

University of Montana

## ScholarWorks at University of Montana

---

Graduate Student Theses, Dissertations, &  
Professional Papers

Graduate School

---

1968

### Fort Owen| An artifact analysis

Michael L. Wilkerson

*The University of Montana*

Follow this and additional works at: <https://scholarworks.umt.edu/etd>

**Let us know how access to this document benefits you.**

---

#### Recommended Citation

Wilkerson, Michael L., "Fort Owen| An artifact analysis" (1968). *Graduate Student Theses, Dissertations, & Professional Papers*. 2390.

<https://scholarworks.umt.edu/etd/2390>

This Thesis is brought to you for free and open access by the Graduate School at ScholarWorks at University of Montana. It has been accepted for inclusion in Graduate Student Theses, Dissertations, & Professional Papers by an authorized administrator of ScholarWorks at University of Montana. For more information, please contact [scholarworks@mso.umt.edu](mailto:scholarworks@mso.umt.edu).

17-

FORT OWEN: AN ARTIFACT ANALYSIS

by

Michael L. Wilkerson

B. A. University of Montana, 1963

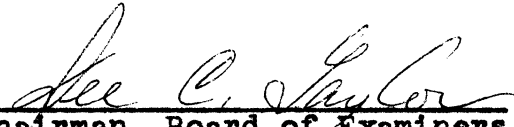
Presented in partial fulfillment of the requirements  
for the degree of

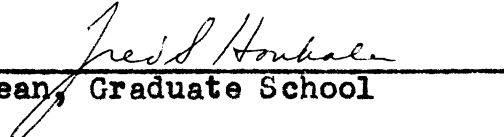
Master of Arts

UNIVERSITY OF MONTANA

1968

Approved by:

  
Chairman, Board of Examiners

  
Dean, Graduate School

MAY 27 1966

Date

UMI Number: EP36277

All rights reserved

INFORMATION TO ALL USERS

The quality of this reproduction is dependent upon the quality of the copy submitted.

In the unlikely event that the author did not send a complete manuscript and there are missing pages, these will be noted. Also, if material had to be removed, a note will indicate the deletion.



UMI EP36277

Published by ProQuest LLC (2012). Copyright in the Dissertation held by the Author.

Microform Edition © ProQuest LLC.

All rights reserved. This work is protected against unauthorized copying under Title 17, United States Code



ProQuest LLC.  
789 East Eisenhower Parkway  
P.O. Box 1346  
Ann Arbor, MI 48106 - 1346



2449.8T

## ACKNOWLEDGMENTS

To Doctors Dee C. Taylor, Carling I. Malouf, and K. Ross Toole of the University of Montana go my thanks for their encouragement of this project and for their constructive criticism that helped bring the manuscript to its final completion.

Fellow students were also helpful in the preparation of this thesis. Donald Dodge and Lynn O'Brien gave considerable time and effort to the photographs of the artifacts. Dale Fredlund helped with drawings and Robert Johnson, Jack Johns and Russell Lockner aided in the identification of several of the specimens.

Special thanks goes to Dude Thomas for his help in the identification of the various wagon and machine parts.

I would also like to thank my wife Toni, and our children Kelley and Kevin who made it all worthwhile.

To all the unnamed others who shared their time and effort on my behalf, I extend my sincere appreciation. However, for errors in the manuscript and for any shortcomings in the interpretation, the responsibility is solely mine.

## TABLE OF CONTENTS

| Chapter  | Page |
|--|------|
| I. INTRODUCTION . . . . .                                      | 1    |
| Purpose of Study . . . . .                                     | 1    |
| Statement of Problem . . . . .                                 | 2    |
| Hypothesis . . . . .   | 2    |
| Methodology . . . . .  | 3    |
| Summary of Archaeological Field Work at<br>Fort Owen . . . . . | 3    |
| II. GENERAL DESCRIPTION OF THE BITTERROOT VALLEY .             | 14   |
| The Setting . . . . .  | 14   |
| Climate . . . . .  | 15   |
| Geology . . . . .  | 16   |
| Flora and Fauna . . . . .                                      | 18   |
| III. AN HISTORICAL SKETCH OF FORT OWEN . . . . .               | 21   |
| IV. ARTIFACT CLASSIFICATION . . . . .                          | 45   |
| Subsistence . . . . .  | 48   |
| Structural Fittings . . . . .                                  | 56   |
| Household Articles . . . . .                                   | 66   |
| Transportation . . . . .                                       | 83   |
| Hand Tools . . . . .   | 92   |
| Personal Possessions . . . . .                                 | 94   |
| Clothing . . . . .   | 99   |
| Firearms and Accessories . . . . .                             | 102  |
| Articles of Native Manufacture . . . . .                       | 105  |
| Miscellaneous . . . . .  | 106  |
| V. SUMMARY . . . . .   | 111  |
| Period 1 . . . . .   | 116  |
| Period 2 . . . . .   | 121  |
| Conclusions . . . . .  | 122  |
| LITERATURE CITED . . . . .                                     | 124  |

LIST OF TABLES

| Table   | Page |
|---|------|
| 1. Distribution of Fort Owen Artifacts into<br>Ten Classes Used in This Study . . . . . | 115  |

## LIST OF ILLUSTRATIONS

| Figure  | Page |
|---|------|
| 1. Map of Fort Owen . . . . .   | 5    |
| 2. Photograph of Fort Owen in 1887 . . . . .                                  | 39   |
| 3. Photograph Showing the Southwest Bastion and<br>Outhouse in 1889 . . . . . | 40   |
| 4. The East Barracks . . . . .  | 44   |
| 5. Iron Axe Head . . . . .  | 52   |
| 6. Glass Trade Beads . . . . .  | 55   |
| 7. Iron Brace for Planks . . . . .  | 58   |
| 8. Sketch Showing Planks Braced Together . . . . .                            | 59   |
| 9. Forged Iron Gate Hinge Pin . . . . .                                       | 63   |
| 10. Large Iron Door Lock . . . . .  | 64   |
| 11. Kitchen Knives . . . . .  | 68   |
| 12. Fragments of Iron Stone Dishes . . . . .                                  | 72   |
| 13. Two Types of Horseshoes . . . . .   | 85   |
| 14. Wagon and Buggy Parts . . . . .   | 87   |
| 15. Sketch of Basic Harness Rigging . . . . .                                 | 88   |
| 16. Personal Possessions . . . . .  | 97   |
| 17. Fragments of China Dolls . . . . .  | 98   |
| 18. Child's Leather Shoe . . . . .  | 101  |
| 19. Brass Cartridge Cases . . . . .   | 104  |



## CHAPTER I

### INTRODUCTION

#### Purpose of the Study

From 1957 to 1961 the Department of Anthropology at Montana State University, Missoula, Montana, conducted a field school for student archaeologists at Fort Owen, a small American trading post located near the present community of Stevensville, Montana. These field exercises were conducted under the leadership of Dr. Carling Malouf and Dr. Dee C. Taylor, both members of the University faculty.

Extensive archaeological work was completed at the Fort over the five seasons which produced information supplementing the known historical literature on this site. Students who participated in the excavations were required to submit detailed reports on their area of work, and the artifacts recovered were cleaned and catalogued. Additional investigations were also carried on at this time independently by Dr. Malouf on certain historical aspects of the Fort and its physical structure.

The artifacts, however, were never categorized into a working typological system so that they might be analyzed to provide a more thorough interpretation of the Fort's

material culture. The construction of such a system and subsequent analysis of the Fort Owen artifacts will be the focal purpose of this study.

Indeed, historical archaeology, as a discipline, is relatively new and no classification system for specimens has yet been standardized. The yield of artifacts at Fort Owen was sufficiently large to justify proposing a system which might be useful as a standard for other researchers.

#### Statement of Problem

The problems in this thesis briefly stated are:

1. To construct a typological classification for historic site artifacts of white manufacture.

2. The analysis of the artifacts recovered from Fort Owen using this classification, and to relate them to human activities and life during the history of the Fort.

#### Hypothesis

Since there are gaps in knowledge of Fort Owen and other related sites, both historical and archaeological, it is hypothesized that:

1. A proper analysis of the Fort's artifacts will provide a more accurate and realistic interpretation of the life-way within Fort Owen and related areas.

2. An analysis of the material culture of Fort Owen may help to support or disprove the validity of

contemporary historical literature related to this site, and it may also provide an aid or reference for any future studies made elsewhere concerning this historic period.

### Methodology

This thesis project is an outgrowth of field work which has been completed at Fort Owen by faculty and students. Therefore, it is not intended to be a repetition of that work, but it is an extension of the overall project.

The author began by reviewing field notes in order to summarize all actual field work which had been done. Then a thorough study of the historical literature and the natural setting was undertaken to provide an adequate background of the activities of Fort Owen, and for information about the persons who resided and traded within its confines.

Some analytical scheme was necessary in order to classify and interpret the Fort's artifacts so a system was devised which grouped the Fort's artifacts according to their function and use. Then conclusions which were made were based on both the historical data and artifacts available.

### Summary of the Archaeological Field Work at Fort Owen

In 1956 the State Parks Division of the Montana Highway Commission was given an acre of land near Stevensville, Montana, which contained the remains of old

Fort Owen. This area was incorporated in the State Parks System and named "Fort Owen State Monument." Under the Revised Codes of Montana, 1947(62-301), the State Highway Commission was vested with the duties and powers to conserve scenic, historic, archaeological, scientific, and recreational resources of the State and thus Fort Owen came under its jurisdiction.

A restoration of the Fort had long been sought by interested residents and historic societies, and now that the site was in the hands of the State it appeared that this hope might at last become a reality. Dr. Carling Malouf, Anthropologist at Montana State University, was contacted by the Bitterroot Valley Historical Society in November of 1956 concerning the feasibility of an excavation of the Fort being undertaken by the University's Anthropology Department. The Society indicated that there was some interest among Bitterroot residents in preserving their history, and that an attempt would be made to raise money for such a project.

Dr. Malouf, who had long been involved in historic sites archaeology, was interested in this location as a source of information on the material culture of the trading era in Western Montana. An excavation, he felt, would answer questions pertaining to the physical outline of the Fort and a study of the artifacts might provide insight into those bits of private life that are often left

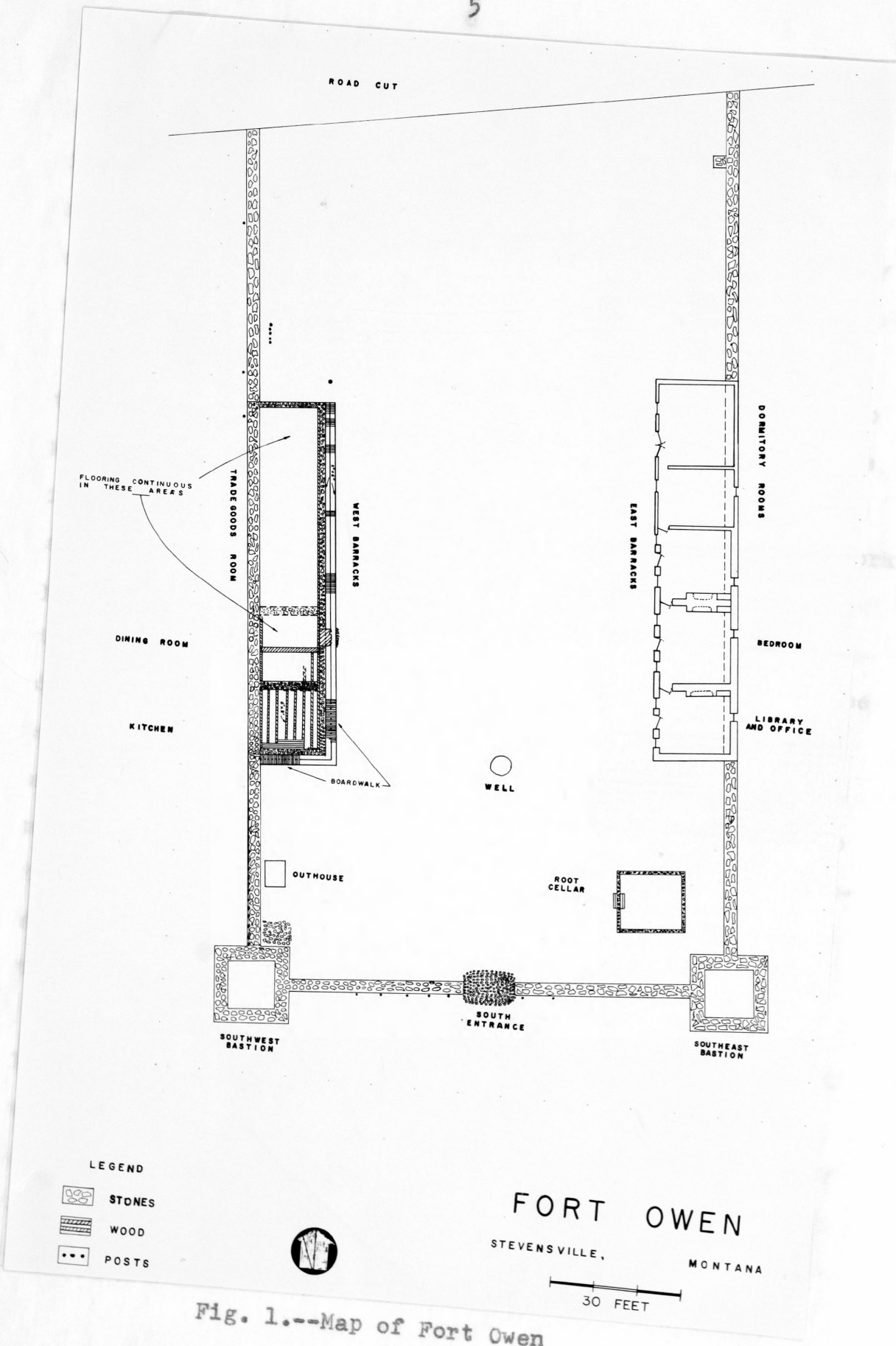


Fig. 1.--Map of Fort Owen

out of history. Also, owing to its proximity to Missoula (twenty-seven miles), this seemed to be an excellent spot for an archaeological field school. Problems related to mapping, excavation of structures, and the proper recovery and interpretation of artifacts could be found in a site such as Fort Owen.

On March 13, 1957, the Parks Division announced to the Anthropology Department that the recent session of the Montana Legislature had granted the Highway Commission an increase in funds which would permit some developmental work at the Fort. Ashley C. Roberts, Director of Parks, proposed a meeting with Dr. Malouf and Dr. William Smurr of the History Department in order that further plans might be discussed. A month later a Memorandum of Agreement was signed by both parties wherein the University of Montana agreed to supply the necessary personnel and facilities to make extensive tests, to excavate such buildings and structures that were to be found at Fort Owen State Monument, and to study materials and data pertaining to the excavations (Memorandum of Agreement, April 15, 1957).

The actual work on the site began spring quarter of 1957 under the direction of Dr. Malouf with a crew of history and anthropology students. The first excavations were aimed at outlining the walls of the old palisade along with the southwest and southeast bastions. Old photographs were available which showed these features; however, by this

time (1957) all surface indications of their presence had disappeared. During their work while outlining the foundation of the southwest bastion the crew uncovered what they believed to be part of an outhouse. Its location corresponded with photographs, one showing an early single structure and a later one illustrating a "double seater." Due to the inaccuracy of a map being used by the crews which was drawn some thirty years earlier by Dunbar and Phillips, the trench had to be extended southward until the southern wall was located as well as the southeast bastion. The excavations were then continued eastward until a portion of the south gate was discovered and the outline of the southeast bastion had been established.

A pit was started at the southern end of the west barracks in order to outline that structure. At this time a kitchen debris pile was located outside the west wall which adjoined the southwest wall of the west barracks. It was believed that an excavation in this area would help to prove Dr. Malouf's idea that the kitchen and messhall were located in the southern end of the barracks (Taylor, field notes:1958).

Roughly one-half of the Fort was excavated during the first season and numerous important structures were located. Three hundred and seventy artifacts were excavated and catalogued; the majority coming from a scrap pile located in the southeast bastion and the west wall kitchen

dump. There was, however, considerable work left and so it was decided to continue the following year.

