## EXCAVATING THE SITE OF OLD FORT RIDGELY

NO ONE FAMILIAR with the history of the Northwest need be reminded of the importance of the Sioux Outbreak of 1862. Almost as well known as the uprising itself is Fort Ridgely, one of the focal points of the struggle between the Sioux and the whites in the Minnesota Valley. It is appropriate that the site of this pioneer fort should now be public property, for the use and enjoyment of all. Although nearly all the buildings originally composing the post had long since been torn down, it was believed that archaeological study, based on careful excavation of individual building sites, would furnish valuable data on the original character of the post not elsewhere available. In November, 1936, in cooperation with the Minnesota division of state parks and the Minnesota Historical Society, the National Park Service began the excavation and study of these remains, as a part of the development planned for Fort Ridgely State Park under the provisions of the Civilian Conservation Corps. The extensive information obtained has surprised not only those familiar with the site in the past, where scant visible remains of the fort could be seen, but also those who have been engaged in the work.

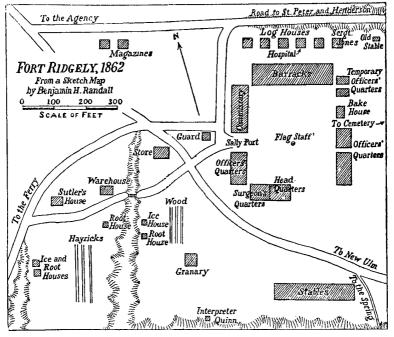
Fort Ridgely was established on the upper Minnesota River in April, 1853, as a part of a prolonged, though frequently altered, program for posts at various points along the frontier, which should afford mutual protection and control of Indian and white. The original intent of the war department was to erect at this point a permanent fort composed of stone buildings, and two such structures, the barracks and the storehouse for the commissary and quartermaster departments, were actually begun before a change was made in the plans to allow for the completion of the post

with wooden buildings. This change in plan probably had a direct bearing on the fact that after having been used for only fourteen years, the site was abandoned for military purposes. By 1867 the frontier in the Northwest had shifted so radically that the fort could have been used only as a supply depot. When the post was established, water transportation was the chief means of supply. This condition soon passed, and the great railroad systems of the succeeding period left the post far inland. The military reservation, containing more than forty-five square miles as originally surveyed, was thrown open to settlement, and the greater part of the area found its permanent usefulness as agricultural land. A further development took place, however, in the disposition of the site of the fort proper, which after having been homesteaded and in part farmed for nearly forty years, returned to the status of public lands in 1911 as a state park. In that year the site of the fort proper was set aside by an act of the Minnesota legislature for the permanent use of the public. The preservation of the major part of the site of Fort Ridgely, with its important educational and historical values, was thus assured.

The destruction of historic buildings is a familiar, if unfortunate, phenomenon. It is, therefore, not difficult to understand why the buildings of Fort Ridgely, in spite of their intrinsic interest and substantial character, should have been torn down and the material used in farm buildings of the vicinity during the great period of Minnesota's development as an agricultural state. The fact that a part of the commissary and quartermaster storehouse was long used as a barn explains the preservation of that remnant of the original group, and the use of one of the two log powder magazines as a shed prevented its destruction. Even the massive stone barracks, over two hundred feet long and two stories high, were torn down and the stone used for other purposes. Some of the stone from the fort found its way into the foundation of a neighboring church, and after long

use there, the blocks were removed during recent alterations and sent back to the fort, where they have been used in the restoration of the commissary.

Only a long low mound of earth was visible at the site of the barracks in 1936. Although this mound was obviously



[From William W. Folwell, A History of Minnesota, 2:126 (St. Paul, 1924).]

a building site, no portion of wall or other feature protruded through the heavy sod that covered the remains. This sod removed, the excavation of the foundations of the barracks was begun. Portions of walls and footings were soon encountered, which were cleared and exposed to a depth slightly below the original ground level. Where portions of footings had been removed to greater depths, the excavation was lowered sufficiently to expose the top of remaining portions. The accumulated debris of fallen stone, brick, and mortar was removed, but only after having been care-

fully excavated by hand. Data of importance concerning architectural details and the smaller cultural objects included in the deposit were carefully preserved. This debris was not unusual in character; as portions of wall had collapsed or been torn down, rock and mortar had accumulated near the walls, with brick, mortar, and plaster from partitions, chimneys, and interior features, and this debris had been further built up by vegetation and wind-deposited soil. Few large blocks of the granite originally composing the building were found, but a great number of smaller size were recovered, many of which were later used in the restoration of the commissary. Few of the original wood members of the structure remained, most of them — even door sills and floor joists - having been long ago removed, but a careful examination of the surviving traces furnished data on the manner in which floor members were originally used in the building.

