in diameter.

292. Sacked: (continued)

63. 1 piece of scrap iron, 4" long x 1 1/8" x 3/16" thick, rectangular hole 5/16" x 1/4" at one end.
64. 12 pieces of iron barrel hoops, which range from 1" wide to 1 1/2" wide with rivets which fasten them to another piece.
65. 1 iron cold chisel, 2 1/2" long x 9/16" wide 5/16" thick.
66. 1 broken iron (saw blade ?) 4" long, 2" wide, 1/8" thick.
67. & 68. 2 fragments of sheet iron.
69. 1 piece of iron tin plate with rolled edge; edge is rounded.
70. 1 piece of iron tin plate with rolled edge, 3 5/8".
71. 1 dipper handle (?) iron 4 1/2" long.
72. 1 piece of iron 1/4" wide 8" long.
73. 1 iron chest lock, 2 3/4" long, 1 7/8" wide.
74. 1 iron rod, 5/8" diameter, 5 3/4" long, one end spread by hammer.

Sept. 12, 1936. 293. Bone handled iron fork (not extant).

294. Sacked: 45' - 47' W of Point 3.

1. 13 wrought iron nails in a bag.
2. Top part of slate pencil in a vial.
3. 1 thick clear bottle glass bottom with pontil mark.
4. 1 deer vertebrae.
5. 1 clay pipe bowl fragment.
6. 2 clay pipe stem fragments.
7. 1 piece of burned bottle glass.
8. 6 pieces of olive green bottle glass.
9. 3 pieces of clear window glass (?).
10. 6 pieces of clear bottle glass.

295. Probable trap main spring 4" long, 5' - 15' E of corner C, along stockade wall, in "slag fill" to 8" depth.

296. Sacked: 5' - 15' E of corner C along stockade wall in "slag fill" to 8" depth.
1. 1 piece of kettle brass, pie-shaped, 5" long x 4"; contains a rivet with two washers.
 2. 1 brass kettle patch, 1 3/4" square, 7 rivet holes.
 3. 3 pieces of kettle brass, with crimped rims.
 4. 18 pieces of scrap kettle brass.
 5. 1 flat iron strip, 1 3/8" wide x 6" long, contains 2 round holes 4" apart, holes 1/8" in diameter, 1/16" thick.
 6. 1 flat iron strip, 1 1/4" wide, 7 1/8" long and 1/8" thick, has a flared v-notch at one end.
 7. 1/2 round iron bar, 3/4" wide, 5/16" thick and 6 3/4" long, rivet on one end.
 8. 3 pieces of iron barrel hoops, 1" wide, 3 1/2" long, each piece has a rivet.
 9. 1 piece of sheet iron, 1 1/8" wide, 7 1/2" long, bent into a curve.
 - 10.
 11. Iron casting, nail heading wedge shaped, 3" long, 1 7/8" wide, 5/8" - 1 3/8" thick one end, bears a round hole, 1" diameter.
 12. 1 piece cast iron, 1 1/8" wide, 1 1/2" thick, 2" long.
 13. 1 curved piece of iron, 1" wide, 2 1/2" long.
 14. 1 iron washer, broken, 7/8" wide, 1/2" thick, 2 1/2" long, bears a hole, 3/4" in diameter.
 15. 1 iron chain link, broken 3 1/2" wide, 1/2" thick, hole is 1 1/2" in diameter.
 16. - 23. 8 pieces of wrought iron, some fragments are bar stock 1/2" and one piece is iron rod, 3/8" in diameter and 2" long.
 24. 1 piece of scrap iron.
 25. 1 piece of sheet iron, 1 1/4" wide, 1 7/8" long, 1/16" thick, irregular hole in middle.
 26. 1 curved iron rod, 3/8" in diameter, 6" long.
 27. 1 piece of sheet iron, 1 1/4" wide, 4" long, 1/16" thick.
 28. 1 broken triangular file, rear portion with

296. Sacked: Continued
 tang, 5/8" wide, 3" long.
29. 1 piece of scrap iron, 1/2" wide, 3 1/2" long, 1/8" thick.
 30. 1 chisel, pointed spike or nail, 3/8" wide, 3 1/2" long.
 31. 1 chisel pointed spike or nail, 1/2" wide, 2 3/4" long, large head 7/8" x 3/4".
 32. 1 chisel-pointed spike or nail, 3/8" wide, 2 5/8" long.
 33. 2 triangular nails, no heads.
 34. 1 broken, chisel pointed spike or nail, 1/2" wide; 1 5/8" long, head is 1 1/8" x 1".
 35. 1 boat nail, iron, 1/2" diameter, 4" long (Rivet).
 36. 1 large nail head, round, 1" in diameter.
 37. 1 chisel-pointed spike or nail, 3/8" wide, 3 3/4" long, head is 1" x 1 1/4".
 38. 1 flintlock pistol lower jaw of flintlock cock vise.
 39. 3 triangular nails, wrought iron.
 40. 14 wrought iron nails.
 41. 1 piece white glazed earthenware.
 42. - 43. Clear window glass fragments.
 44. 1 piece olive green bottle glass.
 45. 2 broken trade clay pipe stems.
 46. 1 piece of bone, 1/2" wide, 3" long; sawed.
 47. 1/2 rodenypelvis.
 48. 1 lump fused white glass.
297. Sherds of painted porcelain, 67' - 76' E of corner A; to 1' depth.
- Sept. 12, 1936 298. Sacked: 67' - 76' E of corner A; to 1' depth.
1. 11 wrought iron nails.
 2. 1 (possible) iron wire bracelet, 3/32" diameter, 2 1/2" across, 1 3/4" wide.
 3. 1 long bar of iron, 1/2" in diameter, 10 1/2" long.
 4. 1 rounded piece of strap iron, 1/2" wide, 8" long, 3/16" deep with doubled end 1" long.
 5. 1 round iron bar, 3 1/2" long, 1/2" diameter.
 6. 1 iron awl or punch, 4 1/2" long, 1/2" - 1/2" wide, 1/2" deep.

298. Sacked: (Continued)

7. 3 pieces of animal bone.
 8. 1 piece of scrap iron, 3 3/4" long, 1" wide, and 1/2" wide.
 9. 1 piece of bar stock iron, 1 3/4" long, 3/4" wide, 1/2" deep.
 10. 1 piece of strap iron, knife blade(?) 3 3/4" long, 3/4" wide.
 11. 1 triangular piece of strap iron, with 2 holes in it, 1" x 1 1/2" holes are 3/16" in diameter.
 12. 2 pieces of tin plated iron, with edges, one rolled and one with jagged edges like saw.
 13. 2 pieces of pottery with feather-edging on top.
 14. 1 piece of a clay pipe bowl.
299. Small iron ornament, 1 1/4" long, Sq. 6N 2E to 10" depth (iron suspender buckle).
300. Bone and iron handle, 3" long, Sq. 6N 2E to 10" depth.
301. Sacked: 6N 2E Top 10" depth.
1. 1 lead bale seal with Mc T C on it.
 2. 42 wrought iron nails in a bag.
 3. 1 grey gunspall, 1/2" diameter from pocket pistol.
 4. 6 white and blue seed beads in a vial.
 5. 3 pieces of animal jaw.
 6. 2 pieces of bottle glass, olive green.
 7. Probable file tang, 2 1/2" long; 1/2" - 1/2" wide and 1/4" deep.
 8. 2 pieces of a light green bottle glass.
 9. 4 pieces of clear bottle glass.
 10. 10 pieces of clear window glass (?).
 11. 4 pieces of clay pipe bowls.
 12. 7 clay pipe stem fragments.
 13. 2 pieces of creamware and 1 china piece with blue markings.

302. Bottom of green glass blown bottle, 2½" diameter; Central stockade wall excavation.
303. Neck of small blown glass bottle, light green, probably soda lime glass, wide flattened, slightly convex lips ¼" neck; 1" diameter. Middle stockade wall excavation.
304. Sacked: S Wall about 20' - 30' W of corner X.
1. 3 wrought iron nails.
 2. 1 piece of white marble, 1 ¾" wide, 1 ¾" long and 1" deep.
 3. 1 piece of pottery with feather edging.
 4. 1 animal bone. †
 5. 1 chisel end, broken, 2" long and 7/16"².
- Sept. 15, 1936 305. Tailed kettle lug, 4" wide, S wall about 20' - 30' E of "fireplace area".
306. Sacked: 20' - 30' E of fireplace area.
1. 8 wire nails.
 2. 2 square nails.
 3. 7 steel brads, 1" long.
 4. 1 piece of earthenware pottery with black glaze.
 5. 1 piece of bar iron stock 2½" x 1" x 5/16".
307. Bottom of small blown glass tumbler, 1 3/8" diameter, 16' - 30' W of Point 3 in middle trench excavation, to 1' depth.
308. Bottom of blown glass tumbler 1½" diameter, 16' - 30' W of Point 3 in middle trench excavation to 1' depth.
309. Two fragments of pipe stems showing types, with mouth bits 3" length and the shorter of the two, 1 5/8" length, has a letter "W" impressed beside the break. Found 16' - 30' W of Point 3 in middle trench, excavation to 1' depth.
310. Heavy iron chisel point hand wrought spike - square cross section 3/8" thick, square shank

6" long, 16' - 30' W of Point 3 in middle trench excavation to 1' depth.

311. Section of heavy iron rasp, $8\frac{1}{2}$ " long, $1\frac{1}{4}$ " wide, with coarse hand cut teeth found at 16' - 30' W of Point 3 in middle stockade wall excavation to 1' depth.
312. Iron forged handle 3" broad, 16' - 30' W of Point 3 in middle stockade wall excavation to 1' depth.
- 312a. Iron piece with loops, $4\frac{1}{2}$ " long, 16' - 30' W of Point 3, middle stockade wall excavation to 1' depth. (ice creeper).
313. Iron piece (not extant).
314. Sacked: 16' - 30' W of Point 3 middle stockade wall excavation, to 1' in depth.
1. 32 wrought iron nails in a bag.
 2. 1 square nail, 4" long.
 3. 1 piece of copper wire, $4\frac{3}{4}$ " long, $\frac{3}{16}$ " diameter.
 4. 3 pieces of blue and white china, 2 willow-are.
 5. 1 neck piece of olive green bottle glass.
 6. 2 pieces of the bottom of a clear glass bottle, $1\frac{1}{2}$ " in diameter.
 7. 9 pieces of clear glass bottle fragments.
 8. 1 piece of clear window glass.
 9. 1 piece of kettle brass with 2 rolled rims, $2\frac{1}{2}$ " x 1".
 10. 1 piece of kettle brass handle, $1\frac{1}{2}$ " x $\frac{1}{2}$ " with 2 holes, $\frac{1}{4}$ " in diameter.
 11. 1 piece of animal bone.
 12. 9 pieces of creamware.
 13. 13 pieces of clay pipe stems.
 14. 9 pieces of iron strap, $2\frac{1}{2}$ " - 5" long, L" with holes, probably burned barrel hoops.
- Sept. 15, **315. Portion of silver ornament, ~~probably from a~~ ~~likely~~ ~~from~~ ~~a~~ ~~socket~~.
- 1936
316. Fragment of painted bead (not extant).

317. Miscellaneous (sacked) (not extant).
318. Sacked: E wall excavation between H & X corners, in Z bags.
1. 38 wrought iron nails in a bag.
 2. 7 pieces of blue and white pottery.
 3. 2 pieces of tin can.
 4. 1 broken half of iron fish spear, 6½" long, 7/16" in diameter.
 5. 1 broken piece of iron, 4½" long x ½" in diameter.
 6. 1 wire iron nail, 2½" long.
 7. 1 square nail, 2" long.
 8. 1 piece of copper wire, 1½" long x ½" in diameter.
 9. 3 pieces of iron, tin plated with nail holes in it.
 10. 3 pieces of kettle brass.
 11. 1 piece of kettle brass rim.
 12. 1 piece of kettle brass with hole, ½" diameter.
 13. 1 piece of iron rasp, 3½" long, 1" wide.
 14. 1 triangular piece of scrap iron, 2½" x 1½".
 15. 1 rectangular piece of scrap iron with iron fragment, 1 3/4" x 3/4".
 16. 1 piece of lead bar, for musket ball making, 2½"x1".
 17. 36 pieces of animal bones.
 18. 1 piece of burned bone.
 19. 1 cosmetic jar cover, 2 3/4" diameter milky glass.
 20. 1 fragment of cosmetic jar, milky glass.
 21. 16 fragments of clear window glass, 1/8" thick.
 22. 3 fragments of clear bottle glass.
 23. 1 fragment of clear bottle glass base.
 24. 4 fragments light green bottle glass.
 25. 1 fragment of olive green bottle glass.
 26. 2 fragments, olive green bottle glass.
 27. 4 pieces of melted green glass.
 28. 4 fragments of cream glazed earthenware.
 29. 1 fragment of saucer bottom, cream glazed colored earthenware.
 30. 1 fragment, brown-glazed earthenware.
 31. 10 clay pipe stem fragments.

318. Sacked (continued)
32. 1 clay pipe bowl base, with spur (letters TD).
319. Portion of iron fork, 6" long, two-tined, complete from tines to end of tang. Found E wall excavation between H and X.
320. Two iron spikes (not extant).
321. Portion of iron lock, probably trunk or chest lock; 4½" wide; E wall excavation between H and X.
322. Portion of another iron lock, 4" wide x 3". Same as above. Found between excavations of E wall between H and X.
323. Short heavy iron wedge, 4" long, E wall excavation between H and X.
324. Iron piece, probably end of shutter hinge, flattened 3" long, E wall excavation, between H and X.
325. Heavy tapered ½" square 5½" long, tapered iron piece, with a right angle to within 1" of its end, found at E wall excavation between H and X.
326. Flattened iron oval piece with spatula blade with tang. Blade is 3 ¾" x 4" with a 2 ¾" tang. Found between E wall excavation between H and X.
327. Portion of iron harpoon, 3½" long; E wall excavation, between H and X.
328. Riveted iron ring, with holes, 2" diameter; E wall excavation, between H and X.
329. Semi-circular Kettle copper lug plate riveted with 5 small rivets with holes ¾" diameter; E wall excavation between H and X.

330. Copper or brass button (not extant).
- See 318. 331. Neck and bottom fragments of dark lime green glass bottle, translucent. 15½" in height with a flattened lip 15/16" in diameter. One pontil 15/16" diameter. Found at E wall excavation between H and X.
- Sept. 15, 1936 332. Sacked: (Sack unbroken) (Not extant).
333. ** Portion of iron gun-barrel (not extant).
334. Sacked: (not extant).
335. Bottom of blown glass tumbler 1 3/8" diameter. Found at middle wall excavation between corners G and H.
336. Pewter buckle, 2 3/4" x 1 3/4" with I D raised letters on back and raised dots and palmate at each quadrant. Probably a shoe buckle. From middle wall excavation, between corners G and H.
337. Section of iron hand-saw, 6" broad, from back to teeth, length 5" and teeth are 3/16" apart. Found middle wall excavation, between corners G and H.
- Sept. 18, 1936. 338. Sacked: N - S exploratory trench, from 150' - 180' S of middle wall.
1. 2 square nails.
 2. 4 fragments of gray salt glazed earthenware jar.
 3. 1 fragment of gray salt glazed earthenware jar, brown slip on inside.
 4. 1 fragment purple glass jug or telegraph insulator.
 5. 1 fragment of aqua rectangular base molded bottle one side spells Congress, the other Co-.
 6. 1 fragment brown molded bottle.
 7. 1 fragment clear glass bottle.
 8. 2 clear glass molded bottle fragments.
 9. 2 fragments of white glazed earthenware, might be saucer?

338. Sacked (continued).

10. 1 fragment of green bottle glass.
11. 1 clay pipe stem fragment.

Sept. 16, Sacked: Sq. 6N 2E below 16"
1936

1. 25 wrought iron nails.
2. 1 aqua seed bead in a vial.
3. 1 broken end of heavy iron spike, $3\frac{1}{4}$ " long, $\frac{1}{2}$ " square.
4. 1 end of an iron chisel, $1\frac{3}{4}$ " long and $\frac{1}{2}$ " square.
5. 1 iron hook, $1\frac{1}{2}$ " long, $\frac{3}{4}$ " wide, $\frac{1}{8}$ " thick.
6. 2 pieces of copper or brass, about 1" long.
7. 1 piece of window glass, clear.
8. 2 pieces of light green bottle glass.
9. 1 piece of clear bottle glass.
10. 3 pieces of china, one with pink leaves.
11. 14 pieces of bone.
12. 3 fish vertebrae.
13. 2 pieces of pipe stem bowl, one with T.D. on spur.
14. 6 pieces of clay pipe stems.