The 1958 season began with plane table mapping of the entire site under the direction of Dr. Dee C. Taylor, University Archaeologist. A north-south magnetic base line was laid out and after two weekends most of the exposed features were mapped. During this time it was discovered that further work was necessary to complete the exact outline of the east wall, part of the southwest wall, and its junction with the southwest bastion (Taylor, field notes: 1958).

The students were then divided into crews of three or four men, and they began to work on their assigned tasks. Excavations were also resumed on the southwest bastion, enlarging and extending a pit which had been started in 1957. One crew was assigned the job of locating a hypothetical root cellar which lay approximately twenty feet south of the east barracks. Another crew excavated the opening of a well located in the open area between the east barracks and a postulated southeast corner of the west barracks.

By carefully removing the top soil crew No. 1 located the north and west walls of the root cellar, as well as an entrance on the west side, thus clearly defining the outline of this structure (Olson, field notes:1958).

The well which had been filled with rocks and other



debris was quite visible with a pipe and broken pumping apparatus still extending from its mouth. This was apparently a later change in the Fort as old photographs clearly show that the original well was located further northward in the center of the Fort's courtyard. The crew dug down into the well to a depth of approximately six feet, then abandoned the project because of crumbling walls and the danger of a cave-in. The well was refilled and left for the duration of the field work (Hagood, field notes: 1958).

Attention was then turned to the largest uncovered structure, the west barracks. An exploratory trench was started running in a north-south direction which began at the southeast corner of the barracks with the hope that any remaining stones of the foundation could be defined on its eastern boundary. Malouf's activities from the year before had exposed one outline of the west barracks south wall, and an outline of the other three sides would give the archaeologists the exact dimensions of the structure. These excavations in the southeast section of west barracks disclosed an unusual amount of broken glass, crockery, and bone materials, all of which lent credit to Dr. Malouf's suggestion that the kitchen was located in the southern end of the building. A trench which followed the inside of the west palisade in hopes of locating the northwest corner of

the west barracks was unsuccessful and the field activities were terminated for the season.

Work resumed on July 3, 1959, with the continuation of activities centered around the west barracks. Excavations were now extended to recover the materials and structural evidences from within the barracks as well as the outlining foundations. Starting inside the extreme southeast corner, the students skimmed along the top of some wooden boards and timbers which were encountered some four to six inches below the present surface, indicating a floor or possible fallen roof.

An alignment of stones running east-west was located within the barracks which appeared to be the base of a partition dividing the structure into separate rooms. A number of pieces of carbon and burned rock were also discovered which indicated the presence of a fireplace, possibly similar to the large double fireplace found in the east barracks (Minna, field notes:1959).

Excavations in this area continued the following year which revealed beams running in various directions. These appeared to be joists in a floor which was wooden and possibly covered with some type of pink linoleum. Records show that the walls of the west barracks had been pulled down about 1912 to prevent their accidentally collapsing on children who played in the area. This then

accounted for the discontinuity of the timbers which were located.

In the second room or mess hall, more bone material was recovered along with pieces of synthetic material, probably linoleum, parts of bottles, crocks, and part of a jug handle, and several blue beads (Dickenson, field notes; 1960). By the end of the 1960 season three definite and separate rooms had been established in the west barracks. These were as follows:

1. Kitchen--located in the southernmost part of the building.

2. Mess Hall--Adjoining the kitchen, it was the middle room.

3. Trade Room and Dormitory--This was the northernmost room and the last one to be established by the archaeologists.

In 1961, the students and their faculty supervisor returned to Fort Owen to discover that the site had been completely leveled by order of the Bitterroot Valley Historical Society. Mrs. McKinley, a resident of the ranch which surrounds the Fort, explained that an elderly woman had fallen into a small ditch near the east barracks and wrenched her leg. As a result of this accident, the Society had the area graded so there would not be a reoccurrence of this type. In the process, however, all of the exposed

features and most of the control stakes and existing grid system were covered over (Arthur, field notes:1961).

Part of the students were then divided into four groups and the remainder assisted Dr. Taylor in the remapping of the site. Four exploratory trenches, each five feet wide, were spaced in a north-south direction to relocate the east wall and boardwalk of the west barracks, and, if possible, to define the northeast corner of that same structure.

In a short time the first three crews located the intended boardwalk which ran the length of the barracks. Since it was believed at that time that the east and west barracks were the same length, a fourth group of students started a trench directly across the courtyard from the northwest corner of the east barracks. Soon it was apparent that the two were not the same dimension and so the trench was expanded in a southern direction. About ten feet south of their original position, the long elusive northeast corner of the west barracks was finally established (Carmichael, field notes:1961). It was then a simple matter to trace the north wall of the barracks to its junction with the west palisade.

During this final season at Fort Owen the last of the major structures had been defined and the entire site was mapped. Over 700 artifacts were recovered and catalogued.

A few problems did, however, remain unsolved. The original well which sat in the center of the Fort was never located. Also, the north end of the compound had been graded over for the old highway several years earlier and all detail was subsequently lost. In terms of the original problems of defining the Fort's structures and the recovery of artifacts so that an authentic reconstruction of Fort Owen might take place, the five-year project should be termed a success. In addition several students were exposed to the problems of field archaeology. Unfortunately the Fort has never been restored beyond the east barracks.

## CHAPTER II

### GENERAL DESCRIPTION OF THE BITTERROOT VALLEY

#### The Setting

The Bitterroot Valley, in which Fort Owen is located, was one of the most favorable locations for frontier settlement within the present limits of Montana. This fertile valley, which is bordered on the west by the Bitterroot Range and by mountain foothills on its eastern periphery, has an average width of approximately six miles. The Valley extends from the vicinity of Darby, Montana, to the confluence of the Bitterroot and Clark's Fork Rivers near Missoula, Montana, a distance of about sixty miles.

The Bitterroot River with its twenty tributary streams traverses the entire length of the Valley. The Fort is located about one mile east of the river on a bench of land near the present community of Stevensville, Montana. The Bitterroot, along with a small stream which was about one hundred yards north of the Fort, afforded the early residents of Fort Owen a source of water, food, and a means of occasional navigation.

The western slopes of the valley are heavily

forested with coniferous evergreens, while the lower western and eastern inclines are usually grassy and often without trees and shrubs. The river bottoms are covered with several varieties of deciduous broad leaved trees and before white settlement, the valley floor was partially covered with scattered groves of Ponderosa Pine and open rolling areas of sagebrush.

It seems natural that the Bitterroot Valley with its combination of mild weather, excellent grazing and farming lands, plentiful water supplies, and friendly relationships with the Flathead Indians would become one of the first permanent agricultural settlements in Montana.

#### Climate

Compared with other areas in Montana which have severe winters and hot arid summers, the climate of the Bitterroot Valley can best be described as mild. The temperature range probably approximates that characteristic of the Northern Rocky Mountain physiographic province which is in general a cool temperate, semi-arid climate.

Annual precipitation, which occurs largely during the winter months as snow, varies considerably within the area. The higher regions have an estimated annual precipitation of about twenty-five inches which decreases to about fifteen inches at the lower elevations near Stevensville (Chase:1961,11).

This mild climate was one of the most important drawing features of the valley. Immigrants on their way to Oregon found it feasible to winter their livestock there and then continue on in the Spring. This insured continued trading and social activities at the Fort during the winter months. Also, the long growing season produced ample supplies of foodstuffs.

However, John Owen frequently complained of cold spells in the valley when the temperature sank far below zero. Late spring snows and June rains, which are an annual occurrence in this intermountain area, plagued his efforts to build adobe bricks and to complete construction of Fort Owen.

### Geology

Some of the most remarkable things in Montana are its broad intermountain valleys of the mountainous part of the State. In these valleys and forming the broad plains are the remains of lake beds. These beds are young geologically (Tertiary) while the mountains that form the sides of the valleys are mostly very old (Paleozoic) (Willard, 1935:220).

Up until middle Cretaceous times Western Montana was nearer sea level than now and sedimentation and depositing were taking place. Beds of limestone, sandstone, and shales were depositing in formations many thousands of feet thick



under ancient seas. A compression of these formations resulted in rocks being folded and overthrust toward the northeast. Great segments of the crust of the earth were thrust upward and vast troughs were formed, having a generally northwest-southeast direction. Basins were formed in the down folds, and immense ridges were heaved up due to folding and overturning of the rock formations. Thus this region where sediments had long been accumulating near sea level was upheaved and became an elevated rugged land (Willard, 1935:221-222).

The basins slowly filled with water and sediments accumulated on the floors of these Tertiary lakes to depths of six hundred feet. At the close of the Miocene elevation once again ensued, and the mountainous part of Montana became a plateau 6,500 to 7,500 feet above sea level. This uplifting continued to the Quaternary or Ice Age, and may still be in progress today. The uplifting of the land caused streams to become more active and thus deepened their channels, dissecting the plateau, draining the basins, wearing away the soft Tertiary deposits, and developing high and low terraces on both sides (Hutchison, 1959:7). The present topography of the Bitterroot Valley was caused by this rejuvenation and recurrent faulting along the margins of the valley.

During the last Glacial Period, a dam of ice which

which was part of the great Cordilleran ice sheet formed an ice lock in Idaho. A lake resulted behind this dam which covered many mountain valleys including the Bitterroot, and left deposits of fine sand, silt, and clay along with exposed cuts of terraces on the sides of the valley. These small beach terraces on either side of the valley reach an elevation of 4,220 feet, indicating that Glacial Lake Missoula must have filled the Bitterroot Valley to at least this height (Hutchison, 1959:8).

#### Flora and Fauna

The area which comprises the Bitterroot Valley has many varied types of vegetation cover. The western slopes are heavily forested with coniferous trees such as Ponderosa Pine, Lodgepole Pine, Spruce, White Pine, Larch, and Fir, while forestation is generally absent on the mountain summits and on the slopes of the steep canyon walls.

Quaking Aspen and other deciduous trees grow in scattered stands in the mountain foothills and valleys. The lower western and southern slopes which are grassy give way to the valley floor which is given to many cottonwoods, willows, birch, and alders which grow along the Bitterroot River and its many tributaries. Choke cherries, service berries, hawthorn berries, gooseberries, raspberries, currants, and other edible wild fruits and vegetables

along with bitterroot and camas are also found growing near streams and well-watered areas of the valley and foothills, while huckleberries can be found almost anywhere on the forested mountain slopes (Stubbs, 1966:10).

Many game animals, both large and small abound in this area. In the higher valleys Bighorn sheep and mountain goats are found along with cougars, bears, and mule deer, while along the lower reaches of the valley moose and white tail deer are most common. Elk, which are common in the Bitterroot now, were previously quite scarce in this area since they were primarily a plains animal and didn't enter the mountain valleys of Western Montana until the pressures of hunting and farming drove them from their natural habitat. There were probably no bison in the Bitterroot Valley during historical times, although the Flathead and other mountain Indians made annual treks into the plains to hunt these animals for their meat and hides.

Supplementing these large game animals as food supply for the Indians and early priests were numerous small animals, birds, and fish. Cottontail rabbits, snowshoe hares, and foxes were very common along the dense underbrush of the river bottoms and various species of ducks and geese made seasonal appearances. In addition, three species of grouse were to be found all during the year in the bottoms and on the slopes.

The Bitterroot River and its tributaries held a variety of edible fish such as Cutthroat trout, Dolly Varden Char, and Rocky Mountain whitefish. Rough fish such as northern squawfish, suckers, and slimy sculpins were also found together with mussels, freshwater clams, and crayfish.

During the first years the priests lived very much like their Flathead converts. Father Palladino, an early Jesuit Missionary, wrote in Indian and White in the Northwest that:

The Fathers' manner of living was, in the main, like that of the Indians, their fare consisting of roots, berries, dried buffalo meat with its tallow, and game when they could get it. Fish, they had in abundance from the river close by, where clear waters were then alive with mountain trout. (Palladino, 1894:46,47)

With the establishment of Fort Owen the white residents became less dependent on wild game and plants for subsistence and instead turned to the products which were raised at the Fort.

### CHAPTER III

#### AN HISTORICAL SKETCH OF FORT OWEN

On June 30, 1840, Father Jean de Smet and his party met the advance guard of a band of Flathead Indians on the banks of the Green River, in the present state of Wyoming. The Flathead led the priests and their guides across the divide to Jackson Hole and then through Teton Pass into their main camp at Pierre's Hole. Here on July 12th, de Smet also found the Pend d'Orielle Tribe and a sizable portion of the Nez Perce Tribe (Forbis, 1951:36).

This historic meeting with the Flatheads and their allies was not by chance because for nine years the Flathead had attempted to bring a priest among their people. They probably first discovered the mysteries of Christianity from Iroquois trappers and canoemen who had accompanied the early Northwest Fur Company traders into Montana. These Iroquois, about twenty-four in number, were led by Ignace La Mousse, or Big Ignace, and they frequently talked about the Catholic Priests and Catholicism. They had been baptized at the Jesuit Mission of Caughnawaga in Canada, and after their return home some of them were eventually adopted into the Flathead Tribe. As a result of their discussions with the

Montana Indians, the approach of the "Blackrobes" was foreshadowed by incidents of a prophetic character among the Flathead (Shaeffer, 1937:231).

One tradition, still current among the Flatheads, tells of a man, who, while mourning the death of his wife, was informed in a vision of the coming of the priests. Another story relates the revelation of a young Flathead girl who was dying. She told her family to heed the orders of the Blackrobes and to do all that they told them. According to the story, she also told them, "They are coming and will build their house of prayer where I am dying." It is believed by some, even today, that the original Mission of St. Mary's was subsequently erected at the site of the young girl's death.

Since the Iroquois did not understand Christianity well enough to give the Flatheads a comprehensive picture of all its dogma, the only recourse for the Flatheads in seeking additional knowledge of Catholicism was to seek out the priests themselves. In 1831, they sent their first delegation to St. Louis in hopes of bringing one or more of the Fathers back with them. Two of the party died in St. Louis and were given Christian rites, and the lone survivor returned home with news that no priest could come. On December 2, 1835, a second delegation reached St. Louis under the leadership of Big Ignace, who was accompanied by

his two sons. The party was received warmly by the Jesuits. However, they were told, as before, that no priests were available for missionary duties in the Northwestern section of the United States. Ignace and four other Indians set out again in 1837 to renew their request, but at Ash Hollow, Nebraska, they were murdered by a band of Sioux. Undaunted by previous misfortune, the Flathead sent a fourth party on the same mission two years later, and this time they were successful in extracting a promise from Bishop Rosati to have a priest come and live among them. Volunteers, both at St. Louis and Rome, were numerous, but all aspirants were set aside in favor of Father de Smet, whose desire to undertake this mission was well known (Davis, 1944:32).

Father de Smet was highly encouraged by the receptiveness to Christianity among the Indians, and so with the idea of obtaining more help he returned to St. Louis. In 1841, Fathers Mengarini and Point accompanied de Smet to the Bitterroot Valley, where they, with the assistance of two lay brothers, built St. Mary's Mission (Forbis, 1951:37).

The first temporary building was the church, which was built of cottonwood logs bound together with wooden pegs and clinched with clay, measuring 25 feet by 33 feet. The roof was made of lodge poles interlaced with branches and plastered with clay. One year later the building was enlarged to 30 feet by 60 feet and a high fence of lodge poles

was built around the church as protection against hostile Indians and wild animals (Florian, 1965:4). The construction of this log chapel, along with other structures, took only a few weeks, and on the first Sunday of October, 1841, the Mission was formally inaugurated (Palladino, 1894:34).

According to the missionaries all seemed to go well for the first five years, and the priests made excellent progress in converting the Indians to Christianity. In 1845, Father Anthony Ravalli joined the mission. His arrival proved to be of great value to the congregation when, with the aid of two Brothers, Claessens and Specht, he built a small mill for the grinding of flour. The mill was powered by water and the wheat was ground by two millstones, each fifteen inches in diameter, brought from Europe by Ravalli. This was probably the first grist mill operating in Montana (Palladino, 1894:45).

The first saw mill in the Bitterroot was also constructed at St. Mary's by this Jesuit Father. Four wagon tires were welded together to make the crank, while a fifth tire was first flattened out and hardened into a steel blade and filed into a saw (Palladino, 1894:46).