Footings for the massive walls of the barracks were found in place throughout the whole of their course, although in certain places the upper portions had been removed with all parts of the wall above. These footings are of special interest, and at one point excavation was carried down more than four feet below the old ground level, to the base of the footing, in order to study this feature of the building. The stones composing this foundation were somewhat graded from bottom to top. Near the bottom were huge, naturally rounded field boulders, unshaped, but tightly wedged and crowded together. Only toward the top of the footing, near the ground surface, was mortar used, with smaller fragments of rock so fitted as to provide a flat surface upon which the walls might be built.

Remnants of the lower portions of these walls, two feet in thickness, were found standing along only a part of their course, being best preserved along the south or front of the building. Remnants of walls that were preserved showed evidence of skillful masonry that had produced a sturdy structure. Rectangular or subrectangular blocks of quarry

stone had been set in mortar and sparingly fitted with smaller fragments, in the pattern known architecturally as random-coursed ashlar. Drill marks on many of these blocks indicate the manner in which the stone was taken from the quarry. In the base of remaining walls, and in one additional cross wall, are openings for joists and sills in some of which were preserved fragments of the original wood members. Resting on the footing of the north side of the barracks was found one surviving timber in place, an oak sill notched to receive joists.

Along the south wall, the base of which was well preserved, were found the remains of six doorways of uniform size. These were in groups of twos—near the east, middle, and west ends of the building. In two of the doorways were the decayed remains of solid timber sills laid into the masonry on the exterior, and in openings from which similar sills had been removed impressions of the wood were clearly visible in the mortar in which they had been laid. On the interior were parts of the original brick trimming of the opening. A porch had originally run along the front of the building, and footings for this part of the structure found in place provide exact data on this feature.

No more interesting feature was found at the site of the barracks than the bases of three double fireplaces of brick. These were plain, winged fireplaces, in pairs, back to back, each opening originally into a separate room. Their interest is greatly heightened by the color of the brick, which, as a result of many hot fires while the building was in use, is a brilliant red, much more colorful than other brickwork not so affected.

On the completion of the excavation of the site of the barracks, work was continued in a similar manner on the sites of other buildings about the parade ground. These include the portion of the commissary beyond the surviving remnant of that building, the officers' dwelling along the west side, the headquarters and surgeon's quarters on the south, the

two officers' dwellings on the east, and the bakehouse at the east end of the barracks, and the hospital at its rear. excavations were made in an endeavor to find traces of former paths, other buildings, and minor features of the parade ground. Since the methods employed did not differ materially from those employed on the site of the barracks, only facts of special interest concerning other structures need be mentioned. The buildings of this group, except for the barracks, the bakehouse, and the hospital, were provided with cellars, which, by reason of their good preservation, are of special interest. In general, cellar walls were made of rough field stones or refuse quarry stone, and were left with earth or sanded floors. That of the headquarters and surgeon's quarters, however, had been constructed with greater care, and was furnished with a brick floor, partition, and ramps, upon which wooden stairs had been constructed, as evidenced by remnants of charred wood found where these members fitted into the masonry.

The wood was one example of the effect of the fire that destroyed the headquarters and surgeon's quarters, a double dwelling with both parts on the same floor, in January, 1865. As a result of the fire that destroyed the superstructure and the subsequent artificial filling of the cellar, the masonry was better preserved than in the case of buildings that had been torn down and had been longer exposed to the elements. On the floors and walls of the cellar the effects of the fire are still visible. There are great areas of blackened brick near the central partition, higher up are brilliant red areas, and the stones of the walls are cracked and exfoliated, as a result of the heat of the same fire.

No one feature of the whole site is of more interest than a large cottonwood tree, approximately two feet in diameter, which is now growing inside the foundation of the smaller officers' dwelling on the east side of the parade ground. Although the cottonwood is a tree of rapid growth, the fact that it has attained its present size since the aban-

donment of the building gives one an appreciation of the time that has passed since the days when the fort was in use.

It was proposed that the commissary building should be restored to its original exterior appearance, and in April, 1937, this restoration was begun. This building, now complete, is designed to serve a new purpose as a museum and public assembly hall. Before plans for the restoration were drawn, a systematic search was made, with the assistance of the Minnesota Historical Society, in the archives of the war department and elsewhere, for old documents that might throw light on the original appearance of the building. The available data from these sources were carefully studied, together with those obtained from excavation and an examination of the surviving portion of the original.