340. Rim fragment of green blown glass tumbler in vial; Sq. 6N 2E below 16".

Sept. 1936 341. Curved iron piece, unidentified use, $4\frac{1}{2}$ " long, Sq. 6N 1E top 8".

342. Section of iron knife (not extant).

343. Copper or brass button with wood, $\frac{3}{4}$ " diameter. Sq. 6N 1E top 8".

344. Bear tooth (not extant).

345. Sacked: Sq. 6N 1E top 6".

1. 26 cut nails.
2. 2 seed beads and 1 cane bead in a vial.
3. 2 pieces of kettle brass.
4. 1 piece of cast iron kettle.
5. 1 piece of iron with rounded tip, 2" long, $\frac{1}{2}$ " wide, and $\frac{1}{8}$ " thick.

345. Sacked (continued)

6. 1 piece of round iron bar $4\frac{1}{2}$ " long, $\frac{1}{4}$ " in diameter.
7. 1 piece of scrap iron, $1\frac{3}{8}$ " long x 1" wide.
8. 4 pieces of strap iron, $2\frac{1}{2}$ " - 1" long x 1" wide.
9. 3 pieces of olive green bottle glass.
10. 5 pieces of window glass.
11. 2 clear glass bottle rims.
12. 1 square corner of clear bottle glass.
13. 2 pieces of burned and fused glass.
14. 4 pieces of bone.
15. 3 pieces of pottery one with blue line on it.
16. 5 pieces of clay pipe stem.

346. Bone tube (not extant).

347. Stone sinker (?) (Not extant).

348. Section of iron rasp, $2\frac{1}{2}$ " long. Sq. 6N 1E
8" - 16" depth.Sept. 18,
1936349. Sacked: Sq. 6N 1E, 8" - 16" depth.

1. 27 cut nails.
2. 2 white seed beads and 2 cane beads, white, in a vial.
3. 3 pieces of copper or brass fragments, $1\frac{1}{2}$ " long x 1" wide.
4. 3 pieces of window glass, modern.
5. 2 pieces of older glass probably from bottles.
6. 1 piece of window glass, burned.
7. 14 pieces of burned and fused glass.
8. 2 pieces of clay pipe bowls with TD on spur of one of them.
9. 7 pieces of clay pipe stem.
10. 10 pieces of china in a bag, 4 are blue design; one is pink.
11. 28 large animal bones.
12. 1 jaw of a moose (?) with teeth.
13. 34 fragments of small animal bones in a bag.

- Sept. 18, 1936
350. Sacked: From central wall excavation.
 1. 2 animal bones.
 2. 1 piece of strap iron, 2½" long x 1" wide.
 3. 1 wrought iron nail.
351. Fragment of bone with cut marks (?) Sq. 6N 1E below 16".
352. Sacked: Miscellaneous (not extant).
353. Iron pin, chisel point, 7" long. Found at Sq. 6N OE 8" - 16" depth.
354. Iron hook (not extant).
355. Iron padlock (not extant).
356. Fragment of copper or brass buckle (not extant).
357. Fragment of copper or brass piece (not extant).
358. Marble, ceramic, unpainted, ¾" diameter. Found at Sq. 6N OE, 8" - 16" depth.
359. Gun Flint (not extant).
360. Fragment of slate pencil, 1" long. Sq. 6N OE, 8" - 16" depth.
361. Corner fragment of small buckle, brass, ¾" long involving 1 corner. Found at Sq. 6N OE 8" - 16" depth.
362. Sacked: Sq. 6N OE 8" - 16" depth.
 1. 3 pieces of copper or brass kettle, with holes 1/8" in diameter.
 2. 11 clay pipe stem fragments.
 3. 3 pieces of burned window glass, modern.
 4. 2 pieces of clear bottle glass, old.
 5. 3 pieces of bottle glass, old.
 6. 2 pieces of thin, round bottle glass.
 7. 3 pieces of china, one with pink design, 2 rim sherds.
 8. 4 pieces of fused, burned glass.

362. Sacked (continued)
9. 39 pieces of animal bones.
 10. 38 wrought iron nails.
363. Hand forged iron staple, legs $1\frac{3}{8}$ " long; head is $1\frac{1}{8}$ " long and $\frac{1}{4}$ " wide. Sq. 6N 1W top to 8" depth.
364. Iron piece (not extant).
365. Silver button, in vial, corroded iron loop, diameter $\frac{5}{8}$ " Sq. 6N 1W to 8".
366. Large copper or brass flat round button, conical shape, bored with hole $\frac{3}{16}$ " diameter, threaded, Sq. 6N 1W to 8".
367. Copper or brass piece, 1" long, Sq. 6N 1W to 8". $1\frac{3}{8}$ " diameter, stamped pattern lines radiating from center, small wire loop on back. Conical shape-threaded inside.
368. Section of iron screw, 1" long, Sq. 6N 1W to 8".
369. Gun flint (not extant).
370. Sacked: Sq. 6N 1W to 8".
1. 82 wrought iron nails, 14 sq. nails and 1 wire nail in bag.
 2. 9 pieces of kettle brass with holes, $\frac{1}{8}$ ", in diameter.
 3. 1 piece of round iron, $1\frac{3}{4}$ " in diameter, 1" wide, $\frac{5}{16}$ " thick.
 4. 1 hinge, $2\frac{1}{2}$ " long, $1\frac{3}{4}$ " wide.
 5. 4 pieces of the rim and neck of olive green bottle glass.
 6. 1 piece of yellow glass with bubble.
 7. 9 pieces of clear window glass.
 8. 12 pieces of burned or fused glass.
 9. 1 piece of scrap iron, triangular, $1\frac{1}{2}$ " long and 1" wide.
 10. 4 pieces of blue and white china.
 11. 8 animal bones.

370. Sacked (continued)
12. 1 animal jaw with teeth.
 13. 1 piece of clay pipe bowl.
 14. 23 pieces of clay pipe stems.
 15. 1 wrought iron hook, $1\frac{1}{4}$ " x $1\frac{1}{8}$ ".
 16. 1 iron chisel $2\frac{1}{2}$ " long, $\frac{1}{4}$ " wide and $\frac{1}{8}$ " deep.
371. Section of razor, $3\frac{1}{2}$ " long. Sq. 6N 1W 8" - 16", $\frac{1}{2}$ " deep; plane-convex blade.
372. Copper or brass button (not extant).
373. Fragments of earthenware (not extant).
374. 3 gun flints (not extant).
- Sept. 21, 1936 375. Fragment of pipe bowl (not extant).
376. Decorated copper or brass button (not extant).
377. Sacked: Sq. 6N 1W, 8" - 16".
1. 108 pieces of bird and animal bones.
 2. 20 fragments of window glass, thickness varies.
 3. 10 fragments of bottle glass, assorted.
 4. 13 fragments glazed earthenware and porcelain.
 5. 43 clay pipe stem fragments.
 6. 4 fragments of clay pipe bowls.
 7. 2 pieces of iron.
 8. 1 piece of melted glass.
 9. 2 pieces of kettle brass.
 10. 91 wrought iron nails.
- Sept. 22, 1936 378. Sacked: Sq. 6N 1W below 16" depth.
1. 19 wrought iron nails.
 2. 23 fragments of animal bones.
 3. 1 piece of flat iron, $\frac{3}{34}$ " long, 1" wide, 1.16" thick.
 4. 1 piece of iron formed at right angle, corner brace, fashioned at right angle, with tacking pins at each end. $\frac{1}{8}$ "

378. Sacked (continued)
 thick, 7/8" wide, 3" to a side with
 forged points at the end, 3/4" long.
5. 1 piece of iron, 2 1/2" long, 1/2" wide,
 1/8" thick, right angle bend at one end.
 6. 1 irregular piece of sheet iron, 1/32"
 thick, 2 1/2" long.
 7. 1 piece of kettle brass.
 8. 3 glass bottle fragments.
 9. 10 fragments of window glass.
 10. 1 fragment of glazed earthenware.
 11. 10 fragments of clay pipes.
 12. 2 pieces of china.
 13. 4 pieces of melted glass.
379. Iron implement (not extant).
380. Iron pin 9" long, Sq. 6N 2W to 7" depth.
381. Large iron staple, legs 2 1/2" long, 2 3/4" long
 head, 1/2" wide, round 1/2 length of pin and
 square 1/2 length. Sq. 6N 1W, below 16" depth.
382. Two glass beads (not extant).
383. Iron knife 3 1/2" long (not extant).
384. Iron pintle, 6" long, made of 2 pieces welded
 together. 6N 2W to 7" depth.'
385. Small pewter button, 3 hole, concaval-convex
 design wreath design on front, back lettered
 Bartlees & Sons, on reverse side with oak leaf
 (?) design. Sq. 6N 2W to 7" depth.
- ** 386. Section of musket mainspring, 3 5/16" long.
387. Sacked: Sq. 6N 2W to 7" depth.
1. 20 square nails.
 2. 52 wrought iron nails.
 3. 4 fragments of olive green bottle glass.
 4. 8 fragments of clear bottle glass.
 5. 2 fragments of irridescent glass, burned.
 6. 1 piece of strap iron 3 1/4" long, 1" wide, 1/4" thick.
 7. 7 fragments of clear window glass.

387. Sacked (continued)
8. 8 fragments of clear window glass.
 9. 11 glazed earthenware sherds.
 10. 4 clay pipe bowl fragments.
 11. 21 clay pipe stem fragments.
 12. 4 animal bone fragments.
 13. 1 bottom section of iron kettle with leg.
 14. 2 iron rods, 3 7/8" long; 3" long, round 1/4" diameter.
 15. 1 iron rod, 1 7/8" long; 7/16" in diameter; has hook 1/2" long at one end.
 16. 1 piece melted glass.
 17. 2 fish vertebrae and 2 small rodent bones.
 18. 1 small strip of lead; 1 small piece of iron.
 19. 1 small piece of iron; probably fits onto 18 above.
 20. 1 small flint flake.
 21. Assorted small beads in a tube.

- Sept. 24, 1936
388. Fragment of clay pipe with lettering (not extant).
389. Copper or brass thimble (not extant).
390. Sacked: (not extant).
391. Iron fire steel, 2 7/8" long to 1 1/2" wide, an elongated oval shape; found Sq. 5N 1E in middle stockade wall fill about 4" from bottom of trench.
392. Bottom of small blown glass tumbler, 1 3/8" in diameter. Middle stockade wall excavation, point 3 to 16' W of Point 3 below 1' depth.
393. Sacked: Middle stockade wall excavation, Point 3 to 16' W of point 3 below 1' depth.
1. 3 wrought iron nails.
 2. 1 opened metal cylinder, 5 1/2" long, 1" wide, shovel blade (?).
 3. 1 tapered metal pin 3 1/2" long x 5/16" wide x 1/4" deep.
 4. 1 piece of iron barrel hoop, 2 5/8" long, 1 1/2" wide with rivet.
 5. 1 piece of clear window glass.

393. Sacked (continued)
6. 1 piece of clear bottle glass.
 7. 6 clay pipe stem fragments.
- Sept. 18, 1936
394. Section of gun barrel (not extant).
395. Section of iron rasp 3 3/8" long, flat mill bastard type 7/8" broad tapering to 1/2" wide tip, 3/16" thick. N - S exploratory trench, 30' - 60' S of middle stockade wall to 1' depth.
396. Sacked: N - S exploratory trench, 30 - 60' S of middle stockade wall, to 1' depth.
1. 13 wrought iron nails.
 2. 1 rose headed nail with chisel end, 4 3/4" long.
 3. 1 piece of iron wire, 5" long, 1/8" diameter.
 4. 1 chisel end of rose headed nail, 3 1/4" diameter; 1/2" wide.
 5. 1 iron object with 3 tines, 3 1/2" long, 3 3/8" wide, 1/8" deep like a tined fork.
 6. 2 pieces of sheet brass.
 7. 1 piece of kettle brass rim.
 8. 2 pieces of light green glass.
 9. 1 piece of glass-clear, 1/8" thick.
 10. 8 pieces of clear window glass.
 11. 3 pieces of clear bottle glass.
 12. 2 pieces of glazed earthenware.
 13. 14 clay pipe stem fragments.
 14. 3 horse (?) teeth.
 15. 1 piece of animal skull fragment.
397. Sacked: N - S exploratory trench, 60' - 90' S of middle stockade wall to 1' depth.
1. 15 wrought iron nails.
 2. 7 Pieces of clear window glass.
 3. 3 pieces of older glass.
 4. 1 round iron flared and tapered cylinder, 3/4" high and 1 3/4" in diameter.
 5. 1 piece of sheet iron, 3 1/4" long, 1 1/4" wide with holes 1/8" in diameter.

397. Sacked (continued)
6. 5 pieces of animal bone.
 7. 28 pieces of clay pipe stems.
 8. 4 pieces of clay pipe bowls.
398. Wooden plug, 3" long (not extant).
399. Lead Ball (not extant).
400. Fragment of clay pipe bowl with lettering (Not extant).
401. Sacked: N - S exploratory trench 90 - 120' S of middle stockade wall, to 1' depth.
1. 3 fragments of clear window glass.
 2. 1 piece of olive green bottle glass.
 3. 1 piece of glazed earthenware crock, tan and brown.
 4. 1 fragment of ironstone ware.
 5. 1 fragment of ironstone ware.
 6. 2 pieces of kettle brass.
 7. 1 rose headed spike, with chisel point, 4 3/16" long, 1/4" square.
 8. 1 right-angled pintle, 3 1/2" long.
 9. 4 cut nails, 2 round wire nails.
 10. 6 clay pipe stem fragments.
 11. 1 broken T D pipe bowl with spur.
 12. 3 animal bones.
- Sept. 18,
1935
- ** 402. Flint lock 6 1/2" long with frizzen and cock.
403. Section of triangular iron rasp, 6 7/8" long, 5/8" wide, equilateral triangle tapering to a point. N - S exploratory trench, 120' - 150' S of middle stockade wall, to 1' depth.
404. Forged iron pintle, 2 pieces, welded mounting pin 5 1/2" long, and hinge pin 1 1/2" long. N - S exploratory trench, 120' - 150' S of middle stockade wall, to 1' depth.
- ** 405. Portion of flint lock ~~main spring~~, 3 5/16" long.

406. Rolled copper or brass ramrod thimble from trade fusil type gun. $1\frac{1}{4}$ " embossed. N - S exploratory trench, 120' - 150' S of middle stockade wall, to 1' depth.
407. Metal button (not extant).
408. Copper or brass button (not extant).
409. Flattened copper bead (not extant).
410. Sherd of colored earthenware with letter; N-S exploratory trench, 120' - 150' S of middle stockade wall, to 1' depth. (recent?). "BOYS" on it, in a vial.
411. Sherd of black on white earthenware in a vial. N - S exploratory trench 120-150 S of middle stockade wall.
412. Fragment of clay pipe bowl, ribbed (not extant).
413. Sacked: N - S exploratory trench, 120' - 150' S of middle stockade wall to 1' depth.
1. 2 lead shot, 5 mm in diameter, 43 seed beads in vial.
 2. 2 pieces of light green window glass.
 3. 1 bottom of light green glass bottle.
 4. 1 large piece of rounded clear bottle glass, $\frac{1}{8}$ " thick.
 5. 1 rim of clear glass bottle.
 6. 1 piece of pink bottle glass.
 7. 2 pieces of a brown bottle glass.
 8. 11 pieces of clear window glass.
 9. 1 piece of ironstone ware.
 10. 1 round piece of lead, $1\frac{1}{4}$ " x 1".
 11. 3 pieces of animal bone.
 12. 1 piece of forged iron, 4" long, 1" wide, tapering to $\frac{1}{4}$ " width.
 13. 1 table knife with SH in handle.
 14. 1 iron rod with fork in it, $7\frac{1}{2}$ " long, $\frac{3}{8}$ " diameter.
 15. 1 broken piece of iron rasp, $2\frac{3}{4}$ " long, $\frac{13}{16}$ " wide, $\frac{1}{4}$ " deep.