In 1846, relations between the Jesuits and the Flathead began to disintegrate. When the Indians left on their summer buffalo hunt everything seemed normal. However, when they returned in the Fall there was a marked change in



their attitude. Father Ravalli described the condition in these words:

We were not a little surprised when on their approaching this reduction last fall, their camp, which was broken up in various bands, took different courses. Part of the Indians were unwilling or afraid to come up to their village while the others on entering the village took up again their old-time barbarous yells, which had not been heard since we came among them. They gave a chilly salute to the missionaries and then drew off with their lodges far from the latter nor did they show themselves to the priest except rarely and then only to smoke in his cabin. They sold us grudgingly a little dry meat and that of the worst quality. We heard a little later that on Father de Smet's departure from their hunting camp to descend the Missouri they had given themselves up to their old war dances, to savage obscenity /sic/ and to shameless excesses of the fleash /sic/. We know we are not to blame for such a change and we bewailed it all the more when we saw that they went on constantly getting worse. (Garraghan, 1938:376-377)

This belligerent attitude towards the priests did not last long, and by 1848 the Flathead again seemed to be on good terms with the missionaries. The situation, however, reversed once again during the winter of 1849 and the relations between the Indians and Jesuits were badly strained. The seeds of mistrust sown in 1846 had finally grown into open rebellion against the priests and their ideas; thus by 1850 the situation seemed hopeless. The Flathead now remained around the mission so little that the Fathers felt their continued efforts were useless (Forbis, 1951:40).

The missionaries explained that the minds of the Indians had been "poisoned" against the Jesuits by

Angus McDonald, a Hudson Bay Company trader, who told the Flathead that the priests planned to kill all of them and steal their land. He also stated, according to the priests, that the fathers had been unable to make a living in the East so they came west to live off the Indians.

Other traders were also said to be guilty of spreading these rumors. Many of these mountain men came to St. Mary's during the winter months to seek some of the comforts the Mission might afford. These tough outdoorsmen, after a summer of hard lonely work, found the Indian women easy prey for their advances, and when under the influence of alcohol they quarreled and fought among themselves. When the priests tried to discourage these activities the traders became angry and spread stories similar to those which McDonald spread among the Indians.

While some of the blame may be attributed to traders' talk, probably one of the main reasons for the ultimate break was due to the inability of the Jesuits to fully understand the Flathead culture and why they had accepted Christianity so readily. If they had really understood the Flathead's motives, they might have realized that the Flathead were mainly interested in the protective powers of Catholicism which would give them an edge over their enemies, the Blackfoot. When Father de Smet proposed to convert the Blackfoot and thus, in the eyes of the Flathead,

give them this same power, the converts at St. Mary's saw this as an act of treason. In addition, Father Mengarini, who took charge of the Mission after de Smet's departure, was not popular with the Indians because he had become involved in tribal politics (Toole, 1959:62).

Finally, Father Joset, under orders from the Bishop, told the priests to leave. Thus, on November 5, 1850, the buildings were sold to John Owen for the sum of \$250.00. The bill of sale read as follows:

This is to certify that I P. J. Joset Catholic Missionary of the first part have bargained & Sold all the property at St. Mary's Mission Flathead Country known as the Church improvements unto Jno Owens receding back to the church that portion of the improvements known as the fields & Mill property providing Said Church Establish another Mission here on or before the 1st day of January 1852.

"Signed" P. J. Joset  
Jno Owen

Witness F. B. Owen St. Mary's Mission Flathead Country Nov 5" 1850. (Dunbar and Phillips, 1927:22,23)

John Owen, who was born in Pennsylvania in 1818, arrived in the Northwest in 1849. Acting as a sutler for a regiment of United States troops known as the Mounted Rifles, Owen and the soldiers came as far as the Snake River and then spent the winter of 1849-50 at Cantonment Loring near the site of Fort Hall, Idaho. When the troops resumed their march in the Spring, John Owen resigned his sutlership and stayed behind to spend the summer trading with Indians

and emigrants who were bound for the goldfields of California and the farmlands of Oregon.

It was during this time he met Nancy, a member of the Snake Tribe. He took her for his common-law wife and moved in with her family for a short time. When his financial situation became desperate he decided to leave their camp, and in the Fall of 1850 John Owen with his wife and brother, Frank, arrived in the Bitterroot Valley. Finding that the Jesuits intended to abandon their mission, he leased the improvements on them. The bill of lease for this transfer of land was the first legal transfer of land ever recorded within the present boundaries of Montana (Howard, 1963:112).

The mission apparently did not satisfy Owen's needs. He desired an outpost that would afford more adequate protection from the elements and possible attacks by hostile Blackfoot. In 1852, he oversaw the building of a new fort on higher ground about a half mile east of St. Mary's Mission. A small palisaded post was constructed which contained two or possibly three log buildings. The earliest known pictorial delineation of Fort Owen was sketched by Stanley, one of the artists who accompanied the Stevens Expedition of 1853. It shows the Fort as a high wall of palisaded timbers enclosing three interior structures, and surmounted by a flag. Outside the wall were several other

small buildings all apparently of wood (Dunbar and Phillips, 1927:8). These cabins, as well as the original mission site, were probably used by the Flathead long after the new fort was built.

During the first few years at the Fort there were a few encounters with hostile Indians who sought to steal horses. One night a party of Blackfoot came to the Fort and dug up some logs forming the stockade and drove off all the horses. In the Fall of 1852, a young man named John F. Dobson was killed and scalped while he and a companion were hauling hay within sight of the Fort. Owen's journal recounted the tragic event as follows:

Wednesday Sept. 15, "Horses Stolen & Dobson  
Killed"

Thursday Sept. 16, "Buried Poor Dobson"

(Dunbar and Phillips, 1927:48)

Because of these incidents with the Blackfoot, John Owen decided it was necessary to make his trading post better fortified. The first mention of adobes, the material of which the Fort was ultimately constructed, is in Owen's Journals of April 1852. The adobe was acquired south of the post near the present road into Stevensville. The bricks were molded in wooded boxes and then sun dried and hauled to the Fort.

Fear of the Blackfoot and a bad financial year caused Owen to abandon his fort briefly in the Summer of 1853. By

chance he met Lieutenant Rufus Saxton Jr. and his party near Spokane, Washington, and was informed that a government survey crew was on its way to the Bitterroot Valley to establish a provisional depot. Under orders of Secretary of War Jefferson Davis, Surveys were being carried on to locate a route for a railroad from the Mississippi River to the Pacific Ocean (Weisel, 1955:26). Major Isaac I. Stevens, Governor of Washington Territory, was heading the Survey between the forty-seventh and forty-ninth parallels, and Lieutenant Saxton was under his command. The presence of troops and army engineers in the valley gave Owen new hope for safety and expanded trade and so he returned and re-established Fort Owen in the Fall of 1853.

During the next few years the business at the Fort improved, and John Owen was in frequent communication with the military men, their relations being of both a business and social character (Reynolds, 1937:86).

The goldfields of California and the farmlands of Oregon brought many travelers to the Bitterroot Valley in need of supplies and a place to rest their livestock. The principal food was meat, both wild and domesticated, which along with small amounts of sugar, coffee, flour, and baking soda was traded to the immigrants. Ammunition and blankets were other important commodities of trade; and tobacco, both chewing and smoking, was an item on nearly every man's

account (Weisel, 1955:239).

The Indian raids which had plagued the settlers and traders for years were finally terminated in 1855 with the signing of the Blackfoot Indian Treaty. It was a masterful stroke of diplomacy on the part of Commissioners Isaac I. Stevens and Alferd Cummings which brought about a great change in inter-tribal relations and placed the conduct of the tribes under the authority of the United States Government (Partoll, 1939:406). As a result of this treaty John Owen was appointed special agent for the Flathead in 1856. He held this position for six years, during which time his responsibilities were increased to include the Upper Pend d'Oreille, Mountain Snake, and Bannack Tribes (Howard, 1963:120). It was probably during this time that John Owen acquired the honorary title of major, a custom which was bestowed upon most Indian agents. Owen was never a commissioned officer in the service of the United States Military, and Fort Owen was never a military post, thus the title of major was used for civil purposes only.

In 1857, work on the Fort progressed in earnest. That year witnessed the beginning of the transformation of Fort Owen from a timber structure guarded by log palisades to its final form of adobe buildings and adobe brick walls (Dunbar and Phillips, 1927:152). In early May work began on the foundation for the walls and the southern bastions

while progress was also reported on the new saw mill. On Tuesday, May 26, 1857, Owen wrote in his journal:

Finished raising Saw Mill frame and a good Substantial frame it is too 18/36 feet. Mr. Harris turned the water into the Mill Creek field for the purpose of irrigating the Wheat & plants. (Dunbar and Phillips, 1927:164).

Every day that the weather would permit, the workers at the Fort were busy making adobe bricks, and by the first of June Owen was able to report that 5,000 bricks had been made and were under cover (Dunbar and Phillips, 1927:165). On the 17th of June the foundation for the southwest bastion was completed which measured 14 feet square with a wall two feet thick, giving a clear two-foot square room. The west barracks was also beginning to take shape, and on June 29th Owen reported:

We have made a fine Start for a good weeks work. Silverthorn building up the fire-places & partition wall in the Mess room & hall. Tallman with Mallet made a commencement on the Eastern Side torn down the Pickets & the roof off the building. Mr. Chase & Harris both found themselves routed from the East building. (Dunbar and Phillips, 1927:169)

Work continued on until the weather stopped production of the adobe bricks. The greatest hindrance to construction usually came from bad weather, since when it rained adobe could not be made, and with continuous hot weather the men's ability to work a full shift was greatly reduced.

During this era of building and expansion, trading



prospered at Fort Owen since there was a noticeable rise in the number of immigrants moving west in search of a new life. The sharp commercial and banking panic which swept the nation in 1857 was not a deterrent to the Fort; in fact, it brought an increase in customers and this western outpost became the most important trading center in a radius of several hundred miles (Weisel, 1959:29). This financial boost also brought added luxury to the frontier, and in 1858 a school teacher was employed at the post for the first time.

1859 and 1860 were banner business years for Fort Owen. In 1859, \$9,571 was brought in, and by 1860, nearly all of the building was completed. On the fourth of July, 1860, a flag was raised and the residents celebrated with a holiday dinner.

Fort Owen during these times was the center of many pioneer festivities, and Major Owen was seldom without at least one guest. Since 1853, when Governor Stevens and his party had arrived in the Bitterroot Valley, the post had been host to many prominent persons. John Owen was a friend of the early explorers who came into that region and also maintained a cordial relationship with the local priests who visited him frequently.

The three chief occasions for celebrating were Christmas, New Years Day, and the Fourth of July. From

Christmas 1860 to January 2, 1861, one continuous party was held at the Fort. Settlements were so far apart and travel so difficult that the settlers apparently decided to make the celebration worth the effort. A one-armed fiddler furnished the music and the white men with their Indian wives and half-blood children all joined in the merriment and partook of the Major's hospitality (Howard, 1963:119).

During the New Year's celebrations of 1863, guests came to Fort Owen from as far away as seventy miles, and an unexpected event took place when Elva Johnson and Henry Cone exchanged wedding vows. This was probably the first wedding between a white couple in the Bitterroot Valley (Howard, 1963:122).

On January 25, 1864, another group gathered at Fort Owen for less cheerful reasons. A band of vigilantes found and arrested Bill Graves, an outlaw wanted for robbery and murder. They kept him in custody at the Fort overnight and the next day hanged him from the limb of a tree. Thomas W. Harris, proprietor of Fort Owen during John Owen's absence in the East, described the incident as follows:

This morning the Vigilance party left with their prisoner, went about two miles below the fort and left him swinging to a Pine Limb, this they say is the twentieth man they have hung within the last two months and if Zackry [Robert Zackry] is caught he is twenty one. (Dunbar and Phillips, 1927:299)

The establishment of the Missoula Mills in 1864

brought to an end the doom of prosperous times at Fort Owen. In 1858, the construction of the Mullan Road, which was to link the navigable waters of the Columbia River with those of the Missouri, was started under the supervision of Captain John Mullan. The road was designed as a military road, with the letters M. R. standing for military road. However, popular tribute to Captain Mullan caused the name to be changed in his honor.

In 1865, Mullan prepared and published a "Miners & Travelers Guide" which indicated data on rest stops, mileage, and other general information. Fort Owen was not mentioned; rather, Mullan recommended that travelers stop at Higgins' & Wordon's store at Hellgate. The weary traveler was told, "Here supplies of all kinds can be obtained, dry goods, groceries, beef, vegetables, and fresh animals if needed." Both Higgins and Wordon had previously worked for John Owen at his Fort but were now his main competition in the trading business. Since the new Mullan Road was toll-operated in places, and Higgins and Wordon controlled one of these, they were able to extract payment from their old employer when Owen tried to bring supplies to Fort Owen over it. From 1867 on, immigrants commenced arriving in covered wagons in ever increasing numbers in the Missoula Valley, and after that date Fort Owen began to lose its unique position as the first stronghold of the pioneers

(Howard, 1963:122).

For John Owen 1868 was a year of personal tragedy. In August he wrote that his wife Nancy was quite ill, probably from some disease such as the dropsy. From that time on Owen recorded in his journals almost daily her constant sufferings. She soon lost her speech and became paralyzed on the right side. Towards the end Owen gave her morphine to quiet her and ease her pain. On September 24, 1868, she died, and on that day John Owen wrote in his journal:

My poor Wife passed a Miserable Night--  
poor Woman, Put the lining in our Shot Wheel,  
Bro. Frank down & took a turn at the Sewing  
Machine. recd. East Mail. 12 o'clk M. My  
poor old Wife unconscious She is not suffer-  
ing but breathing hard & perspiring on her  
forehead. She continued on Her unconscious  
state until 3 P.M. when she quietly and  
peaceably relinquished all that was Mortal.  
Her Snake friends were with her & had been  
with her all the Mning. Poor Woman She is no  
more. (Dunbar and Phillips, 1927:126).

She was not mentioned again in his journals.

On July 9, 1869, Owen mortgaged the Fort, mill, and all the 640 acres of land to W. J. McCormick for \$4,080 in order to secure payment of a promissory note for \$4,080 dated July 7, 1869, and due on January 1, 1870 (Dunbar and Phillips, 1927:325). Owen then took out a second mortgage on the property to Thomas W. Ackley to secure a note of \$20,000. When Owen failed to pay the note to McCormick a suit was brought against him for \$5,229.31. John Owen

chose not to answer this suit and thus judgment was entered against him for the amount claimed, and the court ordered that all or part of the property might be sold at a public auction (Dunbar and Phillips, 1927:326).

John Owen, somehow, was able to remain on the property, but on March 20, 1871, he granted all the Fort, mill property, and water rights to J. A. Nichols for one-half of all net proceeds of all the crops of every kind, and one-half of all the net proceeds derived from the operation of the mill. Owen, in the meantime, was to have the free use of the living quarters of the Fort (Dunbar and Phillips, 1927:326).

In 1872, the courts once again ordered the property at the Fort to be sold, and thus on December 30, 1872, Fort Owen was sold to W. J. McCormick, the highest bidder, for \$4,100.

John Owen's mental faculties were disintegrating, compounded by over-drinking and financial troubles. He suffered a mental breakdown and was sent to St. John's Hospital in Helena. In 1877, he was taken to Philadelphia by W. E. Bass, President of the State Legislative Assembly, and placed in the care of his relatives.

That same year the walls of the Fort were repaired in haste by the local farmers and ranchers who feared the Nez Perce Indians. Women and children guarded by some of

the men were huddled in the safety of the Fort. The rest of the men marched to Lolo, where it was expected that a fight would occur with the Indians. Chief Joseph, however, chose not to fight and instead led his band of men, women, and children around a hastily built barricade. This log barricade, as a result of this incident, was later named Fort Fizzle by the local residents.

The Nez Perce then turned south to the Bitterroot Valley hoping to purchase flour from the Fort Owen Mills. When they found the settlers to be hostile, the band of Indians passed into the Big Hole River country without any incidents with the residents of the Fort. Thus Fort Owen had its last adventure which history would note, and settled back to a future of unprecedented calm.