It was necessary to obtain a large quantity of new stone for the restoration of the masonry that had been removed, and quarrying was begun at a small unused quarry several miles west of the fort, but within the old military reservation, from which the stone originally came. Where once had been heard the tapping of laborious hand drilling, the din of compressed-air drills and dynamite explosions now echoed.

Because of the fact that the site of Fort Ridgely is now dedicated to public use, it was necessary that every possible safeguard be placed about the structural remains found, lest preventable damage from weathering or careless visitors destroy what still remained. In the interest of historical accuracy, it would have been desirable if the site could have been left exactly as it was excavated, but this was quite out of the question. The original masonry had been laid in lime mortar, which had lost its quality of binder, being readily eroded by rain in summer and subject to damage by freezing and thawing in winter. It was therefore necessary to stabilize the remains by replacing the mortar with cement. Every effort was made to do the cement work in a skillful manner. In general, the masonry was simply repointed,

after clearing out as much of the mortar as possible without displacing the stone. The completed work has much the same appearance as when the masonry was first excavated. The introduction of new cement is believed to be fully justified, since the ruins are now relatively permanent. After the excavation and stabilization were completed, the original ground levels were re-established about the individual building sites and the surface seeded or sodded as the case required. Where before there were but low mounds and depressions, there are now picturesque grass-surrounded ruins, clearly visible and understandable to all.

It should perhaps be mentioned that every known resource of the site of Fort Ridgely has not been explored. Certain outlying building sites, for example, have purposely been left untouched, in the belief that they will become increasingly valuable to history as methods of excavation are refined or new documentation comes to light. The proper conservation of archaeological sites, both historic and prehistoric, entails neither a prohibition of, nor a maximum of, excavation, but rather an optimum amount of it. The unexcavated site is like a fine book, its pages unopened, in the bookseller's phrase. The partially excavated site is like the same volume with the preface, the table of contents, the author's conclusions, and the index pages slit. Complete excavation of any site should reveal all the legible details of every page, but should progress surely, just as the reader of the book will slit each signature as he goes, careful not to ruin folded inserts by too great haste.

Great quantities of smaller cultural objects, or relics, were recovered in the excavation of the sites of the various buildings. Although a few of these are clearly of recent origin, the greater portion belong to the period during which the buildings were in use, and serve to illustrate the nature of frontier military life in a most convincing manner. A catalogue of these objects lists more than fifteen hundred recognized objects, classified according to their general nature.

Included are military articles, building hardware, household utensils, personal articles, tools and implements, and examples of the farrier's art and harness. Not only do these objects vivdly illustrate "the conditions imposed upon everyday existence" during the period involved, but they recall social and economic trends of the period in manufactures, the arts, and inventions. From these, materials of intrinsic value have been selected to supplement pictorial museum displays.

These remains of the material culture of Fort Ridgely, what the archaeologist would call its artifacts, are of value in any study of this post—or, for that matter, of any frontier post. They are not mere sentimental relics, of doubtful origin or association with the fort, but a group of objects of known provenience, a series more or less complete so far as they were preserved, from a study of which certain aspects of life in the fort's early period can be reconstructed with a considerable degree of accuracy.

As a kind of footnote to the central theme of the work at Fort Ridgely came the evidence, encountered beneath the site of one of the officers' dwellings, of a previous Indian occupation of the site. Elsewhere in the present park are two burial mounds, the remnant of a group that once included at least four. Of unusual interest, therefore, are flint implements and refuse chips, fragments of pottery, and bits of food refuse animal bone found beneath the layer of building debris dating from the military period. These obiects were discovered in the original top soil upon which the officers' dwelling was built. It now seems likely that the burial mounds and the habitation site were contemporary. No evidence was available at the habitation site of any structural remains such as firehearths - probably such remains were obliterated when the military building was erectedand the site may have been that of a temporary habitation. Of special significance among the material collected from this aboriginal level are four gunflints, which help to assign the deposit to its proper chronological position. These gunflints are the only objects of white origin included in this older level, and it is probable that there was a distinct break between the military and the Indian occupations.

These data of the previous use of the site of Fort Ridgely are of interest to historians in demonstrating that the site was not first used in 1853, but had been inhabited long before that date. They are of interest to archaeologists in affording a case of actual stratigraphy, with Indian and white materials separated into levels, the latter superimposed upon the former. Of even wider significance is the fact that in the protohistoric period, at least at this site, pottery making and flint working by the natives were contemporary with the use of flintlock guns introduced by the white man, and both with the probably ancient custom of mound burial. The aboriginal material belongs to a culture pattern not yet studied in this area in detail; the ethnic relationships of the site are very indistinct. The archaeological field of southern Minnesota has as yet only been outlined, and the exact significance of this early material cannot now be more clearly defined.

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