- Sept. 18, 1936 413. Sacked (continued)
16. 1 saw screw with WHEELER MADDEN AND CLEMSON, on it, pat. date, Dec. 21, 1869, MIDDLETOWN, N. Y.
 17. 1 piece of chinking.
 18. 6 pieces of clay pipe bowls.
 19. 23 clay pipe stem fragments (one T.D. on spur).
 20. 64 wrought iron nails.
414. Fragment of decorative gun stock piece, ~~two~~ ^{two} pieces of brass serpentine (Dragon) ~~market~~ side plate.
415. Sacked: (not extant).
- Sept. 18, 1936 416. Sacked: E - W exploratory trench, 0 - 120' W of N - S line of stakes to 1' depth.
1. 8 wrought iron nails.
 2. 1 piece of wrought iron, 3" long, 1½" wide, with holes, ¼" diameter.
 3. 1 piece of scrap iron 2" x 7/8" wide.
 4. 1 rifle shell, 32 - 40, PETERS.
 5. 1 rounded piece of iron with wood inside, 2" x 3/4".
 6. 1 iron spike, 4 3/4" x ½" x 1/8" deep.
 7. 1 piece of strap iron, bend, 9½" long, 1 3/8" wide.
 8. 1 neck of clear glass bottle.
 9. 1 neck of olive green glass bottle.
 10. 3 pieces of china, one blue design.
 11. 1 piece of brown glazed earthenware.
 12. 1 piece of clear window glass.
 13. 1 piece of white and gold dish.
 14. 23 pieces of white ironstone ware.
 15. 6 clay pipe stem fragments.
417. Sacked: Sq. 80 S 10E, near N - S exploratory trench, to 1' depth.
1. 15 wrought iron nails.
 2. 1 cut nail.
 3. 1 piece of strap iron, 3" long, 1½" wide.
 4. 1 piece of white glazed china.
 5. 1 piece of clear bottle glass.

417. Sacked (continued)
6. 8 clay pipe stem fragments (one TD on spur).
 7. 1 double ended awl of iron, 3" long, 1/8" Square.
 8. 1 iron wire in shape of a hook, 3 1/2" long, 1/4" diameter.
418. Fragment of Indian pipe bowl (not extant).
419. Sq. 6N 2W 16" - 18" depth. Vial with clay pipe bowl.
420. Sacked: Sq. 6N 2W 16" - 18" depth.
1. 14 wrought iron nails.
 2. 5 seed beads, 3 cane beads and 1 barrel bead in a vial.
 3. 1 piece of light green glass.
 4. 1 piece of light blue bottle glass.
 5. 1 piece of Bennington or Rockingham ware.
 6. 10 animal bones.
 7. 1 piece of clay pipe bowl fragment.
 8. 6 pieces of clay pipe stems.
- Sept. 27, 1936 421. Red pigment, Sq. 6N 2W about 16" depth.
- Sept. 26, 1936 422. Sacked: 69' S of corner H, 10' W of E wall, near possible house area.
1. 4 wrought iron nails.
 2. 1 iron wire handle, 3 1/2" long, 2 1/2" wide, with iron strip with 2 holes in it, wire, 1/8" in diameter, holes 1/8" in diameter.
 3. 2 pieces of clear window glass.
 4. 1 piece of Blue willow ware.
 5. 1 piece of a clay pipe bowl.
 6. 2 clay pipe stem fragments.
 7. 7 animal bones.
- Sept. 27, 1936 423. Fragment of variant pink catlinite, slightly granular, has metal tool marks. 69' S of corner H' W of E wall, near possible house area, to 8' depth.

- 424a. Just outside E wall, at corner X near surface
150 pieces of flint.
- ** 424b. $\frac{1}{4}$ " long....). gun barrel fragment.
425. Iron hoop from a small barrel or ket, riveted.
7" diameter, 69' S. of corner H, 10' W of E
wall, near possible house-area, below 8' depth.
426. Two parts of iron latches, 69' S of corner H,
10' W of E wall, near possible house-area,
below 8" depth. (these may not belong to-
gether); one is hinged hasp; one is sliding
latch bar, rose head nail.
427. Section of iron lock, 4" long, 69' S of corner
H, 10' W of E wall, near possible house-area,
8" depth.
428. Gun flint, 69' S of corner H, 10' W of E wall
near possible house area, below 8" depth.
(Black gun spall).
429. Fragment of ornament (not extant).
430. Kettle copper $\frac{3}{4}$ " long tinkler. 69' S of
corner H, 10' W of E wall near possible house-
area, below 8" depth.
431. Sacked: (not extant).
432. Iron offset awl, rounded cross section, $6 \frac{3}{4}$ "
long; 69' S of corner H, 10' W of E wall near
possible house-area, below 8" depth.
433. Fire steel, striker bar from "D" shape, $2 \frac{1}{2}$ "
long. Sq. 6N 2W 14" depth.
434. Sacked: Sq. 6N 2W, 12" - 16" depth.
1. 1 rose headed nail in a sack.
 2. 1 piece of copper or kettle brass $2 \frac{1}{2}$ " long
x $1 \frac{1}{2}$ " wide.
 3. 1 piece of iron, probably a knife blade,
 $2 \frac{1}{2}$ " x $\frac{1}{2}$ ".
 4. 1 piece of iron, probably a file, $3 \frac{1}{8}$ "
long and 1" wide.

- Sept. 27, 1936 434. Sacked (continued)
5. 1 pintle, 3½" long x 3/8" diameter, hook ¼" long.
 6. 1 animal bone.
 7. 3 clay-pipe stem fragments.

MISCELLANEOUS ITEMS FROM VARIOUS PARTS OF SITE,
NO EXACT DATE.

Non - NW Company (?) (nc) Iron (Cast steel) axe head with lettering C or G. T. Lane on it, 7" long, from the supposed XY Co. post area, on E side of brook, opposite NW Co. post area. (This is a lumbering era artifact).

(nc) Sherds of white and colored earthenware, from same location as above.

(nc) Sacked: Miscellaneous (not extant).

435. Crystal quartz (not extant).
436. Worked specimen of steatite, done with metal rasp and sawed.
437. Refuse bone
438. Copper or brass piece with holes 12" long; a rim fragment iron re-inforced copper kettle.
439. Copper or brass piece with holes, very eroded kettle patch, 12" long.
440. Iron padlock, 3" long (about 1880-1900).
- ** 441. Portion of flint-lock 3½" long (Lock plate, percussion type probably from a light fowling piece.
442. Oval portion of firesteel, 2" long.
443. Portion of another oval 2" long firesteel.
- ** 444. Portion of flint-lock 2 1/8" long. Main spring.

445. Portion of iron buckle 2" long, probable uniform strap buckle.
446. Copper or brass Jew's harp, double pins 2" long.
447. Portion of decorative gun stock piece (not extant).
448. Fragment of pewter (not extant).
449. Lead ball, 1.7 cm. in diameter in vial.
450. Bottom of small blown glass tumbler, 1½" diameter pontil marked lead glass.
451. Bottom blown glass tumbler 1 3/4" diameter.
452. Neck of blown soda green glass bottle 1" diameter, flat sided, tall neck, applique mouth, patined glass.
453. Portion of neck of dark green (olive) color hand blown bottle, 1" diameter, with applique lip.
454. Gun flint (not extant).
- Sept. 27, 1936 455. 1 clay bead with red sprig design on it, .8 cm diameter.
456. Fragment of worked stone (not extant).
457. 2 copper beads (not extant).
458. Copper or brass tinkler (not extant).
459. Small ½" diameter copper button, copper loop, reverse side. Face slightly domed, raised ring, traces of gold plating.
460. Decorated copper or brass button (not extant).
461. Fragment of clay pipe bowl (not extant).
462. Fragment of clay pipe bowl (not extant).

463. Group of clay pipe stem and bowl fragments.
 464. Group of glass and clay beads (not extant).
 465. Group of lead shot (not extant).

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 1936

466. Sacked:

1. 34 wrought iron nails.
2. 6 square nails.
3. 1 white barrel bead in a vial.
4. 3 pieces of kettle brass with holes in it $\frac{1}{4}$ " diameter.
5. 6 pieces of scrap kettle brass.
6. 7 pieces of animal bone.
7. 1 piece of sea green bottle glass.
8. 13 pieces of light green window glass.
9. 12 pieces of clear window glass.
10. 9 pieces of clear bottle glass, thick.
11. 2 pieces of thin walled clear bottle.
12. 3 pieces of a light green square bottle.
13. 1 piece of brown bottle glass.
14. 1 piece of a square olive green bottle glass.
15. 7 pieces of round olive green bottle glass.
16. 1 piece of burned or fused glass.
17. 1 piece of iron awl, 2 $\frac{1}{7}$ " long x $\frac{1}{4}$ " square.
18. 1 piece of file, 4 $\frac{1}{2}$ ", 5/8" wide, and 1/8" deep.
19. 1 piece of rose headed spike, 4 $\frac{1}{2}$ " long, $\frac{1}{4}$ " square.
20. 1 round rod of iron, 3 $\frac{7}{8}$ " x 3/8" in diameter.
21. 1 piece of iron strap, bent, 5" long x 7/8", wide x 1/16".
22. 1 piece of iron fire box, 5 $\frac{1}{4}$ " long.
23. 1 piece of iron gun barrel, 3 $\frac{7}{8}$ " long x 3/4" in diameter.
24. 1 piece of curved iron, 2 $\frac{3}{4}$ " x 5/8" wide.
25. 2 pieces of rusted, probably burned pieces -
26. 43 pieces of china and pottery.
27. 1 piece of red stone.
28. 1 round piece of iron, 9 $\frac{1}{2}$ " long, $\frac{1}{2}$ " diameter.
29. 1 piece of yellow chalk.
30. 1 round headed brass tack.

467. Tip of iron rasp, $3\frac{1}{2}$ " long, trench S of fireplace in stockade fill, top soil to 8" depth. Tip of iron rasp, probably being reworked into a knife blade as it shows the edge upcurve to point and concave false edge. The metal has been upset to a greater thickness toward the point. It is 4" in length and $\frac{7}{8}$ " wide and varies in thickness from $\frac{3}{6}$ " to $\frac{5}{16}$ ". The teeth are coarse and hand-cut as evidenced by the variation in spacing.
- Sept. 10, 1936 468. Ring with glass (?) settings, near fireplace, in S trench.
- Oct. 23, 1936 469. Portion of pipe-bowl¹ (Indian) 1" diameter; Sq. 70S 10W to 1' depth. (not extant).
470. Large hand forged iron nail, out of a round iron rod; it is flattened to a rectangular cross section for half its length; Sq. 70S 10E to 1' depth. $5\frac{1}{2}$ " long, chisel pointed, tipped mushroom head.
471. Leg of cast iron vessel (recent?) 3" found at Sq. 70S, 10E to 1' depth.
472. Sacked: Sq. 70S 10E to 1' depth.
 1. 5 wrought iron nails.
 2. 1 piece of strap iron with hole, 3" long, $1\frac{1}{8}$ " wide.
 3. 1 piece of clear window glass.
 4. 1 iron door hook, $4\frac{1}{2}$ " long, $\frac{1}{4}$ " diameter.
473. Iron axe head with legend "Cast Steel, Warranted", 8" long; from excavation of "new stockade wall" (Recent).
474. Iron pin, $12\frac{1}{2}$ " long, $\frac{1}{2}$ " square with double beveled point, the head end bears shearing marks. (Recent) From excavation of "new stockade wall".
475. Iron link eye, $3\frac{1}{2}$ " long $\frac{3}{8}$ " thick - loop eye $1\frac{7}{8}$ " outside diameter pierced with $1\frac{1}{8}$ " hole. From excavation of "new stockade wall".

476. Iron nail, (not extant).
477. Iron nail $1\frac{1}{4}$ " long, from excavation of "new stockade wall".
478. Two fragments of ornamented pipe bowls (not extant).
479. Sacked: From excavation of "new stockade wall" (some of this is recent).
1. 32 wrought iron nails in a bag.
 2. 13 cut nails and 1 wire nail in a bag.
 3. 1 vial with 1 seed and 1 barrel bead.
 4. 18 animal bones.
 5. 2 pieces of kettle brass, 1 with holes, $\frac{1}{8}$ " in diameter.
 6. 3 pieces of a square olive green bottle glass.
 7. 3 pieces of olive green (round) bottle glass.
 8. 2 pieces of brown bottle glass.
 9. 1 piece of bottle glass with letters - EN & ING on it.
 10. 2 pieces of clear bottle glass, square shape.
 11. 1 piece of round, clear glass from a bottle.
 12. 2 pieces of clear window glass, $\frac{1}{8}$ " thick.
 13. 7 pieces of clear window glass.
 14. 1 cinder.
 15. 2 pieces of brown and tan glazed earthenware.
 16. 1 piece of tan glazed earthenware.
 17. 3 pieces of white glazed pottery.
 18. 1 spoon bowl, $2\frac{1}{2}$ " long, $1\frac{1}{4}$ " wide, $\frac{1}{2}$ " deep.
 19. 1 piece of bar stock iron, $2\frac{3}{4}$ " long, $\frac{1}{2}$ " square.
 20. 1 piece of strap iron, $10\frac{1}{4}$ " long, $\frac{7}{8}$ " wide.
 21. 1 piece of scrap iron, $3\frac{1}{2}$ " long, 1" wide, $\frac{1}{8}$ " deep.
 22. 1 spike with chisel end, 3" long, $\frac{1}{2}$ " wide x $\frac{1}{4}$ " deep.
 23. 1 scrap piece of iron, $3\frac{7}{8}$ " long, $\frac{1}{2}$ " wide, $\frac{1}{4}$ " deep.
 24. 1 piece of white quartz.
 25. 1 rock.

479. sacked (continued)
26. 2 pieces of clay pipe bowl.
 27. 31 pieces of clay pipe stems.
 28. 1 boat bolt, 2 3/8" long, 3/16" square.
 29. 1 piece of iron bar, 3 1/8" long, 3/16" square.
 30. 1 spike with chisel end, 4 1/8" long, 1/4" square.
 31. 2 pieces of wire twisted together.
 32. 1 copper or brass suspender, 2 1/8" across, 1" deep.
 33. 1 piece of iron with tin plating, with holes, 4 1/4" long, 2" wide.
- !
480. Copper or brass bead 1" long; from excavation of "new stockade wall".
481. Iron door hinge leaf with hinge eye and fish tail end 17 1/4" in length, average width 1 1/4". The eye would fit a pin 5/8" length, average thickness 3/16". From N - S exploratory trench - 30' S middle stockade wall.
482. Fragment of broken hinge leaf, iron, 9" long, 1 1/4" wide and 1/8" thick. Hinge eye would accommodate a 1/2" pin; N - S exploratory trench 0 - 30' S of middle stockade wall.
483. Sacked: Miscellaneous (not extant).
484. Copper or brass kettle bottom with riveted patch. Kettle copper with concentric rings; oval patch 6" x 7" secured with 16 hollow copper rivets in situ and with 2 rivet holes from which the rivets are missing. This kettle had been mended with two hollow rivets inserted in holes and headed over before the patch was applied. Found N - S exploratory trench, 0 - 30' S of middle stockade wall.
485. Pipe bowl (Indian) fragment (not extant).
- **486. Heavy iron axe head.
- 487. Iron hoe, 5 1/4" wide, 7 1/4" long.

ADDENDA, 1936 Catalogue of Objects Found at Grand Portage

As is usual, in working with a collection dug as long ago as this one, and stored under adverse conditions, errors were made in cataloging. After what had been thought to be the entire collection was catalogued, another box of artifacts was discovered. Corrections to the 1936 Catalogue are as follow:

- 37. Section of musket barrel 2" in length, 3/4" in outside diameter. June 17-18, from section (black band) 16"-18" depth, within six feet of gatepost.
- 46. Lock plate with unbridled pan, from flintlock musket. 6" long. Aug. 10-21. Sq. 4N. 1W.
- 113. Broken lock plate from flintlock musket. Four and nine sixteenths inches from the rear edge of the pan mounting notch to the tail finial. Aug. 10-21. From shoreline excavations.
- 117. Breech plug from flintlock musket, 2 5/8" long. From shoreline excavations. Aug. 10-21.
- 148. Trigger, from flintlock musket, 1 1/2" long. Sq. 5N 2W, 6" / 1'.
- 172. Barrel section from flintlock musket, comprising breech-plug, breech with touch hole and rear mounting stud. Seven inches in length. The specimen may have been mutilated during the fur trade era as the end (muzzle) has been crimped and cut. From 87' E. of Corner A., in disturbed earth, depth about ten inches. Sept. 9.
- 193. Frizzen spring from flintlock musket. Two and five-eighths inches long. Sept. 9, 1936. "Drain trench", 10 W to 10 E of E. wall.
- 213a. Two breech plugs from muskets 2 3/4" long. Sept. 10. Sq. 5N 1W, 8" - 16" depth.