Mr. McCormick, owner of the Fort Owen properties and part-time resident there with his wife until after 1877, was killed in February of 1889 when he attempted to repair the west barracks. A violent wind storm blew the roof off this structure and struck McCormick dead. By a twist of fate John Owen died a short five months later in Philadelphia, thousands of miles from his Fort (Missoulian, September 2, 1928). The property then passed into the McCormick estate and subsequently became the property of Kate Higgins McCormick, wife of W. J. McCormick and sister of C. P. Higgins, one of the founders of Missoula.



39

—Fort Owen in 1887—

Fig. 2.--Photograph of Fort Owen in 1887

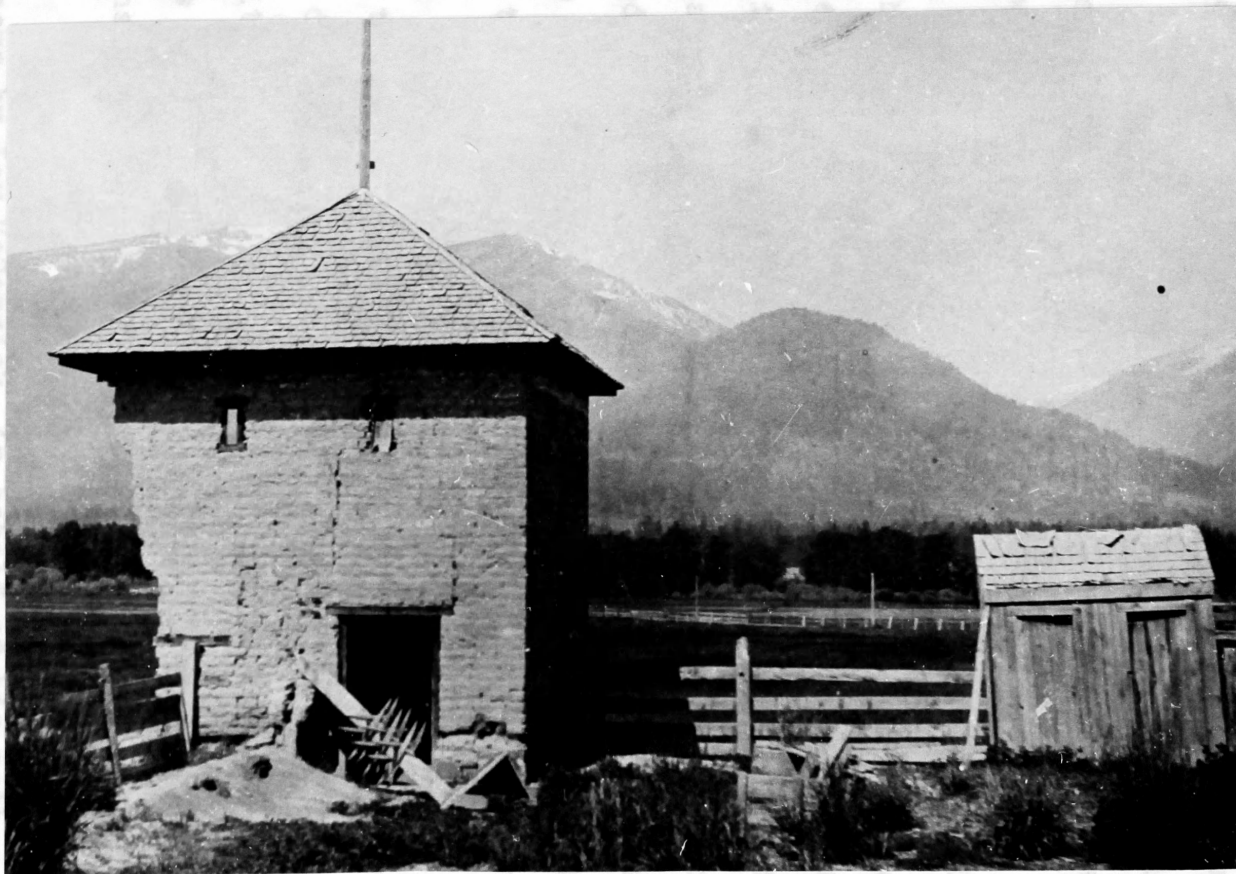


Fig. 3.--Photograph Showing the Southwest Bastion  
and Outhouse Taken in 1889



Sometime later the property was obtained by six May brothers who used it as a cattle ranch. The Fort was then leased, at least in part, to a Mr. Moore and his family who lived in the east barracks. According to Dr. Carling Malouf, it was probably because of this occupancy that this structure was maintained and remains standing today.

In 1912, what remained of the roof and walls of the west barracks were finally pulled down. The storm, which had been responsible for the death of Mr. McCormick, had demolished most of the western half of the Fort and left the barracks in a weakened condition. Many young children played in the area and it was feared the building might collapse and injure them. A team of horses was used to pull down the remains and the refuse was piled toward the plaza.

For the next thirty years several attempts were made to restore this historic site. When Mrs. Kate McCormick died, it was understood that the remains of the Fort and its site would be given, for the sum of \$1.00, to the State or to any organization that would undertake its reconstruction (Missoulian, September 2, 1928).

The property was given to the Society of Montana Pioneers by Jay McCormick, in behalf of his mother, at the closing session of the annual meeting of the Pioneers in Great Falls on September 10, 1920 (Daily Missoulian, September 12, 1920). In 1927, the Montana Society of

Pioneers and the Daughters of Montana made plans to restore the Fort. They met in a joint meeting August 3rd in Missoula and adopted a committee for the salvaging of pioneer land marks in Montana, including Fort Owen. Unfortunately this group's good intentions were never materialized, probably because of a lack of funds (Roundup Tribune, August 25, 1927).

The Stevensville Service Club, with the support of a committee of the Missoula Chamber of Commerce, launched a project to restore Fort Owen in 1930. George T. Baggs of Stevensville handled the legal affairs, while J. G. Hagens of Hamilton volunteered his services as planning engineer (Daniels County Leader, March 27, 1930). This group, however, was not successful in getting the project started, probably for financial reasons similar to those which had defeated earlier attempts to restore the Fort.

Fort Owen was next purchased by a small group of historic-minded citizens in 1937 for the purpose of establishing a State-recognized Historic Site. This group, which included Dr. Paul C. Phillips, noted historian and expert on the fur trade, was successful in raising funds and was able to restore the east barracks.

In 1956, the property was given to the State of Montana and it became known as Fort Owen State Monument. A year later the Department of Anthropology at Montana State

University and the Bitterroot Historical Society made an agreement with the Parks Division of the Montana Highway Commission to excavate and reconstruct the Fort. The excavations took place over a period of five years, during which time most of the structures were located and several hundred artifacts were recovered. Again, however, no restoration took place for lack of available funds.

Today the administration of the Fort has passed into the hands of the Montana Fish & Game Department. This agency presently has plans which include a general clean-up and a small museum in the east barracks. This work will commence in the Spring of 1968.

Dr. Paul Phillips summed up John Owen and his Fort's influence on the Bitterroot Valley and the Northwest in these words:

Viewed in a narrow and personal light Owen's career was a failure, for his efforts did not bring him a competence in his old age, nor rest and comfort on the scene of his long struggle. Fort Owen, that was once the center of its own mountain girdled universe, and the goal toward which for decades the eyes of distant travellers were fixed, became an overlooked and puzzled dot on antiquarian maps, its creator vanished and its walls fell. Yet in a broader and finer sense the purposes of the Fort and life work of the Fort builder ended in victory. The impulse of conquest which led to its building, and that guided the plans it typified in the interior Northwest did not disappear or collapse. They were adopted by still other men in ever increasing numbers until all the essential qualities of modern life which were first centered there as a focal point through the machinery, books, ambitions, and declared purposes of John Owen had effected their amazing transformation. (Dunbar and Phillips, 1927:18-19)



Fig. 4.--The East Barracks; The Only Remaining Building  
at Fort Owen

## CHAPTER IV

### ARTIFACT CLASSIFICATION

In most archaeological taxonomic systems artifact classes are based on a single common attribute shared by a number of artifacts. These artifacts are then subdivided into types on the basis of at least one additional shared attribute arrived at by a different principle of classification. Using these principles, the author grouped the materials excavated at Fort Owen together into categories following this scheme.

From the outset it was apparent that classes and types of artifacts based on material composition, manufacturing techniques, size, and form were not wholly applicable to the Fort Owen material due to the fact that most of the artifacts were made of metal, glass, porcelain, and were used for a wide variety of purposes. Rather, the materials were grouped according to logical relationships which exhibit the normal or most usual functional use of the objects, and with respect to the classes of human activity they best illustrate.

The problem then arose regarding the proper definition of an artifact class as used in this system of

classification. By most definitions, archaeological classes are mutually exclusive and any one artifact placed into a certain class may not be placed into another. Here, function was used as the main criterion for defining a class, and thus classes have been developed which are not mutually exclusive. Many artifacts have more than one function; for example, a rifle may be classified within the category Firearms and Accessories and also logically might be a trade item, a household article, or a subsistence tool. To compensate for this overlapping of function, all artifacts were arbitrarily placed into ten classes which in the author's opinion best illustrate their use as shown in the historic literature on Fort Owen. They were as follows:

1. Subsistence
2. Structural Fittings
3. Household Articles
4. Transportation
5. Hand Tools
6. Personal Possessions
7. Clothing
8. Firearms and Accessories
9. Articles of Native Manufacture
10. Miscellaneous

Following Smith's format (1960) the author first provides specimen catalog numbers, identification and

description of the artifact, material composition, size and dimensions (where possible), decorations and marks, and general historical notes. Measurements are given in English system, as these are used by manufacturers of most of the objects found here. In the case of artifacts of trade significance such as trade beads, the measurements are given in the metric system (Smith, 1960:130).

During the construction of this classification system an attempt was made to follow the catalog of artifact specimens that was devised during the excavations. There are, however, some discrepancies between the material presented here and the original catalogs. First of all, over the five years that the field work took place a few specimen numbers were used more than once. Thus it was found that in these cases there were two unrelated objects bearing the same specimen number. To compensate for this, the first artifact is listed with the original number, then the second artifact is listed with the same number, but with an "A" added to denote the difference. The writer also found artifacts which had never been assigned a catalog number, and there were catalog numbers for artifacts which were missing in the collection at the time of this study. For the former catalog numbers were assigned to them, and this information was then added to the original catalogs. For the latter the artifacts were described from the

information in the catalog and the student field notes. These artifacts in this classification were then marked "Not Available for Identification" so there would be no mistake as to which artifacts the writer identified, and which he did not.

### Subsistence

This class of artifacts is concerned with the various means of economic subsistence which was found at Fort Owen. It is subdivided into five categories: Farming, Forest Products (Logging), Animal Industry, Hunting and Fishing, and Trading.

#### Farming

##### Gears

Specimen No. 316--Fragment of cast iron circular gear. This specimen was probably off farm machinery.

Specimen No. 172--Two metal spring loaded gear dogs used to hold gear teeth in place and keep gear from slipping.

Specimen No. 362--Fragment iron or steel ring gear, possibly from hay rake or similar farming machinery.

##### Mower Guard Tooth

Specimen No. 199, 441--Two cast iron guard teeth 7 1/4 inches long. These were used on hay mowers.



### Eye Bolts

Specimen No. 320--One iron ring 4 inches in diameter with two eye bolts 6 1/2 inches long attached.

Specimen No. 213--One iron eye bolt 5 inches in diameter with a 7 inch pin attached.

Specimen No. 322--Eye bolt. This specimen not available for identification.

### Spring

Specimen No. 514--One iron coil spring approximately 8 inches long with a hook on one end and an eye bolt on the other end. This was probably a part off some type of farm machinery.

### Glass Egg

Specimen No. 632--One white milk glass egg 2 1/2 inches long and 2 7/8 inches wide. These types of eggs were used to induce hens to lay eggs.

### Hay Tripping Device

Specimen No. 17--One hay tripping device used in a hay loft to trip bale of hay into opening in loft.

### Universal Joints

Specimen No. 338--Three iron or steel universal joints with 1 1/2 inch square hole for drive shaft. Some early tractors had square drive shafts and these specimens are

probably off a vehicle of this type.

### Plow Parts

Specimen No. 306--Fragment of cast iron plowshare. This specimen appears to have been used very little as it shows only slight wear.

Specimen No. 257--Fragment of steel plowshare marked "Deere 1217." This is part of a John Deere plow, a brand which is still popular today.

Specimen No. 699--Fragment of plowshare. This specimen not available for identification.

Specimen No. 258--Part of a plowshare (steel).

Specimen No. 343--A piece of plow disk. Not available for identification.

### Sickle Parts

Specimen No. 434, 435, 643--Three specimens described in catalog as sickle blades. These specimens not available for identification.

## Forest Products

### Cable

Specimen No. 379--Fragment of steel cable 1/2 inch in diameter and 12 inches long.

### Pully Wheel

Specimen No. 637--One cast iron idling pully wheel

5 inches in diameter with a 1 1/8 inch hole in the center. This type of pulley is used to tighten belts and it is possible that this specimen was from the old Fort Owen saw mill.

### Spikes

Specimen No. 460--One iron square hand forged spike 9 inches long.

Specimen No. 181--One iron spike 7 inches long and 1/4 inch in diameter.

Specimen No. 25--One steel spike 18 inches long and 1 inch in diameter.

### Axe

Specimen No. 555--One single bit iron axe head 6 inches long and 3 3/4 inches wide.

Specimen No. 711--One single bit axe head 7 inches long and 4 inches wide.

Specimen No. 311--Fragment of light iron single bit hatchet head. This specimen is 3 3/4 inches long and 2 inches wide with a hole 3/4 inch in diameter for the attachment of a wooden handle.

## Animal Industry

### Butchered Cow Bones

Specimen No. 653, 652, 656, 633, 515, 562, 608, 611, 630A, 656A, 669, 695, 694, 649, 686, 576, 600, 387, 393,



Fig. 5.--Iron Axe Head

427, 452, 454, 482--Over 100 various kinds of cut bone were found. Most are rib bones which indicates rib roasts must have been popular table fare.

#### Scapula

Specimen No. 603--One scapula from a cow.

#### Mandibles

Specimen No. 511, 668A--Two mandibles identified as belonging to cattle.

#### Miscellaneous Bones

Specimen No. 373, 374--These specimens are not available for identification and were not described in the catalog.

### Hunting and Fishing

#### Mussel Shell

Specimen No. 586--Two fragments of a fresh water mussel shell. These specimens not available for identification.

#### Bird Bones

Specimen No. 612, 543, 483, 657--These are assorted bird bones most of which appear to belong to small birds such as jays, blackbirds, and sparrows. There are a few larger leg bones which may be either chicken, grouse, or duck.

Fish Bones

Specimen No. 410, 461--No fish bones were available for identification; however, one of the specimens (410) is described in the catalog as being a "fish operculum."

Teeth

Specimen No. 668, 570--Two teeth from small mammals; one has been identified as the canine tooth from a badger (570).

Deer Bones

Specimen No. 617, 622--Two bones identified in catalog as mandibles from deer. These were not available for identification.

## Trading

Beads

Specimen No. 655A--One light blue pear shaped glass bead 13mm in diameter and 12mm long with a 3mm hole in the center.

Specimen No. 386--Twenty-seven blue glass beads approximately 1mm in diameter, which are described in the catalog as "seed beads." These small beads were the most common type used as gifts and for trade and were used mostly for covering surfaces with designs, rather than for stringing as necklaces. These specimens are not available for identification.



Fig. 6.--Glass Trade Beads

Specimen No. 455--Two dark blue glass beads. Specimen No. 1 is 6.5mm in diameter and 6mm long with a 3mm hole in the center. Specimen No. 2 is 5.5mm in diameter and 5mm long with a 2mm hole in the center. Both of these beads are cut from a hexagonal rod and specimen No. 2 has multiple facets ground on both ends. These beads are probably the type known as "Hudson's Bay Beads" to the traders of the Northwest and six of them were worth one beaver skin in trade.

Specimen No. 750--Fragment of flattened spherical glass bead 13mm in diameter and 11mm long with a 3mm hole in the center. This specimen is opal in color with a white and blue marbled design which is in the glass and not painted on.