- 213b. Breech plug from musket, 2 1/2" long. Sept. 10. Sq. 5N 1W, 8" - 16" depth.
283. Broken lock plate from flintlock musket, 5 3/4" long. Sept. 11. From slag fill in wall of stockade, 15' - 25' E. of Corner C. Eight to ten inch depth.
- 285a. Breech plug from muskets, 2 7/8" long. Sept. 11. From "slag fill" in wall of stockade, 15' - 25' E. of Corner C. Eight to ten inch depth.
- 285b. Breech plug from musket, 2 3/4" long. Sept. 11. From "slag fill" in wall of stockade, 15' - 25' E. of Corner C. Eight to ten inch depth.
315. Ornate silver ornament fragment! Possibly from a musket stock inlay. Sept. 15. 0-16' W. of Pt. Three, in middle stockade wall excavation. 0-1' depth.
333. Barrel section, from trade musket, 16" long. Sept. 15. From excavation of W. stockade wall.
386. Mainspring fragment from flintlock musket, 3 5/16" long. Sept. 24. Sq. 6N 2W. Surface to seven inches in depth.
402. Lock plate with bridled pan from flintlock musket, 5 1/2" long. It has the sear mechanism and the frizzen intact. Sept. 18. From N/S exploratory trench, 120' - 150' S. of middle stockade wall, to 1' depth.
405. Mainspring from flintlock musket, 3 5/16" long. Three strands of fine brass wire are wrapped around the action leaf of the spring. Being badly corroded, and embedded in rust, it is probable that the wire was placed on the spring before it was lost or discarded. Thus, it may have been a spare part. Sept. 18. From N/S exploratory trench, 120' - 120' S of middle stockade wall.
414. Two fragments of brass dragon (serpentine) side plate from North West Company musket. Sept. 18. N/S exploratory trench.
424. Section of barrel from musket, 3 3/4" long. Sept. 27. From 69' S. of Corner H. Ten feet W. of E. wall, near possible house area. Below 8" depth.

441. Lock plate, probably from a light percussion fowling piece. The sear mechanism is still intact, and may possibly be freed with intensive electrolysis. The lock plate is 4 3/4" long. Sept. 27. No exact data.
444. Mainspring fragment from flintlock musket, 2 3/8" long. Sept. 27. No exact data.

Most of the above items are illustrated on Plate 42.

436. Ax head, broken through the eye. It is 7" long. The edge is 4 1/8" long, and the blade is 1 1/8" thick at the front edge of the eye. No data.
487. Iron hoe made of a laid-over and forged strap. It has a simple looped eye. 3" overall length, by 5 1/2" wide. This hoe was found by Elmer Spry, at a depth of 18", within the old stockade, and does not properly fall within the scope of the 1936 excavations.

Illustrations of #486 and 487 are on Plate 26.

CATALOGUE OF OBJECTS FOUND AT GRAND PORTAGE

IN THE COURSE OF EXCAVATION, 1937.

(Objects described, 1963).

Baq No. 1 "E - W Trench 140 - 5'S 10 W - 40' E"

1. Nine rose head nails.
2. Eight common square nails.
3. Cast iron door handle.
4. Brown and gray crockery sherd.
5. Green glass sherd.
6. Bone.
7. Plaster chinking material.
8. Buff crockery sherd.
9. Plaster chinking material.
10. White crockery sherd.
11. Brass strap, with two punched and ground holes.
12. White pottery sherd with black decoration.
13. Brown pottery sherd.

Baq No. 2 - "East Trench"

1. Rose head nail with red paint.
2. Seventeen rose head nails.
3. Corkscrew?
4. Four common square nails.
5. Knife blade?
6. Thin copper sheet.
7. Spoon bowl.
8. Clay pipe stem.
9. Fused glass.
10. White pottery sherd.
11. Bone fragment.

Baq No. 3 - "E - W Trench" 140 - 5'S - 10 - 40E

1. One rose head nail - painted red.
2. Three rose head nails.
3. Nine common square nails.
4. Fragment of cast iron vessel. Probably a squarish frying pan.
5. Fragment of cast iron vessel, probably a pot. Diameter approximately 12".
6. Clay pipe stem fragment.
7. Clay pipe stem fragment.
8. Bone fragment.
9. Clay pipe fragment - decorated, bowl.

10. Clay pipe bowl - fragment, decorated, w/apparent oak leaves.
11. Clay pipe bowl - fragment, decorated, w/apparent oak leaves.
12. Clay pipe stem fragment.
13. Decorated crockery sherd - gray on buff.

Bag No. 4 - "East trench, unbroken sack. Contents apparently intact."

1. Five rose head nails with red (Spanish Brown)? paint.
2. Thirty-five rose head nails.
3. Hand forged latch, with two clinched nails. Probably for window shutter.
4. Section of hand forged and cut file.
5. Brass rod, flattened at one end like a screw driver.
6. One translucent blue glass bead.
7. Tubular glass bead, seven-eighths inch long. Purple interior, with a thin fused layer of brown glass covering the purple. 12 mm diameter x 44 mm length.
8. Fragment of heavy medium blue glass, contoured like the side of a bowl.
9. - 12. Clay pipe stem fragments.

Bag No. 5 - "East trench, Bag split, most of contents may remain."

1. Ten rose head nails.
2. Eleven common square nails.
3. Fragment of light green bottle glass.
4. Fragment of light green bottle glass with section of mouth intact.
5. - 6. Fragments of window glass.
7. Section of dark green bottle bottom.
8. - 10. White chinaware sherds.
11. Strap iron. One and one-quarter by three and three-quarter inches.
12. Piece of cast iron.
13. - 20. Clay pipe stem fragments.
21. Fragment of small animal mandible. Skunk?
22. - 23. Fused glass.
24. Small padlock.
25. Large Yale padlock, brass, Pat. Dates 1877, 1888.
26. White composition heel, with two nails.

Bag No. 6 - "East trench, unbroken sack."

1. Light rose head nails.
2. Eight common square nails.
3. Gimlet awl.
4. Strap iron, 7/8" by 1 and 1/2 inches.
5. Light green bottle glass.
6. - 6. Clay pipe stem fragments.
9. Animal tooth.

Bag No. 7 - "East trench, unbroken sack. Contents probably intact."

1. One rose head nail.
2. One machine made eight inch flat mill bastard file..
3. One casting, nickle or chrome plated - two and seven-eighths inches - one and one-half inches broad at wide end, one and one-eighth inches broad at narrow end. Maximum thickness, three-sixteenths inch. Narrow end with circular orifice one-half inch in diameter. Wide end with orifice, (D shaped) one inch maximum diameter by seven-eighths minimum diameter.

Bag No. 8 - "N.E. corner by stone wall. Sack split. All items remaining are probably original."

1. One rose head nail with red paint.
2. Seventy-one rose head nails.
3. Two common square nails.
4. One horseshoe nail. 2-3/8" long.
5. Strap iron pieces, riveted together with leather ? between.
6. Three conical-formed pendant bangles, and sixteen scraps, some cut to shape, used in their manufacture. Thong tips or kettle rivet
7. Twenty-seven fragments of old glass.
8. Portion of highly decorated buckle or brooch.
9. One piece of decorative cast iron.
10. Brass rod, one-quarter by two and three-eighths inches.
11. Small sherd of cast iron.
12. - 13. Small pieces of thin sheet iron.

#8 - 15 17 bag #9 - glued to 9-25.

- *14. - 15. Decorated china sherds.
- 16. Rectangular copper tube. Four and one-half inches in length, one inch broad, by one-quarter inch thick.
- 17. Old glass fragment with a portion of scratched initials.
- 18. Small piece of fused glass.
- 19. Clay pipe bowl fragment.
- 20. - 25. Clay pipe stem fragments.
- 26. Worked ? animal rib.
- 27. Two animal teeth.
- 28. Animal bone.
- 29. Calcined bone fragment.
- 30. Bone fragment.
- 31. Fragment of red brick.
- 32. Fragment of old brass shotgun shell casing.
- 33. Piece of child's noisemaker.
- 34. Piece of modern half-round file.
- 35. Avian bone?
- 36. Chert - Possibly scraper or half a gun flint.

Bag No. 9 - "N. E. Stone Wall. Sack broken, contents reasonably intact."

- 1. Two rose head nails with red paint.
- 2. Twenty-seven rose head nails.
- 3. One square forged nail.
- 4. Three rough-cut copper pieces for conical pendant bangles.
- 5. Thin lead sheeting.
- 6. Twelve old glass fragments.
- 7. Strap iron - one and a quarter by six and one-quarter inches.
- 8. Riveted strap iron - seven-eighths by four and a quarter inches.
- 9. One piece of thin sheet copper.
- 10. Clay pipe bowl fragment.
- 11. - 18. Clay pipe stem fragments.
- 19. - 22. Clay pipe bowl fragments.
- 23. - 25. Pieces of chinaware.
- 27. Bone fragment.
- 28. Distal end, animal femur.
- 29. - 30. Can top edging, modern.
- 31. Seven glass fragments, modern.

* Specimens 8 - 15 -- 9 - 25 decorated china - mate together.

Bag No. 10 - "N.E. wall corner, sack torn. Most of contents are probably present."

1. Nine rose head nails.
2. Brass button, flat disc, three-quarter inch diameter. Wire loop soldered to back.
3. White bead, narrow stripes, two red, two green on opposite quarters. Diameter, roughly three thirty seconds inch.
4. Eighty-one assorted beads, red, white, and blue in different types.
5. One small piece of reddish-brown glazed earthen ware.
6. White chinaware, some flakes restorable.
7. Old window and bottle glass.
8. Three fragments of animal bone.
9. - 14. Clay pipe stem fragments.
15. Green glass bottle bottom, probably recent.
16. Approximately fourteen inches of strap iron, with two rivet holes, one-quarter inch diameter, eleven and three-quarter inches apart.
17. Portion of a large animal (femur or tibia).

Bag No. 11 - "N.W. stone wall corner. Sack intact apparently undisturbed."

1. Twenty-three rose head nails.
2. Rose head nail with wire wrapped around shank.
3. Two completely formed, copper-pot rivets?
4. Nine copper bangle or unfinished pot rivets.
5. Iron ferrule, very fragile.
6. Decorated china flake. Could be from the same plate as specimens 8 - 15 and 9 - 25.
7. Assorted avian and fish bones.
8. Old glass fragments.
9. - 11. Clay pipe bowl fragments.
12. - 14. Clay pipe stem fragments.
15. Fused glass.
16. - 18. Animal bones.
19. Small stone.

Bag No. 12 - "North wall, near structure. Sack with small tears, contents apparently intact."

1. Four rose head nails, with red paint.
2. One hundred and four rose head nails.
3. Twenty-four rose head tacks.
4. One clinched spike? with red paint.
5. One ornamental brass button, with perforated design.
6. Three brass buttons, one, 9/16" diameter. One 5/8" with traces of gilt, and one 1" in diameter, with traces of gilt, and a number of concentric milled circles. There is a portion of design on the center of the button worked out in very fine punch marks.
7. One brass or copper button, one inch in diameter, showing a single milled circle about one thirty-second inch in from the outside edge.
8. Two white beads.
9. One piece melted lead, possibly $\frac{1}{4}$ musket ball.
10. One large copper bangle - rivet? $2\frac{1}{2}$ " long.
11. Fragmentary animal teeth.
12. Pottery sherds, probably modern.
13. Fragmentary copper hinges, very light weight, each leaf approximately two inches by three inches. Four mounting holes in each leaf.
14. Old glass fragments.
15. - 22. Clay pipe bowl fragments.
23. - 25. Clay pipe stems with portions of the junction, bowl/stem.
26. - 74. Pipe stem fragments, undecorated. (clay)
75. One-half of the neck and mouth of a wide-lipped glass bottle.
76. Strap iron, one and one-eighth by seven inches, bearing one rivet, and one rivet hole, spaced on two and five-eighth inch centers.
77. One portion of whip saw blade, two inches by four inches.
78. Knife blade, one and one-sixteenth deep, tang, one and one-half inches in length, blade three and one-half, overall, five inches.
79. Brass rod, one-quarter by four and three-eighths inches.
80. Brass rod, one-quarter by three inches.
81. Iron rod, one-quarter by four inches.
82. Chert fragment, scraper or portion of knife blade.
83. Small rib fragment, probably animal.
84. Small roughly crescent shaped iron object. One and one-quarter inches across the points, by seven-eighths inch, curved edge to line pt. to pt.
85. Iron bolt, 5/8" diameter by three inches in length. Head, only partially formed and roughly hexagonal. Might be hand forged, but probably of no great age.

86. - 88. Animal phalanges.
89. Fish vertebrae.

Bag No. 13 - "West stone wall area, torn bag, contents probably intact."

1. Two rose head nails with red paint.
2. Twenty-one rose head nails.
3. Twenty-one assorted shapes, blue and white beads.
4. Fragment of copper kettle with riveted iron bail support. Rivet centers are at two and one-quarter inches.
5. Copper kettle fragment approximately five inches square. With one rivet.
6. Copper kettle fragment approximately three by five, slightly wedge-shaped. Bend lines appear to indicate that it was part of the kettle bottom and side.
7. Copper kettle fragment. Two and one-half by three inches, again bend lines would indicate a section of side and bottom.
8. Copper kettle fragment. Triangular. At right angle, one by one and one-half inch.

(All copper pieces apparently from the cache indicated by similar contents of the poorly labeled bags grouped No. 9, 10, and 11. Also probable that present numerical sequence bags No. 8 through 13 are from same small area.)

9. Fragment of iron latch bar from door lock.
10. Striated object (composition unknown)..one inch by one and a quarter inch.
11. Melted lead, possibly a musket ball.
12. - 22. Clay pipe stem fragments.
23. Stone.
24. Iron scissors, probably of no great antiquity.
25. Fragment of brown glass bottle. Probably modern.
26. Brown glass beer bottle mouth. Probably modern.
27. Two iron washers, two and one-half inch diameter. One inch holes.

Bag No. 14 - "10' trench, bag split contents probably not intact."

1. Five rose head nails.

2. Ten common square nails.
3. Two wire nails.
4. Four blue and white beads, several types.
5. Copper pot material, one and a quarter by three inches, with a row of four conical tubular rivets with heads the same size as specimens in bags #11, #3, and #4.
6. Triangular piece or fragment of cast iron.
7. - 9. Clay pipe stem fragments.
10. Fragment of Amethyst colored glass.
11. Fragment of old green glass bottle.
12. One inch square nut. Modern.
13. Sherd of buff earthen ware.
14. Sherd of decoratively glazed-blue (plate).

Bag No. 15 - "Ten foot trench, sod and just below. Bag split, contents apparently nearly intact."

1. Twenty-one rose head nails.
2. Iron staple?
3. Clinched iron staple with attached ring. Ring diameter 7/8 inch. Staple length is 1-1/8".
4. Fragment of iron hand saw blade. Ten inches, greatest length. Greatest width, five inches. Narrowest portion, three and three-quarter inches.
5. Strap iron - four and three-quarter inch length - one and one-eighth with four staggered nail holes; one containing a clinched rose head nail.
6. Strap iron - twelve inches - one and one-eighth inch.
7. Strap iron - six and three-quarter inches - one inch.
8. Strap iron - six and one-quarter inches - one and one-quarter inch.
9. Iron wire - eight inches - one-eighth inch.
10. Strap iron - three and one-quarter inches - one inch with three staggered nail holes.

Bag No. 16 - "Ten foot trench, 4" - 10" September twenty-first. Sack unbroken, with small holes, contents are probably all present."

1. Thirteen rose head nails.
2. One rose head spike with red paint.
3. Three medium blue beads.

4. Fragment of leather boot edging with cast? brass lacing buttons.
5. Three and a quarter inch section of knife or straight razor blade. Hollow ground.
6. Scissors, with two and a half inch blades.
7. Two large spikes of the common square variety.
8. - 10. Three sherds of blue decorated china.
11. - 14. Four small sherds of white china.
15. One sherd of brown glazed crock.
16. - 17. Two fragments of light green glass bottle.
18. - 25. Clay pipe stem fragments.

Bag No. 17 - "Ten foot trench, 4" - 1/2'. Sack split, contents apparently intact."