Specimen No. 584--One glass bead. This specimen not available for identification.

### Structural Fittings

This class includes all those artifacts which were used in the construction and fitting of any of the structures and palisades in Fort Owen.

#### Door Latch

Specimen No. 240--One brass door latch 6 1/2 inches long, 1 1/8 inches wide, and 1/4 inch thick.

Specimen No. 566--Fragment of iron door latch



3 3/4 inches by 2 1/4 inches.

Specimen No. 366--Two iron door latch handles.

Specimen No. 470--Metal door latch. This specimen not available for identification.

### Hinge

Specimen No. 548--Fragment of iron door hinge seven inches by 1 3/8 inches.

Specimen No. 526--Fragment of iron door hinge approximately 4 inches long with two screw holes 1/4 inch in diameter.

Specimen No. 179--Fragment of iron door hinge 5 inches long.

Specimen No. 395--Metal hinge. This specimen not available for identification.

Specimen No. 713--One gate hinge. This specimen not available for identification.

### Door Knob

Specimen No. 637--One iron door knob shaft 4 1/4 inches long.

Specimen No. 639--One iron door knob shaft 5 inches long.

Specimen No. 195--One round metal door knob. This specimen is similar to those still found in the East Barracks.

58



Fig. 7.--Iron Brace for Planks

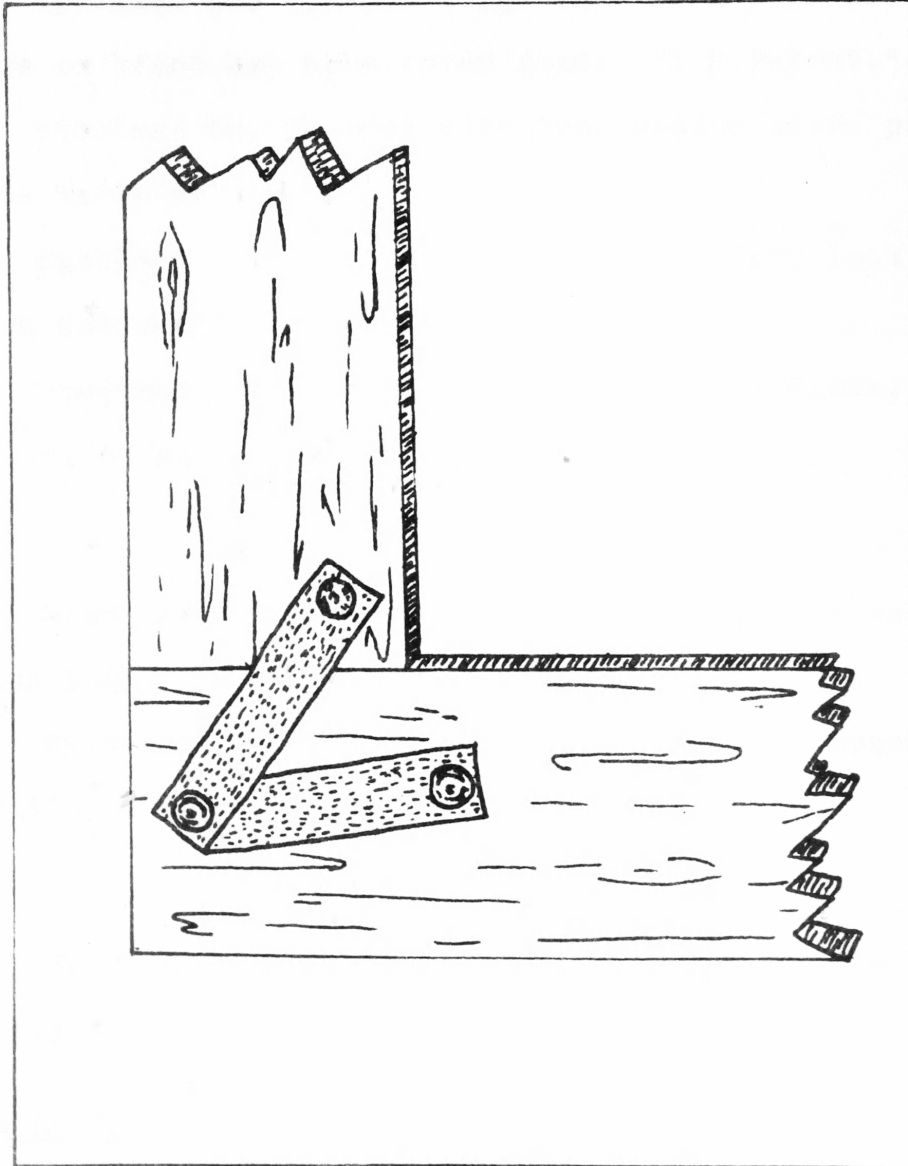


Fig. 8.--Sketch Showing How Planks Braced Together

Locks

Specimen No. 45--One large cast iron door padlock. Markings on brass key hole cover read: "V R Patent."

Specimen No. 44--One cast iron medium sized padlock which is badly rusted.

Specimen No. 565--Fragment of brass door lock. This specimen not available for identification.

Specimen No. 95--One large cast iron padlock, similar to No. 45 except there are no markings.

Key

Specimen No. 94--One large iron key approximately 3 inches long.

Specimen No. 491--Large metal key. This specimen not available for identification.

Hasp

Specimen No. 469--Metal hasp. Not available for identification.

Window Latch

Specimen No. 605--One iron window latch.

Window Glass

Specimen No. 688, 689, 414, 415, 383, 384, 448, 614, 400, 456, 457, 650, 601, 648--Fragments of clear window glass which is either 1/16 inch or 1/8 inch thick. This

glass came from the bastions and west barracks.

### Bricks

Specimen No. 566--Fragment of red brick approximately 1 1/2 inches by 1 1/4 inches in size.

### Baked Clay

Specimen No. 259--Fragments of clay. Since these specimens were found in that part of the west barracks believed to be the kitchen, it is possible they were part of the stove lining.

### Adobe

Specimen No. 385--Fragments of adobe brick. This was the material of which a majority of the Fort was built.

### Plaster

Specimen No. 717--One piece of irregular shaped white plaster approximately 3 1/2 inches by 2 1/4 inches in size. This material was probably used to line one of the walls or ceilings.

### Clothes Hook

Specimen No. 168--One cast iron clothes or hat hook which was secured to the wall.

### Linoleum

Specimen No. 608--Two pieces of pink linoleum with

a cross weave construction. This type of flooring is late and was probably not available until the late 19th century or early 20th century.

### Gate Hinge

Specimen No. 740--One hand forged iron gate pin 17 inches long and 1 inch in diameter. This is an interesting specimen because it indicates how the main gate was hung and how large the beams were.

Specimen No. 687--Two fragments of pink linoleum similar to No. 608 except that these specimens are 1/16 inch thick.

Specimen No. 407, 391--Fragments of linoleum. These specimens are not available for identification.

### Staple

Specimen No. 665--One iron staple 2 3/4 inches by 2 1/4 inches. These large staples were used in a number of places for securing planks, frames, and other objects.

Specimen No. 523--One medium sized iron staple approximately 2 inches long.

Specimen No. 578--One iron staple. This specimen not available for identification.

### Wood Screws

Specimen No. 460--One iron wood screw 2 1/16 inches long with a round head 1/2 inch in diameter.

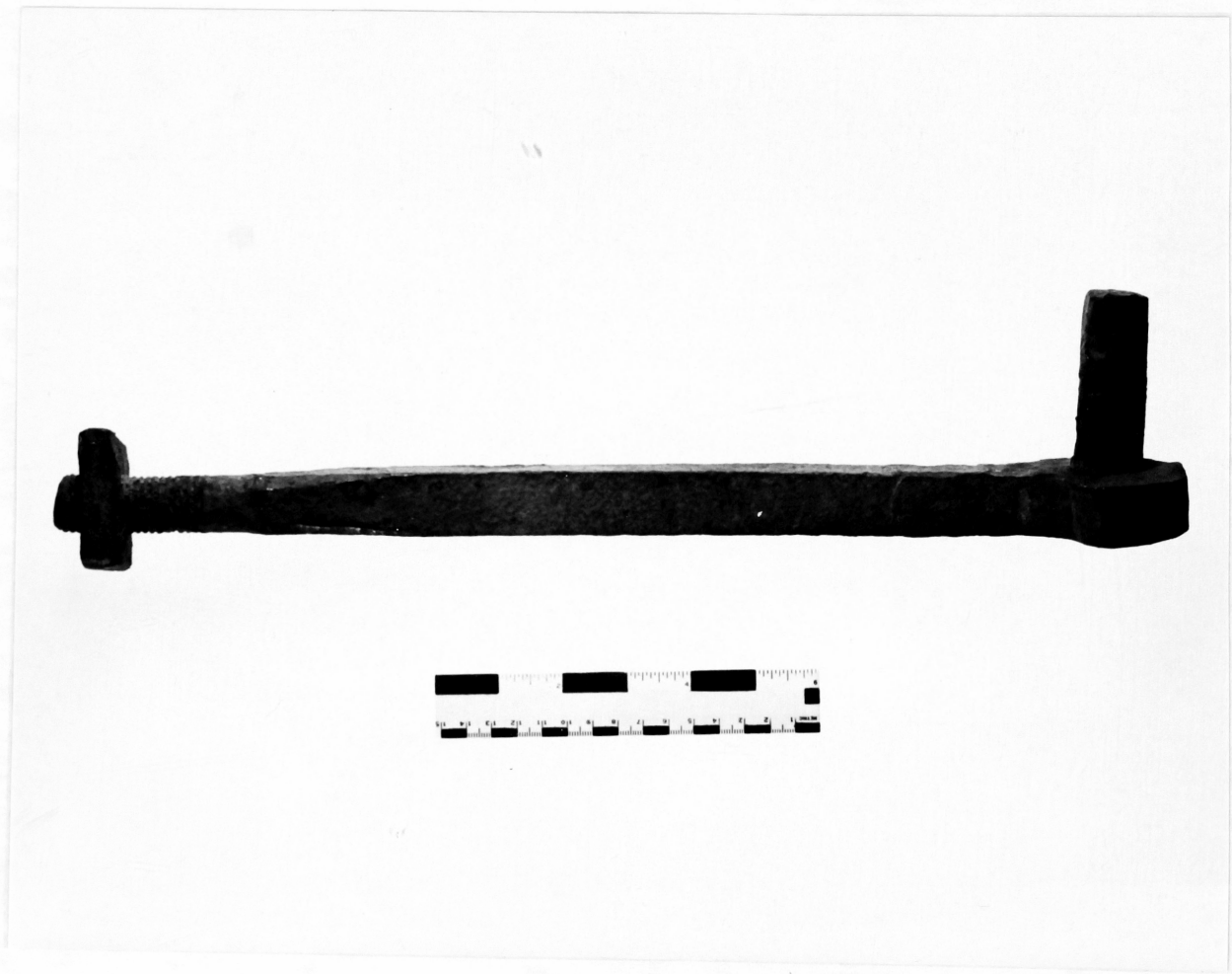


Fig. 9.--Forged Iron Gate Hinge Pin



64

Fig. 10.--Large Iron Door Lock



Specimen No. 708--One iron or steel wood screw 3 inches long and 3/8 inches in diameter.

Specimen No. 250--One wood screw 2 1/2 inches long.

### Brad

Specimen No. 237--One metal brad. This specimen not available for identification.

### Spike

Specimen No. 173--One iron spike 12 inches long and 1 inch in diameter. Spikes such as this were used in a number of ways to secure various architectural features.

Specimen No. 691--One steel spike 8 inches long and 3/4 inch in diameter.

Specimen No. 303--One square iron spike 8 1/2 inches long.

### Braces

Specimen No. 606--One straight iron brace for a wood frame 2 3/4 inches long.

Specimen No. 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 349, 334, 307, 308, 309, 318, 333--Thirty iron hinged braces for joining planks and scaffolds. All of these specimens were found in the southeast bastion; however, it is very probable that they were used throughout the Fort.

Gate Bolts

Specimen No. 710--Two iron gate bolts 4 inches long.

Nails

Specimen No. 661, 673, 604, 638, 703, 251, 605, 524, 676, 170, 580, 598, 619, 620, 634, 635A, 645, 690, 463, 481, 504, 508, 518, 675, 696A, 399, 420, 421, 422, 423, 432, 433--Over 200 nails of various styles and sizes were recovered and catalogued at Fort Owen. These ranged from small specimens 1 inch in length to large spike nails 5 1/2 inches to 6 inches long. There were both square and round types indicating that building and repairs were constant over the sixty odd years that the Fort was inhabited. Most of the nails appeared to be machine cut; however, some of the larger square specimens appeared to be hand wrought which indicated considerable age.

Household Articles

This is one of the largest artifact classes recovered at Fort Owen. It consists of all those objects utilized in the home and its affairs, and is made up mostly of kitchen utensils and earthenware such as plates, cups, saucers, and platters. There is also a substantial number of beverage and medicine bottles along with furniture and appliance parts. The majority of these artifacts were excavated from the kitchen dump outside the west barracks, and are thus in

poor shape. Many potsherds were recovered in this area whose exact identification is impossible; however, they have been included in this class because they were some type of earthenware used in the home.

### Knives

Specimen No. 546--One iron dinner knife 9 inches long.

Specimen No. 671--One bone handled dinner knife 7 inches long.

Specimen No. 365--Fragment of wooden knife handle approximately  $3 \frac{7}{8}$  inches long with two brass rivets.

Specimen No. 305--One metal handle and fragment of blade of dinner knife. The handle is 4 inches long and the total length of the specimen is  $7 \frac{1}{4}$  inches long.

Specimen No. 364--One handle and part of blade of kitchen knife. The handle is wood with two brass rivets and the blade is iron. Total length of the specimen is  $5 \frac{1}{8}$  inches long.

Specimen No. 705--One iron cheese knife blade  $7 \frac{1}{2}$  inches long.

Specimen No. 642--One iron dinner knife  $9 \frac{1}{2}$  inches long.

### Spoons

Specimen No. 658--One pewter spoon handle with



Fig. 11.--Kitchen Knives

floral relief design. Length 4 inches.

Specimen No. 636--One bowl of iron soup spoon  
2 7/8 inches long and 1 5/8 inches wide.

Specimen No. 46--Fragment of iron table spoon  
bowl 2 1/8 inches long and 1 3/4 inches wide.

Specimen No. 360--One brass spoon with silver  
plate 6 inches long. The handle is decorated on both sides  
with water lily relief designs.

Specimen No. 706--Fragment of teaspoon bowl  
2 1/4 inches long and 1 1/4 inches wide.

Specimen No. 556--Fragment of iron spoon handle.

Specimen No. 479--One handle of iron spoon approxi-  
mately 4 1/2 inches long.

Specimen No. 471--Handle of metal spoon. This  
specimen not available for identification.

### Forks

Specimen No. 365--One three tined dinner fork with  
remnants of wooden handle secured by three brass rivets.  
Total length of specimen 6 1/2 inches long.

Specimen No. 704--One three tined iron fork 7 inches  
long.

Specimen No. 544--One three tined brass fork approxi-  
mately 7 inches long.

Specimen No. 752--One three tined iron dinner fork  
7 inches long.

Specimen No. 368--Fragment of three tined iron fork. This specimen was found thrust through a board in the east barracks when restoration work was taking place on that structure in the 1950's.

Specimen No. 718--Fragment of the bone handle of a fork.

### Glass Jars

Specimen No. 651--Five fragments of a Mason or Ball type glass jar. Glass 1/8 inch thick.

Specimen 602--Ten fragments of light blue jar which appears to be a Mason type.

Specimen No. 630--Three fragments of Mason jar. One specimen marked "Mason."

Specimen No. 505--Nine fragments of Mason jar.

Specimen No. 261--Seven fragments of Mason jar.

Specimen No. 403--Four fragments of Mason jar.

Specimen No. 692--Fragments of clear glass jar.

This specimen not available for identification.

Specimen No. 401--One metal Mason jar lid. This specimen not available for identification.

Specimen No. 679--One glass jar lid. This specimen not available for identification.

Specimen No. 20--Two fragments of white milk glass jar lid. This was probably part of salve or cold cream jar.