1. Four rose head nails.
2. Ten common square nails.
3. Six modern wire nails.
4. Gun lock, percussion, left hand probably from a light fowling piece. Very good condition.
5. Light iron wire.
6. An iron object, 2 1/2" long. It consists of an "eye" with a threaded belt at one end. The "eye" passes through an iron cylinder, 1" long and 1-1/8" in diameter. Unidentified.
7. Small animal tooth.
8. Fragment of iron fork.
9. Plated iron spoon.
10. Quarter segment of brass wire. Probably a kettle eye.
11. - 26. Amethyst glass fragments.
27. Imitation cut glass. Fragment of salt shaker?
28. - 30. Brown glass bottle fragments. (No. 28 mates with No. 25, Bag No. 24. See bag No. 24 for #17-28.)
31. - 36. Buff crockery fragments.
37. - 39. Crockery fragments. Gray outside, dark brown inside.
40. Unglazed crockery fragment, gray.
41. Crockery cup fragment.
42. Crockery fragment.
43. - 45. Crockery fragments. See Bag No. 20, No.'s 32 & 33.
46. - 48. Three white china fragments. See Bag No. 16, No.'s 11-14.
49. Clear glass fragment. Probably from a wide mouthed jar.
50. - 52. Clay pipe bowl fragments (small).

53. - 57. Clay pipe stem fragments.
 58. Clavicle from an animal.
 59. 3/4" iron nut.
 60. Lip fragment from iron pot.

Bag No. 18 - "Ten foot trench, 4" - 1' bag badly split; however, most of contents are apparently intact."

1. Six rose head nails.
 2. Eleven common square nails.
 3. Fifteen common wire nails.
 4. Two short pieces of 1/4" iron rod.
 5. Six inch piece of 3/4" strap iron.
 6. Three quarter inch pottery? button.
- 7 - 12. Crockery sherds.
13. -19. Amethyst glass fragments.
20. -24. Thistle Pattern pressed glass, light green in color.
25. Top lip of kerosene lamp, with press-formed scalloped edge.
26. Segment of bottle mouth and shoulder. Clear glass.
27. -30. Clear glass bottle? fragments with faint pressed line border.
31. -32. Fragments of very dark green glass. Slightly wavy surface.
33. -36. Fragments of dark brown bottle glass.
37. Pale blue glass flat-bottle bottom, no marking.
38. -48. Clear, heavy bottle glass fragments.
49. -56. Pinkish bottle glass fragments.
57. -61. Window glass fragments.
62. -64. Pipe bowl fragments.
65. -69. Pipe stem fragments.
70. -71. Rib fragments. Animal.
72. Small bone fragment, probably animal.
73. Avian bone.

Bag No. 19 - "Ten foot trench, 4" - 1' "Some from a hole". Sack with small tears," Contents apparently intact.

1. Six rose head nails.
2. Four common square nails.
3. Three common wire nails.
4. Nine inches of 1/8" iron wire with a small loop at one end.
5. Thin copper kettle material, irregularly shaped. Approximately 4"x8".

6. Hand incised button, thin brass covering an iron core. 7/8" diameter.
7. Lead net weight, 5/8" x 3-5/8", cast, tubular, some crimping at orifices.
8. Gouge blade, fragment, 5/8" x 3".
9. Two inch fragment of slate pencil.
10. Top lip of kerosene lamp with press-formed scalloped edge. (Mates with #18/25.)
11. - 12. Anythest glass fragments.
13. - 17. Fragments of flat glass bottle or bottles, embossed, 14 with a "B", 15 & 16, with Buffalo, N. Y., 17, with "Foste" - - -
18. Bottle glass fragment.
19. Bottle mouth, neck, and portion of shoulder. (Possibly relates to 19/13-17.)
20. Bottle glass fragment.
21. China sherd with brown decoration, simulated grass and rear legs of dog?
22. - 24. Thin glass fragments, probably from lamp chimney.
25. Plaster chinking material, with a high sand content.
26. Clay pipe stem fragment.
27. Cut section of birchbark 1-1/8" x 2 1/2".
28. Avian bone.

Bag No. 20 - "Ten foot trench, 4" - 1', "Some from hole" badly torn sack, contents disturbed."

1. Six rose head nails.
2. Seven common square nails.
3. Three common wire nails.
4. Brass rod, 1/4" diameter, 2 1/2" long, with a curved, tapered quadrangular point - possibly a foot? for a small wire stand or bracket.
5. Wide lipped brown glass bottle mouth.
6. Brown glass bottle bottom marked Pat. No. 21826, Grommes & Ullrich, Chi., Ill.
7. Brown glass bottle bottom, footed, but unmarked.
8. - 10. Brown glass bottle fragments.
11. - 14. Dark green bottle fragments, apparently quite old.
15. Light blue-green mouth neck and shoulder of small flat bottle. Stoppered (probably with cork) with projecting iron wire extracting loop.
16. - 17. Bottom and sides to small, flat bottle, probably 20/ 15.
18. Bottle glass fragment.
19. - 22. Bottle glass - bottom fragments, all mate together.

23. - 27. Bottle glass fragments, probably from bottle fragments 20/18-22.
28. - 29. Bottle fragments, bottom and side to small flat pale bluish bottle.
30. Glass fragment pressed glass, thistle pattern. (Probably mates with 18/ 20-24.)
31. Handle - fork or spoon.
32. - 33. Buff pottery sherds, with fine gold tracery.
34. - 36. Crockery, gray glaze outside, dark brown inside.
37. - 38. Pottery sherds.
39. - 43. Clay pipe stem fragments.
44. China sherd, probably from child's tea set.
45. Brass cartridge casing. .45 cal.
46. Brass grommet, 9/16" outside diameter.

Bag No. 21 - "Ten foot trench, 10" and below??? Sack badly split, probably much of the contents are gone."

1. Twenty-five rose head nails.
2. Two common square nails.
3. Two beads, one white, one blue.
4. Iron buckle (packsack strap?) Very fragmentary.
5. Thin fragments of copper, possibly pot material?
6. Small fragment of window glass.
7. Small sherd of crockery, gray glaze outside, brown inside. (see 20/34-36).
8. Clay pipe stem fragment.

Bag No. 22 - "10' to ? 100' foot trench, contents probably intact."

1. Thirteen rose head nails.
 2. One common square nail.
 3. Copper bangle, 1-7/8" in length. Knotted leather thong, apparently preserved by copper salts still inside.
 4. Pintle, wrought iron, apparently hand forged - door or heavy shutter.
 5. Iron bolt 7" in length, 5/8" diameter. Head, half conical, round, and unslotted.
 6. Fragmentary pipe bowl and stem.
7. - 10. Clay pipe stem fragments.

Bag No. 23 - "10' x 100' trench, bag torn - contents nearly intact."

1. Ten rose head nails.

2. One square shanked spike, oblong head.
3. Two common square nails.
4. Two common wire nails.
5. One staple, 1½" legs.
6. One hand cut file, broken, 8½" overall length remaining.
7. Clay pipe bowl fragment.
8. - 10. Clay pipe stem fragments.

Bag No. 24 "Ten foot trench at 50' west. One foot depth. Bag with small tears, contents apparently intact."

1. Five rose head nails.
2. One round wire nail.
3. Buckle, iron, very friable.
4. Messkit fork. Very long narrow tines.
5. Strap iron, ¾" x 3". One hole, apparently punched.
6. Wide-lipped mouth and neck of small clear glass bottle.
7. - 14. Brown bottle glass fragments.
15. - 24. Light amber colored glass fragments.
25. - 26. Brown bottle glass fragments. No.'s 24/ 7, 14, 25, 26 & 28 mate.
27. Flat bottle bottom, marked Montreal.
28. - 29. Light bluish bottle glass fragments.
30. Olive green bottle glass.
31. - 41. Plain kerosene lamp chimney. Pieces of both top and bottom.
42. - 43. Clear bottle glass fragments.
44. White glazed crockery sherd.
45. Buff glazed crockery sherd.
46. Brown glazed crockery sherd, both inside and out glazing.

Bag No. 25 - "Roadside excavation and misc. Sack with small tears. Contents probably intact."

1. Twenty-three rose head nails.
2. Small brass or copper clad glass inkwell, one and 7/16" high, by 7/8" diameter decorated with two groups of scribed lines encircling the middle of the metal sleeve.
3. One fragment of red pipestone pipe stem.
4. One half of a composite bead, split longitudinally. 5/16" in length. Black with five green chips fused to the

- surface of the bead.
5. One small lead shot, approximately 3/16" diameter.
 6. One badly battered spike, apparently rose head, 5 1/4" in length.
 7. One light forming chisel, 7/8" wide, 5" in length.
 9. One curved blade knife blade. (Bent-Knife?)
 9. One double headed rivet, round cross-section. Four inches in length.
 10. One fish-tail shaped kettle ear with rivets.
 11. Two pieces of kettle copper riveted with two rivets.
 12. Triangular sheet of copper, approximately 2"x4"x5" slotted, with a rectangular piece of copper inserted through, and shouldered, to form a rude hinge.
 13. Badly corroded sheet copper, 4"x6" with four punched holes (1/8") irregularly spaced on the long edge.
 14. Badly corroded copper sheet, approximately 4"x4" with one hole punched in center.
 15. Copper sheet, possibly a continuation of 25/13 with three holes along the edge, and a fourth hole on the opposite edge, roughly centered.
 16. Small (1/2" x 1") copper sheet folded for an edge, with one hole, punched after the edge was folded.
 17. Copper sheet, 1 1/2" in length, similar to 25/16, with two holes.
 18. Copper sheet, square, 1/18" x 1 1/2".
 19. Copper sheet, 1"x2".
 20. Copper sheet, 1"x 2 1/2".
 21. Copper sheet, 1 1/2" x 3".
 22. Small bag of copper sheet trim scraps.
 23. Clay pipestem fragment with spur-foot.
 24. - 26. Clay pipestem fragments used as bits, as evidenced by tooth formed wear marks.
 27. - 37. Clay pipestem fragments.
 38. Mouth, neck, and part of shoulder, small light green glass bottle.
 39. - 40. Mating fragments of flat green bottle glass.
 41. - 46. Mating fragments of larger flat bottle, green glass. Of no apparent antiquity.
 47. Small fragment of dark green bottle glass.
 48. Fragment of window glass.
 49. Small, cream glazed fragment of china.
 50. - 51. Bone fragments.
 52. Beads: five white canebeads. 4 to 8 MM.
 ninety-five small white beads. 4 to 8 MM.
 twelve small red beads - clear glass tube with red shell. 5 MM diameter.

four small gray beads - 4 MM diameter.
 one small black bead - 6 MM diameter.
 fifty-eight blue beads - 4 to 8 MM; mostly 6 MM.

Bag No. 26 - "Roadside excavation, sack with small tears.
 Contents apparently intact."

1. Nine rose head nails.
2. One musket ball.
3. One inch square pot patch, copper, with four rivets.
4. Small trim scraps of kettle copper.
5. - 6. Small Scraps of kettle copper.
7. - 8. Mating fragments of frosted? glass.
9. - 11. Heavily patinated window glass fragments.
12. Window glass fragment with very slight patina.
13. Lump of fused glass.
14. - 15. Clay pipe bowl fragments.
16. Junction, pipe bowl and stem, clay pipe.
17. Junction, pipe bowl and stem, clay pipe.
18. Four inch pipe stem with bit, clay pipe.
19. Three and one-half inch pipe stem with bit - clay.
20. - 22. Mating fragments of four and five-eighths inch pipe stem with bit - clay.
23. - 24. Clay small pipe stem fragments. Bit ends.
25. - 27. Clay pipe stem fragments.
28. - 29. Ceramic dish fragments.
30. - 33. Small bone fragments.

Bag No. 27 - "S.W. corner section. Contents apparently intact."

1. Seventy-one rose head nails.
2. Five and half inch spike, chisel pointed, with no head.
3. Spike, chisel pointed, three and three quarters inches long, square cross-section, and with no head.
4. Ten inch flat mill bastard file, modern.
5. Strap iron, 1-3/8" wide. Five inches long. Punched hole one inch from end.
6. Small fragment of heavy pink glass.
7. - 9. Window glass fragments.
10. Small pebble, possibly used as a whetstone.
11. - 13. Clay pipe bowl fragments.
14. - 16. Clay pipe bit fragments.

17. Fragment of small glass bowl.
18. - 36. Clay pipe stem fragments.

Bag No. 28 - "Fence of (at) Southwest ? Fireplace. Sack with tears. Presumably most of contents are intact."

1. One hundred and four large rose head nails.
2. Two hundred and thirty-four small rose head nails.
3. Strap iron with two projecting nails or rivets. $1\frac{1}{4} \times 3\text{-}3/4$ ".
4. Strap iron with rose head nail, and second square hole, one end rolled, apparently part of a hinge.
5. Strap iron, $1\frac{1}{4} \times 3\frac{1}{4}$ " with four square holes, paired, diagonally placed.
6. Strap iron, $1\text{-}3/8 \times 3\frac{1}{4}$ " with riveted cross member.
7. - 8. Strap iron, similar to 27/6.
9. - 10. Small iron wedges.
11. Small loop, riveted from copper hinge.
12. Home-made copper hinge, four holes, two with associated rose head nails.
13. Small brass button, edges badly corroded.
14. Iron button, badly rusted.
15. - 18. Mating clay pipe bowl fragments. Marked "ADDELLY." With short whittled stem.
19. Branded pipe bowl fragment - clay.
20. Branded pipe bowl fragment. Marked with "T" - clay.
21. Clay pipe bowl fragment with spur marked T. D.
22. Clay pipe bowl fragment with spur marked W. G.
23. Clay pipe bowl fragment with fragment marked W. G. ?
24. - 26. Clay pipe bit fragments.
27. - 32. Clay pipe stem fragments.
33. - 34. Pottery fragments with dark brown mottled glaze.
35. Bowl fragment. Blue and white banded glaze. Of no great antiquity.
36. Cream colored glazed china sherd.
37. Phalange from a large animal.
38. - 41. Small bone fragments.

Bag No. 29 - "Square 150 S - 130 W - ? Fireplace or ashpit material - 10" to 16" depth. Sack split, contents probably disturbed."

1. Seventy-six rose head nails.

2. Rose head nail formed around a bar.
3. Two common square nails.
4. One five inch common square head spike.
5. Large hand forged iron staple with three-inch legs.
6. Large ring head staple, legs clinched for one-inch board.
7. Flat iron latch hook.
8. Hand forged bolt eye.
9. Iron key, two-inch tubular shank.
10. Unidentified iron object - apparently meant to be hafted.
11. Fat lunette shape of sheet iron, with a "C" shaped wall set one-half inch in from the outside back edge of the object, with a quarter-inch rod riveted equi-distant from the two arms of the "C".
12. Strap iron hinge with two associated rose head nails.
13. Six inch cold chisel.
14. Segment of iron strike-a-light.
15. Two layers of 1½" strap iron with rivet.
16. Strap iron, 7/8" x 5½".
17. Fragment of iron knife blade.
18. Strap iron, 1/8" x 5/8" x 5-3/4". with punched holes at either end.
19. Fragment of alloy? buckle
20. Eccentric shaped sheet of kettle copper with four rivets and two rivet holes.
21. Eccentric shaped sheet of kettle copper with three rivet holes.
22. Quarter inch brass rod, 6½" long.
23. Brown glazed crockery fragment.
24. Sherd with trademark Dowell ? ironstone china.
26. Badly flaked sherd of blue decorated china.
27. Flaked sherd of china, white glaze.
28. Bottle bottom, blue glass. No great antiquity.
29. Lip fragment of soft buff colored ceramic with some white glaze.
30. Light green flat bottle bottom with fragmentary sides (three)
31. - 32. Junctions, pipe bowl and stems, clay.
33. Pipe stem fragment.
34. White chert pebble, worked.
35. Fragment of small, buff glazed crock.

Bag No. 30 - "Fenced Fireplace, sack open, contents may or may not be intact."

1. Sixteen rose head nails.
2. Clear glass fragment with gold banding.
3. Fragment of heavily patinated window glass.
4. Pipe stem / bowl junction.
5. - 7. Pipe stem fragments.
8. Bone fragment - Scapula? from large animal.

Bag. No. 31 - "West of fenced fireplace. Probably complete contents."

1. Nine rose head nails.
2. Iron trunk handle, no great antiquity.

Bag No. 32 - "Approximately 50' east of fenced fireplace area, contents probably intact."