Specimen No. 622--One zinc jar lid. This specimen

not available for identification.

Specimen No. 21--One clear glass salve or petroleum jelly jar. This specimen has threads on mouth for screw-on lid and is 1 1/4 inches in diameter. Impressed on bottom:

W. T. & Co.  
998  
E

### Plates

Specimen No. 719--Fragment of white glaze iron stone dinner plate. Scalloped edge with green floral design and gold overlay. Stamped on back:

Ameerst  
J & E Mayer

This is work of Mayer Bros. who did work from 1830 on at Hanley, Staffordshire, England.

Specimen No. 263--Fragment of white glazed iron stone dinner plate marked: "Boston."

Specimen No. 268--Fragment of white glazed iron stone plate marked: "Stone China, Pankhurst."

Specimen No. 265--Fragment of white glazed iron stone plate with blue floral and geometrical overlay designs. Marked:

Dorothy  
Johnson Bros.  
England

The Johnson Bros. were a firm founded in 1833 and made earthenwares at Hanley and Tunstall, Staffordshire, England.

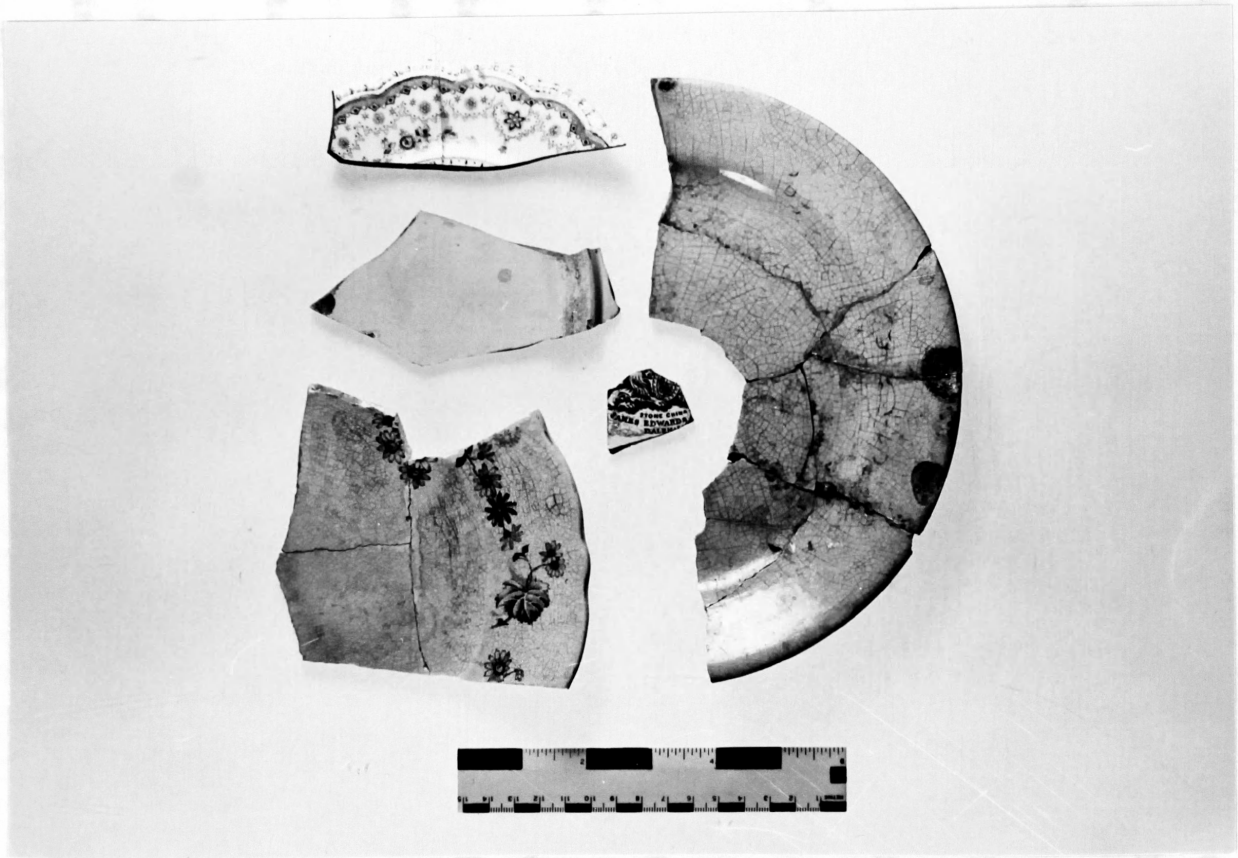


Fig. 12.--Fragments of Iron Stone Dishes



Specimen No. 271--Two fragments of white glazed iron stone plate.

Specimen No. 537, 274, 278, 292--Fragments of white glazed iron stone plates. These specimens not available for identification.

Specimen No. 279--Fragment of an iron stone white glazed plate.

Specimen No. 489--Fragment of a white glazed iron stone plate marked: "Henry A. Cork."

### Cups

Specimen No. 721--Two fragments of white glazed iron stone drinking cup  $3 \frac{3}{8}$  inches in diameter.

Specimen No. 532--Two fragments of white glazed iron stone drinking cup approximately  $3 \frac{3}{4}$  inches in diameter.

Specimen No. 264--Two fragments of white glazed iron stone cup with a brown overlay floral design.

Specimen No. 542--One large portion of a white glazed iron stone cup with a flat bottom and flared sides. Approximately  $3 \frac{1}{2}$  inches in diameter and  $3 \frac{3}{4}$  inches high.

Specimen No. 277--Fragments of white glazed iron stone cup approximately  $3 \frac{1}{2}$  inches in diameter and  $3 \frac{1}{4}$  inches high.

Specimen No. 276, 287, 288, 289, 290, 291--Fragments

of white glazed iron stone cups. These specimens not available for identification.

### Saucers

Specimen No. 535--Fragment of white glazed iron stone ware saucer approximately 6 inches in diameter.

Specimen No. 269--Four fragments of white glazed soft paste ware saucer.

Specimen No. 531--One white glazed iron stone saucer approximately 5 7/8 inches in diameter with a gold floral overlay design in the center and a thin gold band around the edge. Marked:

Royal Ironstone China  
Alferd Meakin  
England

The Alferd Meakin Ltd. imported pottery into the United States from England during the late 19th century and early 20th century.

Specimen No. 275, 284, 294, 295, 296, 297, 298, 299--Fragments of white glazed iron stone saucers. These specimens not available for identification.

### Bowls

Specimen No. 720--Fragment of base of white glazed iron stone bowl.

Specimen No. 266, 267--Two fragments of white glazed iron stone bowl.

Specimen No. 293--One fragment of white glazed iron stone bowl.

#### Chamber Pot

Specimen No. 22--One white glazed iron stone chamber pot 5 inches high and 8 3/4 inches in diameter. Marked on bottom: "Iron Stone China" with letter W and crest showing lion holding coat of arms. This is probably a product of the W. M. Co. of Staffordshire, England.

#### Lamps and Accessories

Specimen No. 528--Fragment of clear glass kerosene lamp chimney.

Specimen No. 653--Fragment of base of oil lamp. This specimen not available for identification.

Specimen No. 8--One iron base with wall attachment for oil lamp. A specimen exactly like this was in the St. Ignatius Mission.

Specimen No. 9--Similar to No. 8 except that there is no attachment for wall. Both of these specimens are 5 1/2 inches in diameter.

#### Crockery

Specimen No. 262A--Fragments of buff colored crockery 3/8 inch thick. This specimen marked:

U(nion)  
Stonewa(re) (Co.)  
Red Wing, Min(n)

Crocks of this type were used for many different things in the household.

Specimen No. 567--Two fragments of a buff colored crock. One fragment marked "5" which indicated it was probably of five gallon size.

Specimen No. 679--Two fragments of crockery 5/16 inch thick. One fragment is part of the handle.

Specimen No. 450, 699, 500, 612, 380, 411--Fragments of crockery.

#### Vase

Specimen No. 631--Two fragments of the base of a clear glass vase with embossed floral design.

#### Glass Dish

Specimen No. 536--Fragments of clear glass dish with embossed geometrical designs on the bottom. This may have been a candy dish.

Specimen No. 19--Fragments of clear glass dish approximately 5 inches high with pressed design on sides showing European stags in a forest.

#### Tin Cans

Specimen No. 187--One flattened tin can approximately one pint capacity.

Specimen No. 219--One large fragment of the base of a tin can. The exact size is unknown.

Specimen No. 353--One metal lid of a coffee can 5 inches in diameter.

Specimen No. 397--One flattened tin can 4 1/2 inches by 4 inches.

Specimen No. 472, 473--Twenty-two fragments of tin cans.

### Stove

Specimen No. 336--One fragment of cast iron stove lid which is 1/4 inch thick.

Specimen No. 369--Piece of flat iron grate from firebox of stove.

### Bell

Specimen No. 363, 591--Two round brass bell clappers 1 inch in diameter.

### Grinder

Specimen No. 11--One top of a cast iron meat or coffee grinder approximately 6 inches square with a 2 inch by 2 1/2 inch opening on the top. Marked: "Patented Aug 2, 1855."

Specimen No. 10--Part of grinder similar to No. 11. This specimen marked: "Patent Ext. Aug 2, 1873." This specimen not available for identification.

Shoe Last

Specimen No. 681--One iron shoe last for child's shoe 6 3/4 inches long. These forms over which a shoe was fit for repairs were common in the home up into the 20th century.

Goblet

Specimen No. 550--This artifact listed in the catalog as a glass goblet. This specimen not available for identification.

Coil Springs

Specimen No. 514--One iron coil spring similar to the type used in furniture.

Medicine Bottles

Specimen No. 485--One light blue rectangular bottle 5 inches high. Marked "Davis" on sides which indicates it was probably a product known as "Dr. Davis Vegetable Pain Killer."

Specimen No. 2--One small aqua glass medicine bottle. This specimen not available for identification.

Specimen No. 358--Fragments of clear glass bottle. One fragment marked:

C. M. JA  
Philad(elphia)

Specimen No. 18--One clear glass rectangular shaped

bottle 5 7/8 inches high with a pronounced flared lip.

Marked:

Private  
215  
Mold

Specimen No. 541--Fragments of clear glass bottle. This appears to be rectangular in shape which indicates it is some type of medicine or bitters bottle.

Specimen No. 682--Neck of clear glass bottle 3/8 inches in diameter.

Specimen No. 1--One clear glass bottle rectangular in shape and 8 1/2 inches high. No markings.

Specimen No. 534--Three fragments of a dark blue bottle which was probably square or rectangular in shape. This may have been some type of laxative or extract bottle.

Specimen No. 3--One clear glass medicine bottle marked: "Dr. Prices Special Flavoring Extracts." This specimen not available for identification.

Specimen No. 530--Fragments of base and neck of clear glass rectangular bottle. Marked "Radways" on one side panel and "L Parillian Solvent" on other side.

Specimen No. 639--One rectangular based glass bottle with beveled corners. The length is 6 3/4 inches, the width is 2 1/4 inches, and the thickness is 1 1/8 inches. Marked: "Dr. Prices Special Flavoring Extracts."

Specimen No. 527--Base of rectangular clear glass

bottle 2 inches by 1 3/8 inches.

Specimen No. 617--Three fragments of a clear glass bottle marked:

Of  
Ess(ence)

Specimen No. 587--Fragment of base of clear glass bottle marked "Boyd,S" on bottom.

Specimen No. 501, 533, 592, 593, 655, 669A--Fragments of clear glass medicine bottles. No markings.

#### Beverage Bottles

Specimen No. 502, 512, 538, 663, 667, 695--Twenty-three fragments of olive or green wine bottles. Most of this glass is 3/16 inch thick and specimen No. 502 appears to be hand blown while the other fragments seem to be products of a glass mold.

Specimen No. 635, 624A, 615--Six fragments of brown glass bottles. These were probably either wine or beer bottles.

#### Bottle Stopper

Specimen No. 540--One clear glass bottle stopper 1 1/8 inches in diameter. Marked on top of beveled edge in circumference: "Lea & Perrins." This stopper is from a Worcestershire Sauce bottle.

Specimen No. 616--One clear glass bottle stopper. This specimen not available for identification.



Coffee Bottle

Specimen No. 541A--One round bottle marked:

J. A. Folger & Co.  
San Francisco

This specimen not available for identification.

Glass Sherds

Specimen No. 416, 376, 377, 449, 539, 625, 696--  
Fragments of glass which may be either bottles or jars.  
Most of this glass is clear and varies from 1/8 inch to  
1/4 inch thick.

Potsherds

Specimen No. 585--Three potsherds of iron stone  
ware. Two of the specimens are marked "Iron Stone China  
W. M. Co.," and the other piece is marked "James Edward's  
Stone China." The firm of Edward's was a well known manu-  
facturer of Stoke-On-Trent, England.

Specimen No. 412--Three white glazed iron stone  
potsherds, one of which is marked "Ironstone Ch(ina)."

Specimen No. 631A--One white glazed sherd with a  
purple overlay floral design.

Specimen No. 613--One white glazed sherd marked:

Celia  
Wedgewood & (Co.)  
England

During the early 19th century the Wedgewood Co. imported  
great quantities of hard earthenwares to the United States

as a substitute for porcelain. From 1891 on, the marking "England" was added to all their products which were exported to the U.S.

Specimen No. 519--Five small white glazed sherds with a green leaf design.

Specimen No. 300, 375, 382, 396, 406, 413, 600, 629, 626, 627, 645, 664, 697, 647, 680, 280, 281, 282, 283, 285, 515, 601--One hundred and twenty-four sherds of white glazed iron stone pottery.

Specimen No. 272, 273--White glazed iron stone potsherds.

### Beds

Specimen No. 738--Two brass bed ornaments which are funnel shaped and 2 inches long.

### Pump Handle

Specimen No. 233--One cast iron pump handle approximately 9 inches long.

Specimen No. 247--Fragment of iron pump handle.  
This specimen not available for identification.

### Ice Tongs

Specimen No. 127--One pair of iron ice tongs  
14 inches long.

Barrel Fittings

Specimen No. 29--Fragment of iron barrel hoop found with fragments of the actual barrel in situ.

Specimen No. 217--Fragments of iron barrel hoops.

Specimen No. 254, 255, 256--Fragments of iron barrel hoops. These specimens not available for identification.

Bucket

Specimen No. 707--Fragment of iron wire handle for wooden bucket. This was probably a 5 gallon size.

Specimen No. 41--One metal lid 13 inches in diameter with handle in center. This was probably off of 10 gallon bucket or can.

Transportation

This class of artifacts includes those object connected with wagons, buggys, harness riggings, draft animals, and blacksmithing implements. These were important commodities in a frontier trading post such as Fort Owen, for the ability to import trade goods was very much dependent upon their availability.

Mule Shoe

Specimen No. 97--One fragment of an iron mule shoe.

Specimen No. 701--One mule shoe approximately 4 3/4 inches long and 3 1/4 inches wide.

Specimen No. 102--One mule shoe. This specimen was

not available for identification.

### Horseshoe

Specimen No. 688--One light iron horseshoe. When it was necessary to keep horses shod the year round, these light shoes were put on during the summer months.

Specimen No. 98--One iron horseshoe. This specimen appears to be hand made.

Specimen No. 662--One steel horseshoe which measures 6 inches by 5 3/4 inches.

Specimen No. 700--Two complete shoes and two fragments, all of which are made of iron and appear to be hand made.

Specimen No. 621--Rusted fragment of iron horseshoe.

Specimen No. 372--One large iron horseshoe which is 6 inches long and 5 inches wide. This specimen appears to be hand forged.

Specimen No. 662--One iron horseshoe 6 inches by 5 3/4 inches in size.

Specimen No. 687, 688A, 525, 99, 100, 101--Six iron horseshoes. These specimens not available for identification.

### Ox Shoe

Specimen No. 702--One fragment of an iron ox shoe.



Fig. 13--Two Types of Horseshoes. Left, Winter; Right, Summer

Single Trees

Specimen No. 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 167, 175, 179, 304, 314, 346, 339, 340, 14, 194, 212, 216, 218, 231, 232, 246, 563, 310, 313, 324, 328, 87, 88, 89, 90, 91, 92, 93--Sixty-eight iron single trees. The single tree was an important feature on the harness riggings for all wagons and buggys as it was the main connection between the hame which fit over the animal and the tongue. It fit on the end of a single tree bar which hung under the double tree and tongue, and was fastened to the tug lines. The number of these artifacts found shows the importance of wagons and similar vehicles at Fort Owen. See fig. 14.

Double Tree Iron

Specimen No. 211--Iron cap which fits over the wooden double tree. This cap is then connected to the single tree which hung beneath it.

Harness Rings

Specimen No. 371, 130, 640, 331, 215, 221, 222, 225, 244, 319, 342, 476. Twenty-one various sized and shaped harness rings all of which are made of iron or steel. Most of the specimens are round; however, there are some oval types present also. These are from 2 1/2 inches to 4 inches



Fig. 14.--Wagon and Buggy Parts. Top, Bolster Iron; Bottom Left, Single Tree Iron; Bottom Right, Buggy Step and Foot Rest

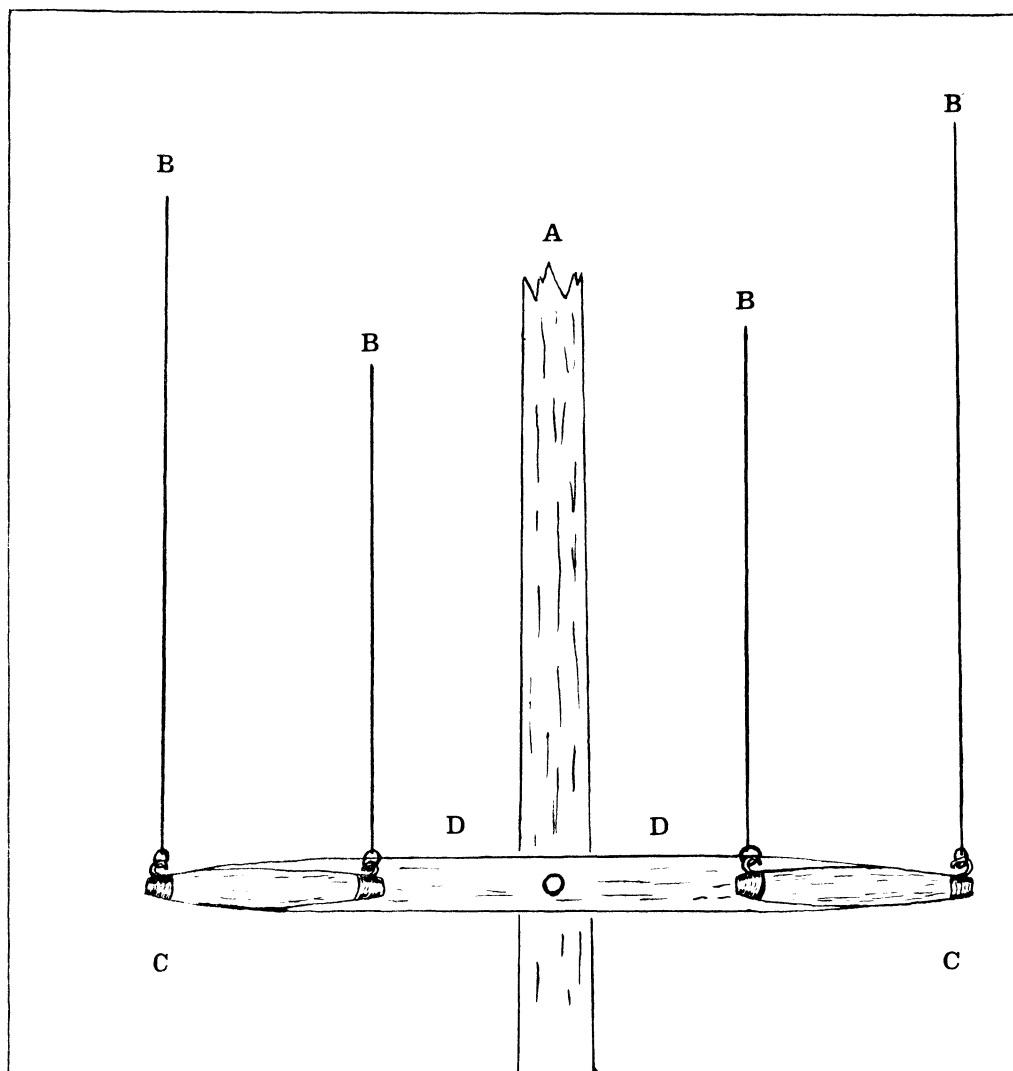


Fig. 15.--Sketch of Basic Harness Rigging. A, Tongue;  
B, Tug Lines; C, Single Trees; D, Double Tree



in diameter.

#### Neck Yoke Attachments

Specimen No. 178--One iron yoke attachment approximately 8 inches long. These were used to attach the yoke to the tongue.

Specimen No. 226--One iron plate from yoke attachment 7 inches long.

Specimen No. 206--One iron yoke attachment 7 inches long. This specimen is the same as No. 226 and may be part of the same rigging.

#### Harness Buckles

Specimen No. 180--One iron or steel square harness buckle 2 1/2 inches by 2 inches.

Specimen No. 356--One iron harness buckle with fragments of leather still attached. The size is 4 inches by 3 1/2 inches.

#### Chain

Specimen No. 348--One link of iron chain approximately 3 3/4 inches long and 2 3/16 inches wide. Chain was used in a number of ways on wagons and for pulling logs or other heavy objects.

Specimen No. 13--Short piece of medium-heavy chain with three oval links attached. Total length is 6 1/2 inches.

Specimen No. 495--One iron chain link 1 3/4 inches in diameter with 3 1/2 inch diameter ring attached.

Specimen No. 529--One iron chain link 2 inches in diameter.

Specimen No. 319--Three iron chain links each 3 1/2 inches by 2 1/2 inches.

Specimen No. 241--One three foot iron chain with 4 inch diameter rings attached on both ends.

Specimen No. 235--One piece of steel chain 16 inches long with hook attached.

### Clevis

Specimen No. 629A, 164, 227, 245, 321, 329, 145, 33, 163, 223--Nine iron clevises and pins. These S shaped objects were used to connect pieces of chain for hauling and in wagon rigs.

Specimen No. 196, 165--Three clevis pins.

### Spring

Specimen No. 735--One flat iron buggy or wagon spring 16 inches long and 1 1/8 inches wide.

### Axle

Specimen No. 166--Fragment of a cast iron wagon axle 18 inches long and 2 1/8 inches wide.

Specimen No. 337--Fragment of axle. This specimen not available for identification.

Specimen No. 6--Fragment of iron freight wagon axle. This specimen not available for identification.

#### Hame

Specimen No. 96--One metal fragment of a hame. The hame is that part of the harness rigging that goes over the animal and is a connecting point for the tug lines and reins.

#### Hold Down Iron

Specimen No. 722, 40--Two wagon hold down irons 11 inches long. These were used to hold the sides of a wagon box to the bottom.

#### Buggy Step

Specimen No. 171--One cast iron T shaped buggy step 6 inches long. These were attached to the side of a buggy or wagon.

#### Bolster Iron

Specimen No. 317--One cast iron medium sized bolster for a buggy, 5 inches in diameter. The bolster was used as a pivot between the box and front axle and kept the box straight as the front wheels turned. See fig. .

Specimen No. 16--One cast iron bolster 8 inches in diameter. This specimen was probably used on a wagon.

Specimen No. 36, 128--Two iron bolsters. These

specimens not available for identification.

### Forge Part

Specimen No. 315--One cast iron forge part used to control the air to the fire. This specimen is 10 1/2 inches long.

### Spreader

Specimen No. 12, 15--Two cast iron three horse spreaders approximately 13 inches long with three rings attached. These were used to attach three animals to one rigging.

### Ladle

Specimen No. 4--One iron ladle 22 inches long with a 5 inch bowl. Ladles of this type were used by blacksmiths for handling molten metals.

### Hooks

Specimen No. 330--One cast iron hook 6 inches long. Hooks of various sizes were used on wagons and for hauling objects with a harness rig.

Specimen No. 476--One iron hook. This specimen not available for identification.

Specimen No. 425--One iron hook.

### Hand Tools

This class consists of those artifacts which were

used in a variety of jobs as tools or implements.

Wood Auger

Specimen No. 201, 202, 203--Three iron wood augers 18 inches long.

Pick

Specimen No. 623--One small metal pick 16 inches long. This specimen not available for identification.

Shovel

Specimen No. 735--Fragment of large iron or steel shovel blade with pointed tip, 14 inches long and 6 1/2 inches wide.

Hammer

Specimen No. 327--One cast iron sledge hammer head. The weight is approximately 16 pounds and it is 5 inches long and 3 inches wide with a 1 1/4 inch hole in the center for a handle.

Wrench

Specimen No. 43--One iron or steel monkey wrench 8 inches long. This specimen is badly rusted.

Specimen No. 204--One monkey wrench similar to No. 43. This specimen not available for identification.

File

Specimen No. 199, 200--Two flat metal files 13 inches long. Files of this type have a number of uses.

Personal Possessions

This class is represented by those artifacts of a personal nature. Combs, toothbrushes, razors, toys, coins, and wallets are found in this class with other objects which probably were the property of an individual person.

Ring

Specimen No. 561--One copper finger ring 7/16 inch in diameter. This is a very plain piece of jewelry and may be hand made.

Marbles

Specimen No. 729--One grey clay marble 5/8 inch in diameter. These types of clay marbles were popular during the latter part of the 19th century and early 20th century.

Specimen No. 560--Fragment only of one green and white glass marble approximately 3/4 inch in diameter. Glass marbles are extremely old, going back to the 17th century and so they are very hard to date.

Dolls

Specimen No. 722--Fragments of one white porcelain doll. The head which is 1 inch in diameter has painted black

hair and blue eyes. The short fat arms indicate that this doll was probably made after 1880. Many dolls of this type were imported from Germany.

Specimen No. 736--Fragment of one white male porcelain doll, approximately the same size as No. 722. This specimen, however, appears to be of better workmanship with more delicate facial features. Also included under this specimen No. is a leg  $2 \frac{1}{8}$  inches long with a high heeled shoe. This is an indication of its manufacture date, probably being in the 1880's or 1890's.

Specimen No. 730--Two fragments of a porcelain doll head approximately  $2 \frac{1}{2}$  inches high and  $1 \frac{1}{2}$  inches wide. Numbers "36" stamped on one piece.

#### Doll Accessories

Specimen No. 731--One child's clear glass play baby bottle. This specimen is 3 inches high with a threaded top and is marked on one side to indicate centimeters and on the other side to indicate ounces. Stamped on bottom "Japan," which indicates it is quite recent.

Specimen No. 732--One miniature toy drinking cup  $\frac{1}{2}$  inch high and  $\frac{5}{8}$  inch in diameter. This is probably part of a set.

#### Pocket Knife

Specimen No. 733--One wooden handled jack knife

3 1/4 inches long with two blades. Shield emblem on one side which is similar to "Emperial Brands" knives of today.

### Toothbrushes

Specimen No. 547, 716--Two bone toothbrushes minus the bristles. One specimen is 6 3/4 inches long and marked on the handle "Ex Fine London." The other specimen is 6 1/4 inches long.

### Comb

Specimen No. 361--Fragments of one or possibly two hard rubber hair combs.

### Hairpins

Specimen No. 446, 462--Two metal hairpins approximately 2 1/4 inches long.

### Razor

Specimen No. 545--One steel bladed straight razor blade 3 inches long.

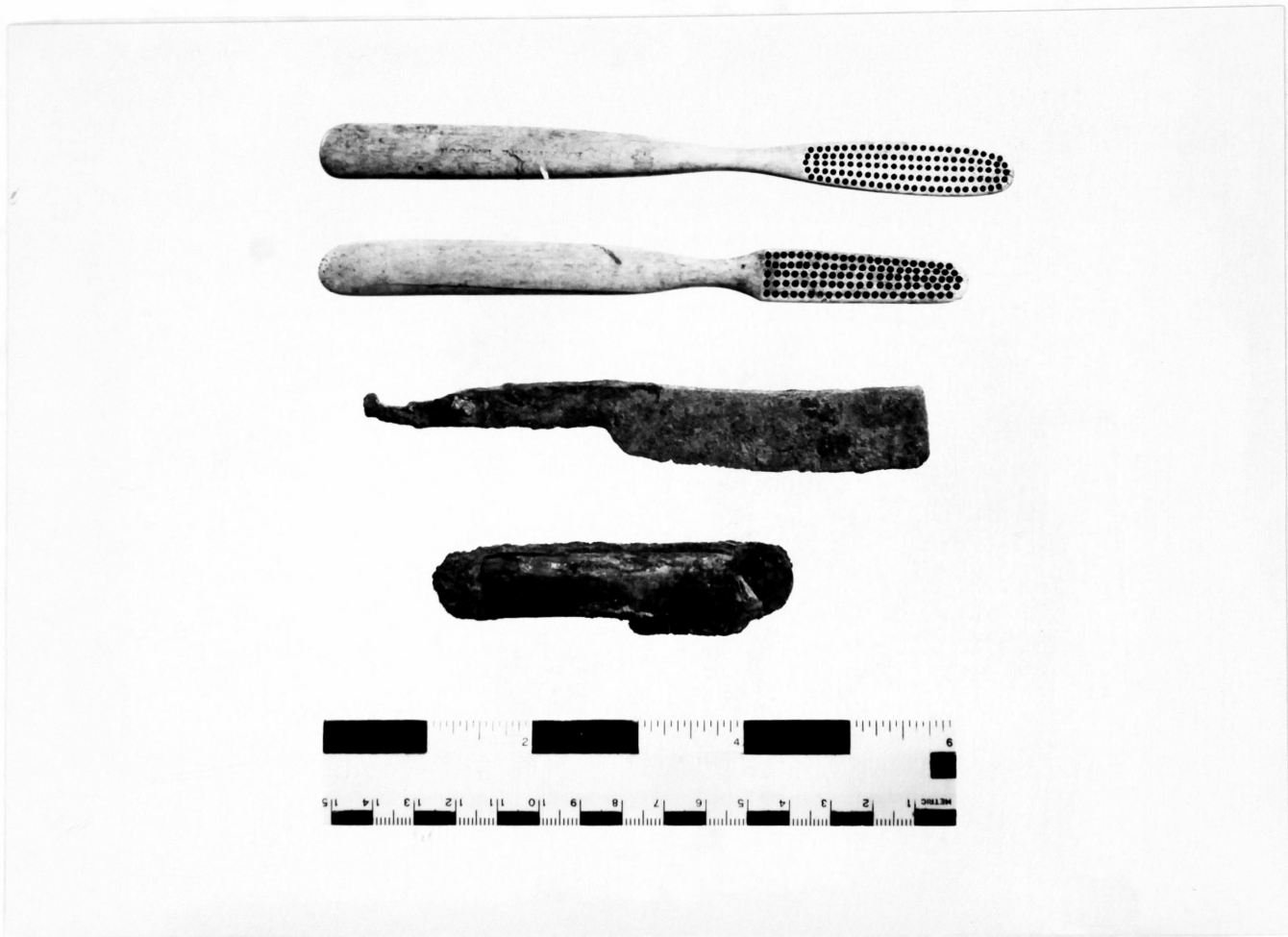
### Wallet

Specimen No. 734--One leather wallet 11 inches long and 3 1/2 inches wide.

### Coin

Specimen No. 751--One 1877 Sitting Liberty dime. This specimen not available for identification.