1. Seventy-seven rose head nails.
2. One lead bale seal.
3. Ring from bale seal.
4. Iron key with ornate two inch tubular shank.
5. Plated metal button, half inch diameter. (silver)
6. Nail with hammered eye.
7. Fish tailed iron hinge.
8. Iron latch plate?
9. Unidentified iron object. (buckle)
10. Iron tube fragments with square hole. Probably the tip of a clock key.
11. - 18. Cream colored glaze - ironstone fragments.
19. - 20. Vitrious porcelin, white.
21. China fragment with blue designs.
22. Pottery fragment similar to #32/11-18.
23. Pottery fragment similar to #32/22, but with blue glaze on one edge.
24. Fragment of dark green bottle glass.
25. - 32. Window glass fragments.
33. - 34. Light green bottle glass fragments.
35. - 37. Clay pipe bowl fragments with raised striations, spur marked with A - V.
38. - 39. Clay pipe bowl fragments, probably from 32/35 - 37.

40. - 45. Clay pipe bowl fragments 32/40 branded T D. Probably all from this bowl.
46. Clay pipe bowl/ stem junction.
47. Clay pipe bowl/ stem junction, spur marked TD.
48. Clay pipe bowl/ stem junction, spur unmarked.
49. Clay pipe bowl/ stem junction, spur marked TD.
50. Clay pipe bowl/ stem junction, spur marked TD.
51. Clay pipe bowl/ stem junction, spur unmarked.
52. - 53. Clay pipe bowl fragments.
54. Clay pipe bowl fragment marked with TD.
55. - 60. Clay pipe bowl fragments.
51. Clay pipe spur marked TD.
62. - 65. Clay pipe bowl/ stem junctions.
66. - 67. Clay pipe stem fragments with tooth wear.
68. Clay pipe stem fragment painted red.
69. - 82. Clay pipe bit fragments.
83. -201. Clay pipe stem fragments.

Bag No. 33 - "Recent piece in front of museum in recent fill. Sack broken, contents probably intact."

1. Brush axe with eye and riveted loop for haft.
2. Unidentified iron object. Probably a knife.
3. Flat iron disc with embossed inscription: COWNE (T)? Mfg. Co. Des Moines, Ia. 00. (Probably a can cover)

Bag No. 34 - "Trench No. 1 east of area thirty. Unbroken sack, contents probably intact."

1. Twenty-seven rose head nails.
 2. One small "Hold down" nail.
 3. Three double headed handle rivets. One and a half inches, one and three quarters and three and three eighths inches in length.
 4. Tip from small half round file, single cut, hand made, tapering to point.
5. - 8. Clay pipe stem fragments.
9. Clay pipe bit.

Bag. No. 35 - "E-W exploratory trench leading to fenced fireplace. Sack has small breaks, both bottom and sides, and some of contents may be missing."

1. Twenty-seven rose head nails.
2. Double headed handle rivet. One and three-fourths inches in length.
3. End fragment of strike-light.
4. Clasp knife. Three and a quarter inch outside length.
5. Beads, three blue (light) and one white.
6. - 8. Light green bottle glass fragments.
9. Dark olive green bottle glass fragment.
10. - 25. White china fragments with blue design.
26. - 27. Red brick fragments.
28. Clay pipe bowl, stem whittled to fit a wooden bit. ? ... No spur - not branded.
29. Clay pipe bowl fragment comprising back of bowl/stem junction and spur. T.D. brand is placed upside down.
30. Clay pipe bowl fragment. Right rear with T portion of T.D. brand.
31. - 33. Clay pipe bowl fragments.
34. Clay pipe bowl fragment with portion of brand scroll.
35. Clay pipe bowl fragment with rope-like brand surround or scroll.
36. - 38. Clay pipe bowl fragments.
39. Clay pipe bowl fragment with T. D. spur.
40. Clay pipe bowl/stem juncture with T.D. spur.
41. Clay pipe bowl/stem juncture. Stem with two converging holes leaving bowl.
42. Clay pipe stem/bowl juncture.
43. Clay pipe/stem/bowl juncture.
44. - 45. Clay pipe bits.
46. - 56. Clay pipe stem fragments.
57. Calcined bone fragment.

Bag No. 36 - "S.W. corner trench Oct. '37 Sack split, but most of contents intact."

1. One hundred and thirty-six rose head nails.
2. Forty-two common square nails.
3. Ferrule straps with rivets from light shovel or rake / pitchfork.
4. Three and five-eighths inch long flat iron wedge.
5. Unidentified iron object - probably an unfinished light hinge. 3½" long.
6. Fragmentary carving knife blade.
7. Four and a half-inch iron door hook with attaching staple.
8. Can cover, one and a half inch diameter.

9. Broken spike, one-half inch square tapering shank, 3-3/4" long bent at point.
10. Broken iron door handle - type used on screen doors.
11. Flat horse shoe nail like spike..2 1/2" long.
12. Cast iron stove fragment.
13. Light, doubled copper hinge with square nail holes. 1 1/2"x2". 1"x2" leaves.
14. Light green bottle glass fragment.
15. - 16. Mating pottery fragments. White and light blue geometric design with trailed lines.
17. - 18. Two copper rivet blanks.
19. - 20. White china fragments.
21. Tubular glass bead, 7/8" long brown over violet interior - see bag no. 4/ 7.
22. - 31. Chinking material.
32. Clay pipe bowl fragment.
33. Clay pipe bowl/stem juncture with unmarked spur.
34. Clay pipe bowl/stem juncture.
35. Clay pipe bit.
36. Clay pipe stem fragment with a scored line around its circumference. Line probably used as a guide for breaking the stem evenly at a given point.
37. - 47. Clay pipe stem fragments.
48. Calcined bone fragment.
49. - 50. Fish bones.

Bag. No. 37 - "Center N.S. trench, Sq. N.S. Sack split, contents apparently intact."

1. One hundred and ten rose head nails.
2. Three common square nails.
3. Five modern wire nails.
4. One heavy copper (brass?) harness rivet, unused.
5. Hand forged hammer of unusual configuration. Forged from flat bar stock, hammered thin in the center to form the back of the eye, the bar was then twisted to form the bottom and top halves of the hammer which was then heat and and hammer welded together. The bottom half of the hammer projects 5/8" forward of the top half, and its striking face is rounded to make it into a kind of cross pein hammer.
6. Double end offset awl, three and three-eighths inches in length.
7. Hafted iron loop, 1-1/8" broad, 3/8" thick, five inches long.

8. Forged hasp. Two inches long and quite light.
9. Hand cut single cut file.
10. Broken forming chisel, five eighths inch wide.
11. Badly rusted knife blade ?
12. Child's tea set knife.
13. Kettle copper, 18 gauge, 2"x6" with six holes of varying diameter
14. Kettle copper, approximately 20 gauge, 1½"x4".
15. Kettle copper scrap.
16. Modern glass marble.
17. Large amethyst bottle glass fragment.
18. Fragment of molded clear glass bottle.
19. - 21. Fragments of small, clear glass bottle with molded lettering. Indistinct.
22. - 27. Heavily crackled window glass fragments.
28. - 30. Fragments of dark olive green bottle glass.
31. - 33. Fragments of clear bottle glass.
34. - 53. Fragments of clear window glass.
54. - 55. Fragments of medium green window glass.
56. Window glass fragment.
57. Clear bottle glass fragment.
- 58. Medium green bottle glass.
59. - 71. Badly flaked small sherds of pottery. 61 blue geometrical flower belt, all others are cream colored with no distinguishing features.
72. Thin slab of stucco-like mortar.
73. Fragmentary iron suspender buckle.
74. Steatite, showing saw marks, rough slab, ¾" x 2½" x 1½". One face is natural, as quarried, the others all show saw marks.
75. Clay pipe stem fragment, scored for breaking.
76. Clay pipe stem/bowl juncture with spur marked T.D.
77. Clay pipe stem/bowl juncture, without spur or markings.
78. - 79. Clay pipe bowl fragments.
80. Clay pipe stem fragment, whittled and tooth worn.
81. - 84. Clay pipe bits.
85. Clay pipe stem fragment, tooth worn.
86. - 125. Clay pipe stem fragments.
126. - 135. Bone fragments.
136. Fragment of slate pencil.
137. Bone from animal tibia, 1-¾" long, rough oval, probably an unfinished gambling counter or marker.
138. Small rectangularly cut fragment of birch bark, 7/16" x ¾".

Bag No. 38. "In area of 140 S and 110 W. Sack with small tears; contents may have been disturbed."

1. Thirty-two rose head nails.
2. Six common square nails.
3. - 4. Two five and one quarter inch chisel pointed rose head spikes.
5. - 6. Two apparently unfinished rose head nail blanks.
7. A small (2½") hand forged center punch.
8. Three inch double headed handle rivet.
9. Saw fragments. Set still apparent in the teeth.
10. Five and a half inch section of ¾" wide forming chisel.
11. Unidentified tool, broken working end. Five inch tang, squared off for the last inch. The main body of the tang is 5/16" diameter.
12. -15. Strap iron, 7/8" wide.
16. Copper strap, four inches long, with quartered corners, and with five small holes punched along its main axis. Wide end 11/16" narrow, 9/16" wide.
17. Copper fragment, apparently a portion of an unused hinge.
18. - 19. Clay pipe bowl fragments.
20. - 22. Clay pipe bowl/stem junctures without spurs or markings.
23. Clay pipe stem fragment. Heavily tooth worn.
24. Clay pipe stem fragment with scored line at the break point.
25. - 42. Clay pipe stem fragments.
43. Curved wedge of mortar.
44. Animal tooth, bear or wolf.
45. Pottery/sherò, white, with a staggered black line edging.
rim

Bag. No. 39. "In area of 110 W. - 140 S. Sack was split and tipped, but probably most of contents are retained."

1. Seventeen rose head nails.
2. One six and one-half inch chisel pointed rose head spike.
3. Two strips of one and a quarter inch strap iron, secured with one rivet.
4. -5. Strap iron, one inch wide, six inches long.
6. Strap iron, one and one quarter inch wide, six inches long.
7. Unidentified piece of sheet iron. According to the shape, probably a section of a strap hinge.
8. Two inch section of one and a quarter inch strap iron with rivet hole.
9. Iron tool, probably a scraper.
10. Two inch section of three-quarter inch square iron bar.

11. Tang and section of knife blade.
12. Front and one side of a large flat buckle. The buckle measures $2\frac{1}{2}$ " across the front, and was at least $2\frac{1}{2}$ " -plus- in length. It is made with an iron base, with a top layer of some silvery metal that was heavily chased and engraved. This layer is quite fragmentary, the iron base beneath it having corroded and lifted portions of the surface until they fragmented off and were lost.
13. Iron wire, quarter inch diameter, five and a half inches long.
14. Scrap of thin sheet iron.
15. Kettle copper, 5"x6". Badly cracked, consolidated with Duco and each section labeled as 21 CK 6 39/15 A, B, and C.
16. Kettle copper. Reinforcing rim, one edge rolled around iron wire, probably from a thin straight sided kettle. Badly bent.
17. Smaller more fragmentary portion of the same.
18. Kettle copper, parallel sided strip, $5/8$ " wide, approximately 16" long-bundled.
19. Kettle copper fragment with right angled corner cut $4\frac{1}{2}$ "x2".
20. - 22. Kettle copper fragments.
23. Kettle copper, badly corroded section of reinforcing roll.
24. Quarter inch brass rod, 7" in length.
25. Small, partly fused fragment of window glass.
26. Back half of pipe bowl, above the stem juncture, unmarked, clay.
27. Clay pipe stem fragment..
28. Bone fragment.
29. Right, lower mandible - probably deer.

Bag No. 40. "In area of 140 S-110 W. Sack unbroken, open, upright and nearly empty."

1. Note - "Sack was open, and empty except for flakes of iron rust and one red glazed cylindrical bead - bead removed 4 ?/23/62 by ()".

Bag No. 41. "Sq. 130 W and 140=190 (?)S. Sack split contents apparently intact."

1. Thirty-eight rose head nails.
2. Door hook made from a long rose head nail.
3. Two common square nails.
4. Riveted iron fragments, possibly part of wagon hardware.
5. - 6. Fragments of a narrow saw blade similar to a hacksaw, but with large teeth.

- 7. - 11. Strap iron, one and a quarter inch wide, with rivets in each fragment.
- 12. Strap iron, one inch wide with rivet.
- 13. Strap iron fragment one and a quarter inch wide, with rivet hole.
- 14. Cast iron fragment, probably from stove rim.
- 15. Strap iron fragment, one inch by three inches.
- 16. - 20. Sections of leather boot sole and heel.
- 21. Clay pipe stem fragment.
- 22. Animal long bone, intact.
- 23. - 27. Animal bone fragments.

Bag No. 42. "In area of 120W - 140S, Sack with small tears, but contents are probably intact."

- 1. Ten rose head nails.
- 2. Four common square nails.
- 3. Strap iron scrap apparently being worked into a knife or lance point.
- 4. - 5. Strap iron fragments with rivets.
- 6. Strap iron fragment, three-quarter inch wide.
- 7. Strap iron fragment, one and one-eighth inch wide.
- 8. Strap iron fragment, one and a quarter inch wide.
- 9. Broken bolt or punch - not threaded - hand forged, three-eighths inch diameter.
- 10. Brass button, 13/16" diameter. Foliate cross hand punch - pricked on face.
- 11. - 13. Old leather boot heel and sole, probably mates with 41/16-20.
- 14. Clay pipe stem fragment.
- 15. - 16. Animal bone fragments.
- 17. - 18. File fragments, tip and tang, hand cut-double cut files.

Bag No. 43. "Sq. 5, in 130 S, S. of 140 S. Sack split contents may have been added to or subtracted from."

- 1. Ten rose head nails.
- 2. Iron staple, hand forged, one and a half inch legs.
- 3. Heel and tang of wrought iron scythe blade. Fragment is nine inches in length. Blade is unusually wide, five inches, heel to back, tang, one and a quarter inches broad.
- 4. Forged iron bar with rectangular loop, probably a sliding latch bar for a window shutter.

5. Iron wedge, $\frac{1}{4}$ "x $\frac{3}{4}$ "x5", head shows some batte ring.
6. Strap iron, 1- $\frac{3}{8}$ " wide by 7" long. Rivet hole at one end.
7. Strap iron, 1 $\frac{1}{2}$ " wide by 6- $\frac{3}{4}$ long.
8. Fragment of cast iron stove top.
9. Kettle copper strip, twenty-five inches long, half inch to 1- $\frac{1}{8}$ " in width.
10. Bottle glass fragment, bottom and side of oval bottle. Light green.
11. Clay pipe stem fragment.

Bag No. 44. "I ---a 130 W - 140-57 (S) Sack with some holes. Some of contents may have spilled."

1. Ninety rose head nails.
2. Two brass buttons, 1 $\frac{5}{16}$ " and 7 $\frac{7}{8}$ " in diameter.
3. Joint and top and bottom edges of a can, four and one-half inches high.
4. Wood knot, with possible axe cut face.
5. Fragment of triangular file, smooth cutting four and a quarter inches long.
6. Unidentified iron object. One quarter inch thick, one and a half broad, and three inches long. One end rounded, the other right angle cut.
7. Strap iron, 1 $\frac{1}{4}$ "x8".
8. Strap iron 1"x5", with two small holes, two inch centers.
9. Strap iron 1- $\frac{3}{8}$ "x2", one large rivet hole in the center.
10. Strap iron, 1- $\frac{3}{8}$ "x1- $\frac{5}{8}$ ", rivet hole in center.
11. Kettle copper strip, one-half inch wide, eleven inches long. One edge is crimped into the reinforcing fold, as around the top of a straight sided kettle.
12. Kettle copper, 2 $\frac{1}{4}$ "x4 $\frac{1}{2}$ " with reinforcing fold on one edge.
13. Heel portion of shoe sole.
14. Clay pipe stem fragment broken just beside score mark.
15. - 20. Clay pipe stem fragments.
21. - 23. Window glass fragments.

Bag No. 45. "N. - S. Trench at 40' E. of 120' - 150'. Unbroken sack, complete 7"

1. Two rose head nails.
2. One iron hold down nail.
3. Copper latch bar keeper, four and a half inches long, the raised section would accommodate a latch bar $\frac{3}{16}$ " thick by one and three-quarters wide. The holes (Attachment) at either end are unusual, punched with an

- equilateral triangular punch. One hole is triangular; in the other, the punch was inverted to make a hole shaped like a six-pointed star.
4. Pottery sherd with a shell-like design embossed on the surface. Warm red-brown terra cotta-like pottery - fine grained.
 5. China sherd, badly flaked, white glaze.
 6. Pottery sherd, light yellow flake probably from inside surface of a handle.
 7. - 9. Clay pipe stem fragments.

Bag No. 46. "Sq. - in area of 100W, 100S, unbroken sack, probably undisturbed."

1. Four rose head nails.
2. Portion of iron hinge with rose head nail.
3. Portion of iron hinge, with nail attachment hole.
4. Kettle copper, 15 inch strip of rim, one and three-quarters inches wide.
5. Kettle copper rim strip, thirteen inches long.
6. Kettle copper rim strip, six and a half inches long. ---
4, 5, and 6 are apparently from the same kettle.
7. - 8. Bottle glass, bottom fragments comprising three-quarters of the entire bottom. Four inches in diameter the bottle had a high-arched bottom. The fragments are a good three-eighths inch in thickness, and dark olive green in color.

Bag No. 47. "Sq. 120 W 130 S. Sack split, contents gone."

Bag No. 48. Sqs. 40-90 in 130 W tier, Oct. 21-22, 1937. Sack split, contents apparently intact.

1. Twenty-seven rose head nails.
2. Two common square nails.
3. One modern wire nail.
4. Thin sheet iron lock plate with hole for a massive key. Key hole one and five-eighths inches, top to bottom.
5. Oval link with lapped split ends used for joining chain, or harness. Called open end lap repair link. Four inch length.
6. "S: shaped double end hide scraper made from iron tube or gun barrel (?). 6 $\frac{1}{2}$ " long.

7. Strap iron, one and a quarter inch wide, lapped pieces with rivet, 5½".
8. Strap iron, one and three-eighths inch by five. two holes. 2" centers.
9. Strap iron, one and a quarter inch by eight inches. one rivet hole.
10. Strap iron, one and three-eighths inches wide by three inches long.
11. Strap iron, one and one-eighth inches wide, eighteen inches in length.
12. Knife blade fragment three-quarters inch by three and a half inches.
13. Strap iron, doubled, three-quarters inch by seventeen and a half.
14. Half inch section of 5/8" iron pipe, one end battered. This battered end appears to have been removed from the main body of the pipe with a triangular file.
15. Three-eighths inch copper rod, eleven and a half inches in length, one end bent into a large, gentle curve, the other, hammer flattened and apparently cut off with a cold chisel.
16. - 17. Fragments of kettle copper.
18. Ornamental shoe buckle, mates with 39/12. Iron backed with Pewter ? facing, chased and engraved. Both sections in bag no. 48.
19. - 20. China sherds, mating, white glaze, apparently a cup.
21. China sherd, blue glaze.
22. Clay pipe bowl fragment. Exceptionally clear T.D. brand.
23. - 25. Clay pipe stem/bowl junctures.
26. - 28. Clay pipe bit fragments.
29. - 36. Clay pipe stem fragments.
37. Window glass fragment.
38. Bone hide scraper - 7½" long - 1½" wide.
39. - 43. Bone fragments - animal.
44. Cranial fragment - human.

Bag No. 49. "Contents were loose in box, but probably from sack marked (cf) E. of 65 "E. of N. S. w (/) line"."

1. Eighty-one rose head nails.
2. Iron pintle three and a half inch mounting pin; 1½" pivot pin.
3. One double end awl.
4. Triangular smooth cutting file, six inch section with tang.
5. Tang section of hand cut - double cut file.

6. Staple with one broken leg. Leg is 2" long - head end 2-3/8" long and 1/2" wide.
7. Trade spear head or crudely fashioned knife; modified made into knife - overall length 7-3/8", with battered back edge.
8. Manufactured item of strap iron, probable reinforcing strap. One and a quarter inches wide, three and a half inches long. Right angled turn-up at one end with a two and a half inch rose head spike driven through it and parallel to the main axis of the object. There are two holes along the main axis; one is in one and a half inches from the turn-up; the second is centered one and a half inches from the first, and the main axis section terminates three-eighths of an inch farther along the axis from this second hole.
9. Unidentified iron object, three-eighths inch thick, three and a quarter inches in length, tapering from one inch to eleven-sixteenths.
10. Strap iron, 1 1/2 x 5" with two nail holes and an emplaced rose head nail.
11. Strap iron, 1 1/2" x 3" with one nail hole.
12. Strap iron 1" x 3 1/2".
13. Strap iron, 1-3/8" x 7 1/2". One inch turn-up at one end. Four nail holes along axis of the strip.
14. Strap iron, 1 1/2" x 7 1/2" with a second two inch piece riveted at one end with a single rivet.
- 14A. Kettle copper, tapered strip, approximately 2" x 10" tightly folded.
15. Kettle copper fragment.
16. Kettle copper fragment, 1/2" x approximately 11 inches.
17. Lip fragment, copper, probably a lip crown from a glass or china dish approximately a quarter segment from a dish six inches in diameter.
18. Copper strap, 16 gauge, 13/16" wide x six and a half inches in length, one diagonally cut end; the other end rounded, with a second piece, 7/8" long, one square; one rounded end, with a piece of similarly shaped hard dense wood rivet between the two sections of copper.
19. Quarter inch copper rod, flattened at one end, two and seven-eighths inches long.
20. - 24. Clay pipe stem fragments.
25. Animal phalange.
26. Bone fragment - long bone of large mammal.
27. Plaster or whitewash fragments.

Bag No. 50. "Sq. 30' W - 150'S. Small tears in sack, contents may not be intact."

1. Three common square nails.
2. Cane bead, bright blue.
3. Pottery sherd, white glaze inside, blue outside.
4. Pottery sherd, white glazed, probably a cup fragment.
5. Pottery sherd, white glazed, lip fragment, with slight surface modeling on inner surface.
6. Pottery sherd, white glazed, 5/16" thick.
7. Pottery sherd, white glazed, from plate or shallow dish.
8. China sherd, lip fragment, white with blue cross-hatching in a narrow band and with beige colored edging on lip.
9. Pottery sherd, white glaze inside, with a band ? of blue-gray around the body of the dish while the shoulder area is decorated with alternate black and white stripes.
10. China sherd, lip fragment, blue geometric border on white base.
11. China sherd, white base with design of classical (Roman) buildings in purple-blue. Medium hard paste base.
12. Clay pipe bowl fragment.
13. Clay pipe stem fragment.
14. Lead glass bottle neck with appliqued mouth.
15. Lead glass bottle neck and mouth of more modern type.
16. - 21. Bottle glass fragments, partially fused.
22. Bottle glass fragment, partially fused, with impressed design ? ...
23. Melted window glass.
24. - 34. Window glass fragments, some bent by heat.
35. - 49. Kerosene lamp chimney fragments.
50. Clear bottle glass fragment.
51. Clear glass fragment probably lamp chimney glass, bent by fire.

Bag No. 51. "Sept. 11, misc. center wall material. Sack unbroken, contents probably intact."

1. Six rose head nails.
2. Fragments - scissors, rounded points, three-inch blades.
3. Earthen ware sherd, cream-colored glaze.
4. Earthen ware, red-brown glaze, exterior only.
5. Bottle glass fragment, clear, from a flat bottle.
6. Window glass fragment.
7. Tooth, from large herbivorous animal.

Bag No. 52. "Trench No. 2, east of area thirty, west of---?"
Unbroken sack, some of contents may be missing.

1. Thirty-nine rose head nails.
2. Rose head nail with square iron clinch pad.
3. Strap iron, $1\frac{1}{4}$ "x $2\frac{1}{2}$ ". Two pieces, secured by rivet.
4. Strap iron, $7/8$ " x $2\frac{1}{2}$ ".

Bag No. 53. "E. of 65 E. of N.E. (Baseline ?) to 6 inches.
Sack unbroken, probably all contents intact."

1. One rose head nail.
2. Two modern wire nails.
3. Three-quarter inch square of thin embossed metal, perforated at one end.
4. Unidentifiable shard of cast iron.
5. Kettle copper, two by four inch section of kettle rim, with perforated edges, probably meant for a patch.
6. Clay pipe bowl fragment with spur. Marked with a "W" ?
7. Clay pipe bowl fragment.
8. Clay pipe stem fragment.
9. Bottle glass fragment, light blue-green.
10. China sherd, white glazed.
11. Lump of fused glass.
12. Chinking material?
13. - 14. Wood fragments thin $5/16$ " thick x $1\frac{1}{2}$ " wide.

Bag No. 54. "O-8-10W R 9 60'S S of S. Top - 1.5' Un-
broken sack, contents probably intact."

1. Thirty-six rose head nails.
2. Gun part, apparently a butt plate hatch cover.
- 3 - 4. Strap iron hinges, hand forged, fragmentary.
5. Lead shot size "B".
6. Unidentified iron and lead object - seal, or reinforcing strip ?
7. Dark green bottle neck with appliqued mouth.
8. Dark green bottle glass bottom fragment, with high kick-up.
9. - 10. Fragments of thinner dark green bottle glass.
11. Window glass fragment.
12. Window glass fragment, partially fused.
13. - 14. Window glass fragments, quite thin, amber in color.
15. Dark green window glass fragment, edge appears black.

- 15. Fragment, white glazed, with three-eighths inch foot. Porcelain.
- 17. China fragment, foot from dish or bowl.
- 18. Porcelain fragment, white, with a trailed crenellated design along the lip, white at this time, it was probably gold filled originally.
- 19. Clay pipe bowl fragment with two-inch stem.
- 21. - 22. Clay pipe bowl fragments.
- 20. Clay pipe bowl fragment.
- 23. - 25. Clay pipe bowl fragments.
- 26. Clay pipe bowl/stem juncture with unmarked spur.
- 27. - 30. Clay pipe bit fragments.
- 31. - 76. Clay pipe stem fragments.
- 77. - 82. Bone fragments, animal.

Bag No. 55. "N.W. (Mound?) Sack unbroken, contents apparently intact."

- 1. Thirty-one rose head nails.
- 2. Hook eye formed of bar stock, the two legs laid parallel, and hammer welded into a wedge. Outside eye diameter $1\frac{1}{4}$ ", inside, $\frac{1}{2}$ ", overall length, three inches.
- 3. Thin sheet iron lock plate, from a cheap lock, probably used on a chest.
- 4. Thin cast iron scrap - unidentified purpose.
- 5. - 6. Kettle copper scraps.
- 7. Clay pipe stem fragment.
- 8. - 17. Chinking material.

Bag No. 56. "E. of 65', E. of N.S. Line W. (?) line. Sack split, contents probably not intact."

- 1. Sixteen rose head nails.
- 2. Three common square nails.
- 3. Iron wire ? $\frac{1}{4}$ " by two inch.
- 4. Trigger guard finial ? iron.
- 5. Triangular file, modern, one-half inch to a side. One and a half inch.
- 6. Iron bar stock, $\frac{3}{8}$ " x 1" x $3\text{-}3/4$ ".
- 7. - 8. Kettle copper scraps.
- 9. Kettle copper fragment, reworked, probably a portion of a hinge.
- 10. Polychrome barrel bead. White with a light and dark blue looped design.
- 11. Clay pipe bowl fragment.
- 12. - 14. Clay pipe stem fragments.

15. Bottle glass fragment. Dark olive.
16. Animal bone fragment.

Bag. No. 57. "100'-75' N.S. at 75 - 100 E.W. Split sack, contents disturbed."

1. Ninety-four rose head nails.
2. Iron gun trigger, with part of mounting pivot pin.
3. Awl, three inches in length with thickened shank.
4. Iron wedge $\frac{1}{4}$ " thick, $\frac{1}{2}$ " wide, two inches long, tapered to point.
5. Iron object, tang or possibly a gun part. Five inches in length, it tapers from one inch wide to three-eighths inch at the other end.
6. Iron wedge shaped object, two and three-eighths inches in length, three-eighth inch wide and one-eighth inch thick. It is bent to a quarter segment of a circle.
7. Wrench, old type, similar to the type used on bicycles.
8. Iron wire, or tool shank. The object is three inches long by one-quarter inch thick, roughly round in cross section, with a four-sided taper at one end.
9. Strap iron, two widths, one and three-eighths and one and a half inches, held with one rivet. The narrow piece is the longer, being six and a half inches. The wider is four inches in length. Overall length is $7\frac{7}{8}$ ".
10. Strap iron, one and three-eighths inches wide, eight inches long, with a two-inch segment secured with a single rivet at one end.
11. Strap iron, one and a quarter inch wide, five inches overall, two pieces, secured with a single rivet, one three and a half, the other, four inches.
12. Strap iron, one inch wide, two pieces, secured with a single rivet, the longer piece, five inches, has a fish-tail notch at the end opposite the rivet. The shorter piece, is two inches long, and overall length is $5\frac{1}{2}$ ".
13. Strap iron, two pieces, one inch wide, secured with one rivet. Overall length, measured on the longer section is four and a half inches, the shorter is two and five-eighths in length.
14. Strap iron, one and one-eighth inches wide, secured with a single rivet. The longer section is two inches, the shorter, one and a half inches.
15. Total overall length of the two pieces is two and one-eighth inches.

16. Strap iron, one and three-eighths inches wide, two and a quarter inches in length. The piece has one rather large hole, and it is apparent that the rivet was bodily torn from the hole.
17. Strap iron, one and three-eighths wide as determined by short segment of the edge of a rivet hole. Length is one and one-eighth inches.
18. Strap iron, one and one-eighth inches wide, four inches long.
19. Strap iron, one and one-eighth inches wide by four and a quarter inches long.
20. Strap iron, nine-sixteenths wide by six inches in length.
21. Tin can fragments, mostly top and bottom lips, and side seam.
22. Clay pipe bowl fragment.
23. Clay pipe bowl/stem juncture, no spur.
24. - 35. Clay pipe stem fragments.
36. Bottle glass, light greenish, comprising portions of the bottom and three sides. The one extant side measures $2\frac{1}{2}$ " square, with beveled corners.
37. Bottle glass fragment, clear.
39. Ironstone fragment, badly flaked.
39. Bone fragment, animal, possibly worked. Resembles a gambling counter.

Bag No. 58. "Recent glass, Sept./37, "Toward trench." Sack unbroken, contents probably intact."

1. One rose head nail.
2. Sixteen common square nails.
3. Iron wire, one-eighth inch diameter, four and one-eighth inches long.
4. Cast iron plate, (broken fragment) with three screw holes, two with flat head machine screws in situ.
5. Pipe stem fragment, with diamond-shaped cross section.
6. - 7. Pipe stem fragments.
8. Bottle, light bluish-green glass, (Soda pop, circa 1900?) seven and three-eighths inches high, two and a quarter inches in diameter. Bears the words "Jno. Ve-----, Trademark with beaver effigy, --ronto", and a large "V" on the bottom. The neck is half an inch high, sprouting from rounded shoulders, and the bottle mouth has an outside applied sleeve of glass to build it to the desired thickness.

9. Bottle, light bluish-green glass, (Soda pop, circa 1900?) seven and a half inches high, two and five-sixteenths inches in diameter. Bears the words: "CHAS. WI-SON" and "---ONTO.*" The neck is one-half inch high, and shows gathering tool marks. The mouth has an outside applique for thickness.
10. Bottle glass fragment probably from 58/9, but with no matting surfaces.
11. Molded flat bottle fragments, light bluish tint, marked "CLARKE SIZE -- -----ENCE, R."
12. Bottle glass, flat bottle, light bluish, with letters "ED".
13. Bottle glass, flat bottle, light bluish, with letters "Wm E--- "TR" and "OV".
14. - 15. Bottle glass, flat bottle, light bluish, no marking.
16. - 17. Bottle glass, flat bottle, clear.
18. Bottle glass, flat bottle, light bluish, marked "HU".
19. Bottle glass, flat bottle, bluish, marked "EMEDY".
20. - 22. Bottle glass, flat bottles, clear glass, bottom fragments.
23. Bottle glass, very small fragments.
24. - 29. Bottle glass fragments, dark brown.
30. Bottle glass, dark olive green fragment.
31. Bottle glass fragment, dark brown.
32. Bottle glass, probably a square vase, imitation cut glass with frosted area.
33. Bottle mouth amethystine glass, with threaded mouth.
34. China sherd with gold edged lip.
35. Window glass sherd.
36. Charcoal fragments.

Bag No. 59. "Bones from Feature B17 Oct. 21/37 - Sack unbroken, contents apparently intact."

1. Canine burial.
2. Iron strap door handle.
3. Clay pipe stem fragment.
4. Bone fragment, splinter of large animal long bone.

Bag No. 60. "These items were in an open box containing a number of items that came from the well (including the Paint bucket.) 1937..."

1. Three rose head nails.
2. Two common square nails.

3. Iron rod roughly circular, bent in right angle, one end slightly battered, the other roughly chisel pointed.
4. Strap iron, one and an eighth inches wide, two and a half inches long, with a loop with three-eighths inch inside diameter at one end. Hinge leaf?
5. Clay pipe bowl base with T D spur.
6. Clay pipe bowl/stem juncture.
7. - 17. Clay pipe stem fragments.
18. - 19. Clay pipe bowl fragments.
20. - 22. Iron stone sherd and flakes.
23. Water tumbler base, clear glass.
24. Bottle glass, clear from large flat bottle or bottle bottom.
25. Bone fragment, large animal long bone, sawn, apparently for knife handles.
26. - 27. Resin.

Bag No. 61. "Misc. pieces, first week in Sept." Sack torn, contents probably intact."

1. One common square nail.
2. One iron suspender buckle.
3. - 9. Charred fragments of leather heel.
10. Clay pipe stem fragment.
11. Shoulders, neck and mouth of a light bluish flat bottle.
12. Bottle glass fragment, dark brown.

Bag No. 62. "Loose material in box with sacks presumed to be from 1937 dig."

1. One hundred and thirty-five rose head nails.
2. Seven common square nails.
3. Wrought iron loop-ring and mounting stud. The mounting stud was formed of bar stock, or heavy strap iron, three-quarter inches in width and about six inches in length. This was folded back upon itself to form a square head, with wide beveled edges, one and a quarter inches to a side. The extra material formed the leg or shank of the mounting stud, which is two inches in length. The ring-loop is formed of quarter inch square rod stock. Its dimensions are one inch outside diameter, and four and three-eighths inches overall length. The ring loop swings quite freely on the mounting stud.

4. Wrought iron figure eight hitching ring with one large loop and a second smaller loop formed by crimping sides of loop into contact with each other. Overall length, four and three-quarters inches, extreme width, one and a half inches on wide loop, seven-eighths inch on the smaller loop.
5. Strap iron hasp, one inch wide, four and a half inches long. Hasp loop is five-eighths inch wide, and seven-eighths inch high. Made of eighth inch stock. The main strap was pierced with four mounting holes, one of which holds a rose head nail.
6. Knifeblade, minus point. Seven inches overall length in present state. The haft is one and three-fourths inches by three-fourths inch wide. It is pierced with three rivet holes along its bottom edge.
7. Unidentified iron object. Possibly a very light latch bar.
8. Unidentified metal object, Possibly a tool tang, five inches long.
9. Chisel tang? Three and three-eighths inches overall length.
10. Iron rod, approximately round. One quarter by four and a quarter inches.
11. Iron rod with beveled corners. Seven-sixteenths by three inches.
12. Strap iron, two pieces secured with a single rivet. 8½" overall.
13. Strap iron, one inch and one and one-eighth inch widths, secured with two rivets. Five and a quarter and five and a half inch pieces.
14. Strap iron secured with six holes, one still holding a rose head nail.
15. Strap iron, four inch length, one inch wide, with hole from a pulled rivet.
16. Sheet iron, about 18 gauge, 2" x 3-3/8". Nail holes in each corner.
17. - 20. Kettle copper scraps, much corroded.
21. Fragmentary copper bung tap.
22. Corner section of flat brass shoe buckle, bead and rope pattern design.
23. Bone? ceramic? small fragment?
24. Iron trunk lock lid hasp.
25. Clay pipe stem fragment, scored.
26. - 32. Clay pipe stem fragments.

1. Three common square nails.
2. One four and a half inch modern wire spike.
3. One double-headed rivet ?, one-eighth inch diameter by twelve and a half inches.
4. One skate blade of no great antiquity.
5. Cast iron stove fragment.
6. - 9. Heavy brown crockery jug fragments.
10. Glass fragment, clear.
11. Glass fragment, clear.
12. - 16. Small mammal bones.

Bag No. 65. "No information, torn sack, probably some contents missing."

1. Forty-one medium size rose head nails.
2. Fifty-nine small rose head nails.
3. Double-end awl, not off-set.
4. Large awl ?. Three-eighths inch shank, five and a quarter inches long.
5. Iron rod, square, with semi-hooked ends. Five inches by one quarter inch.
6. Clay pipe bowl fragment.
7. - 12. Clay pipe stem fragments.
13. - 21. Iron stone sherds and flakes.
22. - 30. Bottle glass fragments, light greenish.
31. - 32. Bottle ? glass fragments, mouth ?.
33. - 42. Bottle glass fragments, light greenish, almost clear.
43. - 45. Window glass fragments, lime green.
46. - 47. Window glass fragments, very thin, clear.
48. - 49. Bone fragments, large mammal.

Bag No. 66. "East trench, split, contents gone."

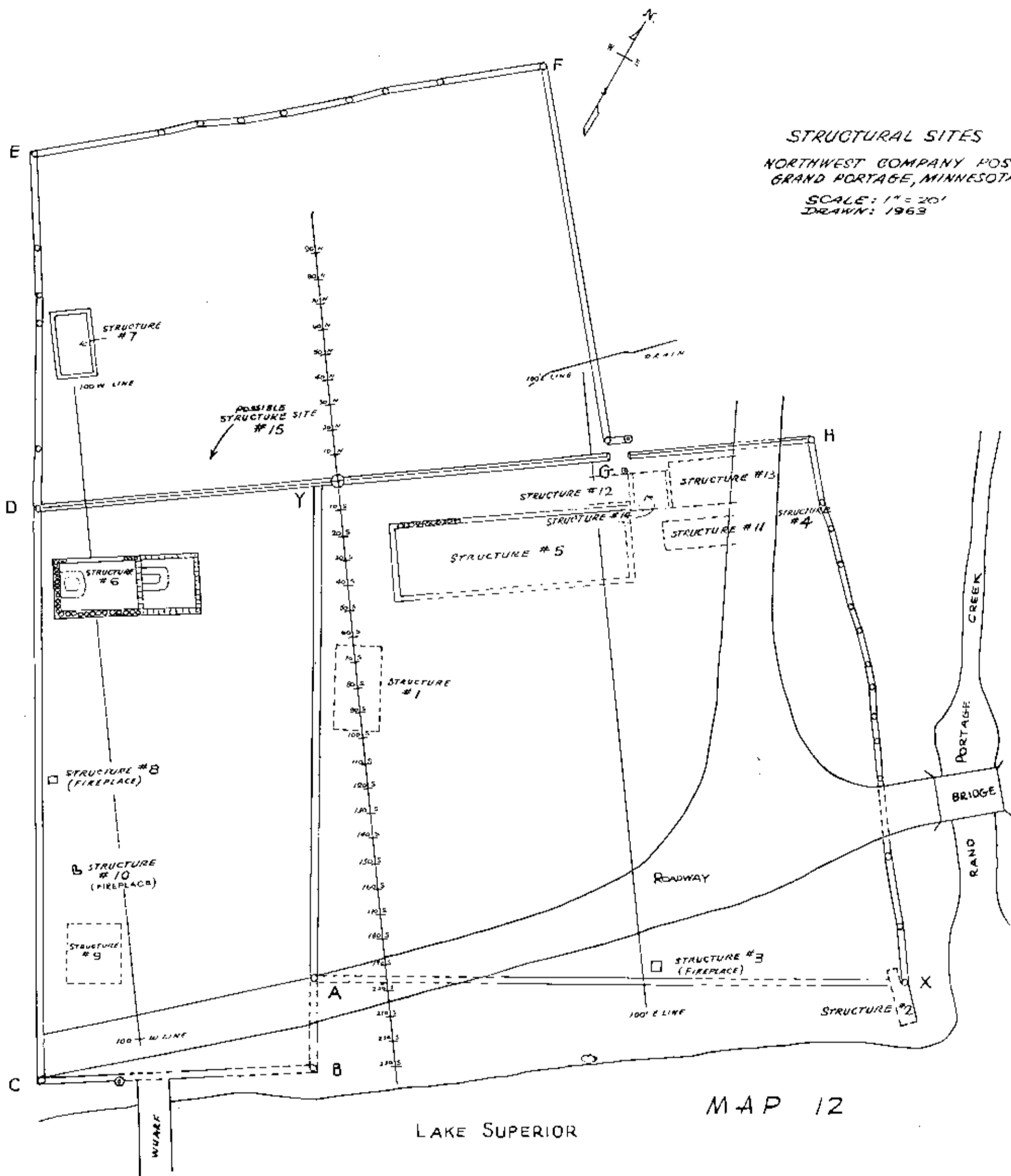
Bag No. 67. "East trench, split, contents gone."

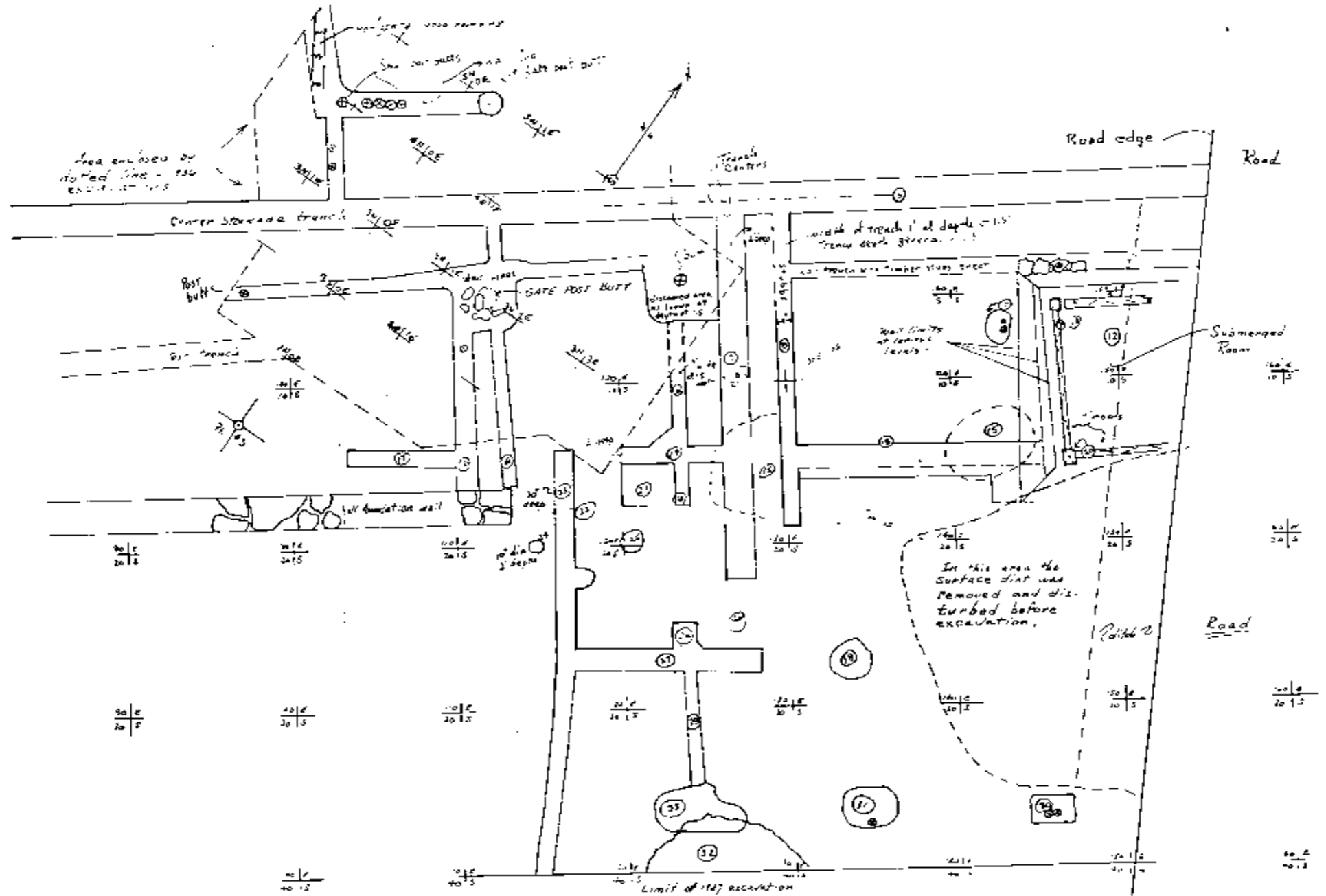
Bag No. 68. "Labor lost" Unbroken sack, contents gone."

ADDENDA, 1937 (?)

69. Door handle and latch, forged from round bar stock. The handle is 10 1/2" in overall length. The top securing portion is a simple squared spike, while the bottom, which also serves as a pivot for the latch is flared and was secured to the door with two screws or nails. From box containing presumed 1937 materials.

STRUCTURAL SITES
 NORTHWEST COMPANY POST
 GRAND PORTAGE, MINNESOTA
 SCALE: 1" = 20'
 DRAWN: 1963





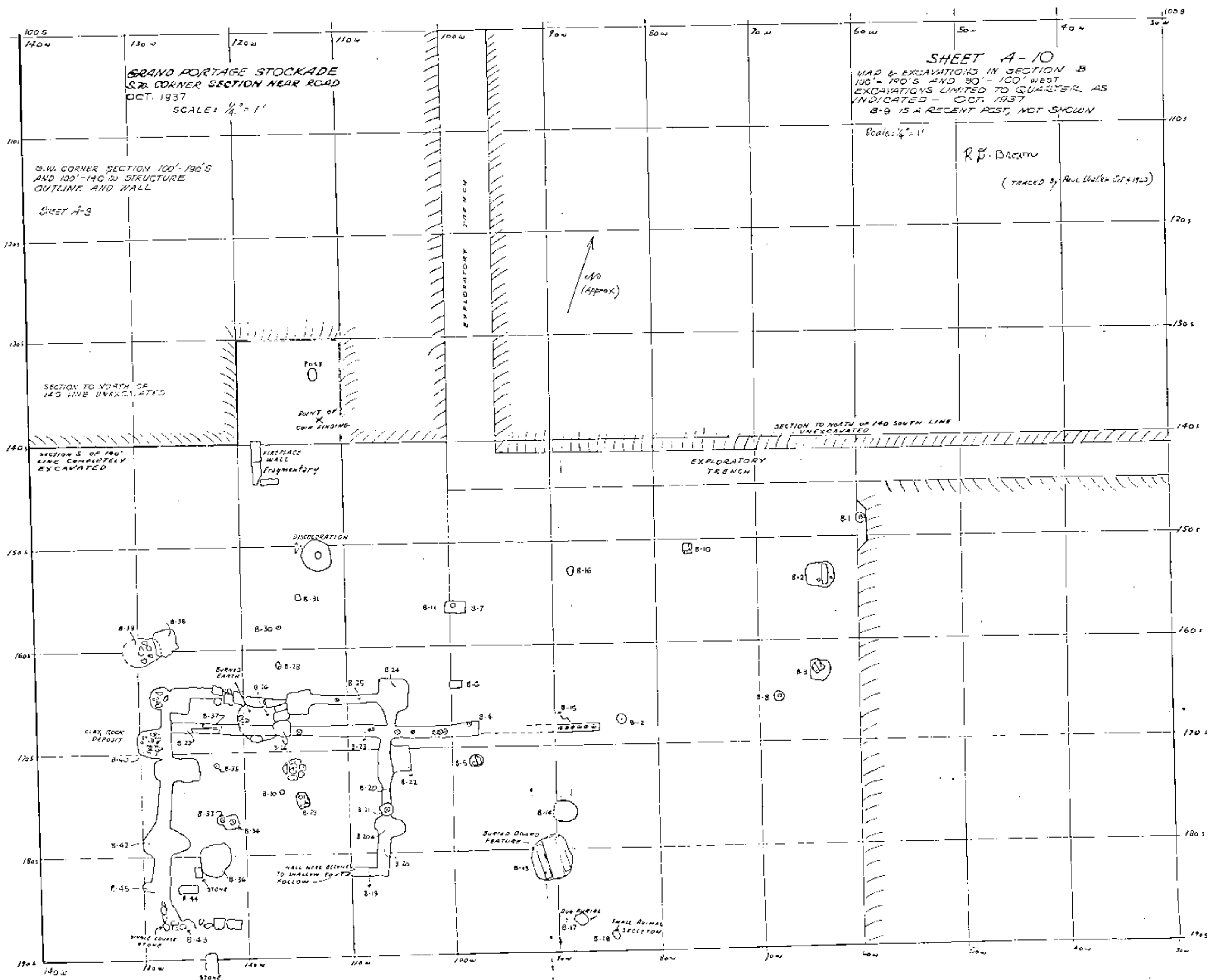
MAP 13

SHEET A-6
 DETAIL OF EAST QUARTER AREA, FROM GATE TO ROAD, 1936-1937 EXCAVATIONS

SCALE: 1/2" = 1'

R.B. Brown

(TRACED BY PAUL WALLER JULY 1963)



MAP 14