97

Fig. 16.--Personal Possessions. Top, Bone Toothbrushes;  
Middle, Razor; Bottom, Jackknife

CLOTHING

Thirty-one artifacts are included in this category of clothing, which includes all wearing apparel, or parts of wearing apparel, such as hats, caps, coats, jackets, suits, dresses, blouses, shirts, trousers, pajamas, nightgowns, and undergarments. The artifacts are arranged in the order in which they were discovered. The following is a list of the artifacts:

- 1. One pair of men's shoes, size 7 1/8 inches, made of black leather, with laces, found in the east wall of the house.
- 2. One pair of men's shoes, size 7 1/8 inches, made of black leather, with laces, found in the east wall of the house.
- 3. One pair of men's shoes, size 7 1/8 inches, made of black leather, with laces, found in the east wall of the house.
- 4. One pair of men's shoes, size 7 1/8 inches, made of black leather, with laces, found in the east wall of the house.
- 5. One pair of men's shoes, size 7 1/8 inches, made of black leather, with laces, found in the east wall of the house.
- 6. One pair of men's shoes, size 7 1/8 inches, made of black leather, with laces, found in the east wall of the house.
- 7. One pair of men's shoes, size 7 1/8 inches, made of black leather, with laces, found in the east wall of the house.
- 8. One pair of men's shoes, size 7 1/8 inches, made of black leather, with laces, found in the east wall of the house.
- 9. One pair of men's shoes, size 7 1/8 inches, made of black leather, with laces, found in the east wall of the house.
- 10. One pair of men's shoes, size 7 1/8 inches, made of black leather, with laces, found in the east wall of the house.
- 11. One pair of men's shoes, size 7 1/8 inches, made of black leather, with laces, found in the east wall of the house.
- 12. One pair of men's shoes, size 7 1/8 inches, made of black leather, with laces, found in the east wall of the house.
- 13. One pair of men's shoes, size 7 1/8 inches, made of black leather, with laces, found in the east wall of the house.
- 14. One pair of men's shoes, size 7 1/8 inches, made of black leather, with laces, found in the east wall of the house.
- 15. One pair of men's shoes, size 7 1/8 inches, made of black leather, with laces, found in the east wall of the house.
- 16. One pair of men's shoes, size 7 1/8 inches, made of black leather, with laces, found in the east wall of the house.
- 17. One pair of men's shoes, size 7 1/8 inches, made of black leather, with laces, found in the east wall of the house.
- 18. One pair of men's shoes, size 7 1/8 inches, made of black leather, with laces, found in the east wall of the house.
- 19. One pair of men's shoes, size 7 1/8 inches, made of black leather, with laces, found in the east wall of the house.
- 20. One pair of men's shoes, size 7 1/8 inches, made of black leather, with laces, found in the east wall of the house.
- 21. One pair of men's shoes, size 7 1/8 inches, made of black leather, with laces, found in the east wall of the house.
- 22. One pair of men's shoes, size 7 1/8 inches, made of black leather, with laces, found in the east wall of the house.
- 23. One pair of men's shoes, size 7 1/8 inches, made of black leather, with laces, found in the east wall of the house.
- 24. One pair of men's shoes, size 7 1/8 inches, made of black leather, with laces, found in the east wall of the house.
- 25. One pair of men's shoes, size 7 1/8 inches, made of black leather, with laces, found in the east wall of the house.
- 26. One pair of men's shoes, size 7 1/8 inches, made of black leather, with laces, found in the east wall of the house.
- 27. One pair of men's shoes, size 7 1/8 inches, made of black leather, with laces, found in the east wall of the house.
- 28. One pair of men's shoes, size 7 1/8 inches, made of black leather, with laces, found in the east wall of the house.
- 29. One pair of men's shoes, size 7 1/8 inches, made of black leather, with laces, found in the east wall of the house.
- 30. One pair of men's shoes, size 7 1/8 inches, made of black leather, with laces, found in the east wall of the house.
- 31. One pair of men's shoes, size 7 1/8 inches, made of black leather, with laces, found in the east wall of the house.



Fig. 17.--Fragments of China Dolls

### Clothing

Thirty-one artifacts are included in this category of clothing, which includes all wearing apparel, or parts of wearing apparel. The majority of the specimens are buttons of various styles and materials and the rest are portions of boots and shoes.

#### Military Buttons

Specimen No. 670--One military brass blouse button 7/8 inch in diameter. It has a spread eagle design with the head pointing left on the front and the letters R and S stamped on the back. This type of button was manufactured by the Hostletter Bros., Philadelphia, Pa., from 1851-1855.

Specimen No. 666--Two badly corroded brass buttons. One specimen is 1/2 inch in diameter and the second specimen is 3/4 inch in diameter. Both have a snap attachment on the back.

Specimen No. 609--One metal button which is described in the catalog as a military type. This specimen is not available for identification.

Specimen No. 589--One large metal button 1 1/6 inches in diameter and 1/2 inch thick with four thread holes. This is probably off a blouse.

#### Civilian Buttons

Specimen No. 392--One bone button 7/16 inch in diameter

with four thread holes.

Specimen No. 694--One metal button marked "T. W. & W." This specimen not available for identification.

Specimen No. 378--Two white porcelain buttons 1 1/16 inch in diameter with four thread holes.

Specimen No. 660, 568--Two plastic buttons 7/16 inch in diameter. One specimen (660) is blue and the other specimen is white.

Specimen No. 594--Fragment of a blue shell button.

Specimen No. 474--Seven specimens of buttons in various sizes. These are not available for identification.

### Boot

Specimen No. 443--One sole and heel of a man's boot approximately 7 1/2 inches long with iron nails in the heel.

### Shoes

Specimen No. 634, 686--Three fragments of children's shoes. No. 634 includes one girl's slipper approximately size 8 and the other specimen is a boy's hightop laced shoe with brass eyelets. No. 686 is a fragment of a child's low cut shoe.

Specimen No. 558, 624--Two soles from women's leather shoes. No. 624 is 8 1/2 inches long.

Specimen No. 466--Fragments of leather shoe. This specimen not available for identification.



Fig. 18.--Child's Leather Shoe

Firearms and Accessories

This category includes thirteen specimens consisting of various cartridges, a percussion cap, and two rifles. The cartridges are of a late variety used mainly in the 1880's and 1890's, and both of the rifles are relatively late. One specimen (No. 725) was probably used well after the beginning of the 20th century.

Cartridges

Specimen No. 693--One brass .45-70 fired case. It is 2.10 inches long and .475 inches in diameter at the neck. This cartridge was first loaded in 1873 for the Government and soon became one of the most popular loads for military use and big game hunting. It is still loaded today even though no rifles are presently made for it.

Specimen No. 610--One brass .40-72 Winchester unfired cartridge. This specimen was not available for identification. The .40-72 was a relatively popular cartridge for use in lever action and single shot rifles in the 1890's. The .40 refers to the diameter of the bullet and the 72 refers to the amount of black powder used in the load.

Specimen 641--One brass cartridge case. It is 1 7/8 inches long and 13/32 inches in diameter. This is probably about .50 caliber; however, without chamber measurements the exact loading is unknown.

Specimen No. 726--Fragment only, one brass center

fire cartridge case. Diameter 9/16 inch, exact caliber and load unknown.

Specimen No. 394--One brass .41 caliber rimfire cartridge case. This specimen not available for identification. Most of the .41 caliber cartridges were introduced in the 1870's and were used in pistols and single shot rifles.

Specimen No. 632, 633--Two brass .32 caliber rimfire fired cases, 1 1/8 inches long and .317 in diameter. These cartridges were extremely popular for use in single shot rifles.

#### Bullets

Specimen No. 648--Two copper jacketed fired bullets. One specimen is .308 caliber and the other is .458 caliber. Both appear to be quite recent in design.

Specimen No. 727--One lead ball approximately .25 caliber. This could have been used in either a rifle or shotgun. Its weight is 90 grains.

#### Percussion Cap

Specimen No. 579--One brass percussion cap. Not available for identification.

#### Rifle

Specimen No. 725--One Remington pump action, .22 rimfire rifle minus the stock. The barrel is 24 inches long and octagonal in shape. This is probably very recent as

105  
104

Guns of this type were manufactured until the 1920's.

Specimen No. 728--One Winchester Model 1876 Lever



Fig. 19.--Brass Cartridge Cases

part of a mask or other object. One of the fragments depicts  
a bear's claw which is a very common motif in Northwest Coast  
art. This specimen is not available for identification.



guns of this type were manufactured until the 1920's.

Specimen No. 728--One Winchester Model 1876 lever action rifle minus the wood stock. This weapon has a .45 caliber barrel which is 34 inches long and octagonal in shape. The exact loading is not known but it is probably a .45-60 which was chambered for this rifle.

#### Articles of Native Manufacture

This class is represented by only two specimens. One is a hand carved slate object which appears to be distinctly Northwest Coast in origin, and the other is a worked jasper flake. There is no way of establishing any relationships outside of location between these two artifacts and Fort Owen.

#### Worked Flake

Specimen No. 602--One piece of worked jasper flake approximately 2 inches long and 1 1/2 inches wide, and 5/8 inch thick. There is a definite working edge on one side which indicates that this was probably a scraper.

#### Worked Slate

Specimen No. 603--Three fragments of hand carved slate. The motif appears to be Northwest Coast and may be a part of a mask or other object. One of the fragments depicts a bear's claw which is a very common motif in Northwest Coast Art. This specimen is not available for identification.

Miscellaneous

This final class of artifacts includes those objects which either did not fit into the other nine classes or their function seemed so general that it wasn't feasible to restrict them to any one category. For example, various sizes of nuts and bolts, which had many uses in the Fort, could have been used in the household for gun parts, on wagons, tools, and in the construction of structures. Other artifacts in this class are those objects which were not identified. This includes leather scraps, bits of cloth, glass sherds, and various metal objects and scrap.

Brass Cap

Specimen No. 609--One brass cap 7/8 inch long and 1/4 inch in diameter. This was possibly a cap for some type of air valve.

Glass Gasket

Specimen No. 402--One glass gasket. This specimen not available for identification.

Charcoal

Specimen No. 390--Four pieces of charcoal.

Coal

Specimen No. 389--One piece of small coal. This was probably used in one of the stoves for fuel.

Lead Foil

Specimen No. 418, 444--Two pieces of lead foil.

Use unknown.

Slate

Specimen No. 477--One fragment of slate. There appears to be no connection between this and specimen No. 603 which is a piece of carved slate.

Pencil Lead

Specimen No. 488--One fragment of pencil lead.

Cloth

Specimen No. 486--One piece of black cloth.

Leather

Specimen No. 260, 419, 685, 549, 590, 487--Fragments of leather. All of this is flat and may have been part of harness riggings; however, identification is not positive.

Iron Washers

Specimen No. 663, 220--Two iron washer, 2 7/8 inches and 2 inches in diameter.

Iron Straps

Specimen No. 674, 672, 503, 714, 646, 649, 34, 229, 214, 27--Eight iron and steel straps which vary from 8 inches to 22 inches in length. Use unknown.

### Nuts and Bolts

Specimen No. 132, 133, 131, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 186, 242, 243, 253, 554, 302, 341, 350, 352, 370, 209, 193, 464, 490, 492, 207, 208, 692, 644, 322, 326, 680, 192--Various sized iron and steel nuts and bolts which apparently had several uses in Fort Owen.

### Springs

Specimen No. 498--Two small iron coil springs. Use unknown.

### Glass Sherds

Specimen No. 628, 577, 409, 559, 683, 480. Various glass sherds which could not be identified as either jars or bottles.

### Melted Glass

Specimen No. 517, 520, 678, 613A--Pieces of melted glass. This glass was apparently in some type of fire. They may have been jars or bottles; however, positive identification is not certain.

### Paint

Specimen No. 573--One small object approximately 3/8 inch by 3/8 inch which appears to be a drop of hardened red paint.

Pins

Specimen No. 239, 236, 351--Three iron pins which vary in length from 3 1/2 inches to 16 inches. Use unknown.

Iron or Steel Objects

Specimen No. 440, 24, 607, 557, 248, 344, 23, 709, 176, 712, 38, 424, 26, 7, 301, 174, 238, 230, 5, 182, 184, 357, 359, 367, 513, 224, 190, 205, 551, 552, 553, 597, 618, 467, 468, 495, 623, 638, 700A, 345, 442--These are objects which were not identified. They appear, for the most part, to be parts of machinery.

Metal Scraps

Specimen No. 610, 659, 571, 355, 715, 646, 644, 129, 28, 30, 32, 35, 37, 39, 42, 103, 162, 177, 252, 521, 681, 581, 599, 627, 335, 345, 436, 494--Several fragments of rusted iron and pieces of brass and copper.

Iron Bars

Specimen No. 228--One iron bar 14 inches long with a threaded pin attached to one end. Use unknown.

Specimen No. 596--One iron bar. This specimen not available for identification.

Specimen No. 249--One iron bar 14 inches long and 1/2 inch in diameter.

Specimen No. 438--One iron bar. This specimen not available for identification.

Specimen No. 354--One iron bar which is perforated on one end and threaded on the other end. Use unknown.

#### Wood

Specimen No. 684--Four fragments of wood. Use unknown.

#### Bakalite

Specimen No. 572--Three small pieces of bakalite. Bakalite is an artificial coal-tar product and these pieces may have been part of an electric insulator.

#### Pipe and Pipe Fittings

Specimen No. 417--One piece of iron pipe 5 inches long and 1 inch in diameter with threads on both ends.

Specimen No. 510--One iron pipe joint with inside threads 2 7/8 inches in diameter.

#### Wire

Specimen No. 262--Fragment of drawn steel wire.

#### Human Tooth

Specimen No. 583--One fragment of human milk tooth.

## CHAPTER V

### SUMMARY

As was stated in the first chapter under "Statement of Problem," the focal point of this thesis was the development and usage of a descriptive classification system for the Fort Owen artifacts and a subsequent analysis of this same material. The following, then, is a summary of these endeavors.

Seven hundred and forty-five catalogued specimens were placed into the Fort Owen classificatory scheme with an actual artifact count of over 1,000. The difference between these two figures resulted from the fact that several artifacts were given the same catalog numbers. Thus, several numbers actually contained, in some cases, more than one artifact. The classification system was based on function and was delineated into ten artifact classes in order to interpret the materials recovered from the Fort, and to relate them to its history.

This classification system for the Fort Owen artifacts was devised with the idea that it might be extended for use in similar historic sites. Thus, for the purposes of this summary the ten artifact classes were broken down

into broad categories which might be useful to other archaeologists working with this type of material. The following is a brief outline of this conceptual ordering.

#### Subsistence

1. Farming
2. Forest Products
3. Animal Industry
4. Hunting and Fishing
5. Trading

#### Structural Fittings

1. Building Hardware and Fittings
2. Construction Materials

#### Household Articles

1. Culinary and Earthenware
2. Glassware
3. Appliances
4. Furniture

#### Transportation

1. Animal Shoes
2. Wagon and Buggy Parts
3. Blacksmithing Implements

#### Hand Tools

1. General Hand Tools



Personal Possessions

1. Toiletries
2. Toys
3. Personal Articles

Clothing

1. Garments
2. Footwear
3. Buttons and Emblems

Firearms and Accessories

1. Rifles and Pistols
2. Cartridges and Balls
3. Accessories

Articles of Native Manufacture

1. Lithic

Miscellaneous

When Fort Owen is compared with other historic trading posts which have been excavated, we find there are certain similarities in artifact types which indicate that perhaps these items were standard in frontier trading forts. At Fort Lookout II and Fort Stevenson, both located in South Dakota, similar earthenware items, especially 19th century Staffordshire ware, were found along with various tools, bottles, and jars like those excavated at Fort Owen.

Similarities also exist between these two areas by virtue of the fact that certain types of artifacts are absent

in almost all the sites. These include, for the most part, articles of quality such as fine cut glass, china, and silverware. If these items were used in these posts, they probably became heirlooms and were not tossed away with the everyday items. Also absent are articles of leisure such as games and musical instruments which probably indicates evidence of the long hard work days of these early traders.

Major differences between Fort Owen and other similar posts occur when one analyzes the many artifacts connected with subsistence and business pursuits. Most of the trading posts, especially those found on the Missouri River, were primarily involved in trade with the Indians and hunting as indicated by the preponderance of trade beads and other artifacts related to these activities.

In contrast the artifacts from Fort Owen show that trading with native populations and hunting were relatively unimportant. In fact, the vast number of specimens deal with farming, ranching, and logging, and indicate that these activities were very important to the residents of the Fort.

After all the artifacts had been placed into these ten classes based upon their function, the problem was then: What do these artifacts tell us about the Fort and the people who lived there? A study of both the historical and archaeological aspects of this problem brought forth one clear point; there were two distinct occupational horizons

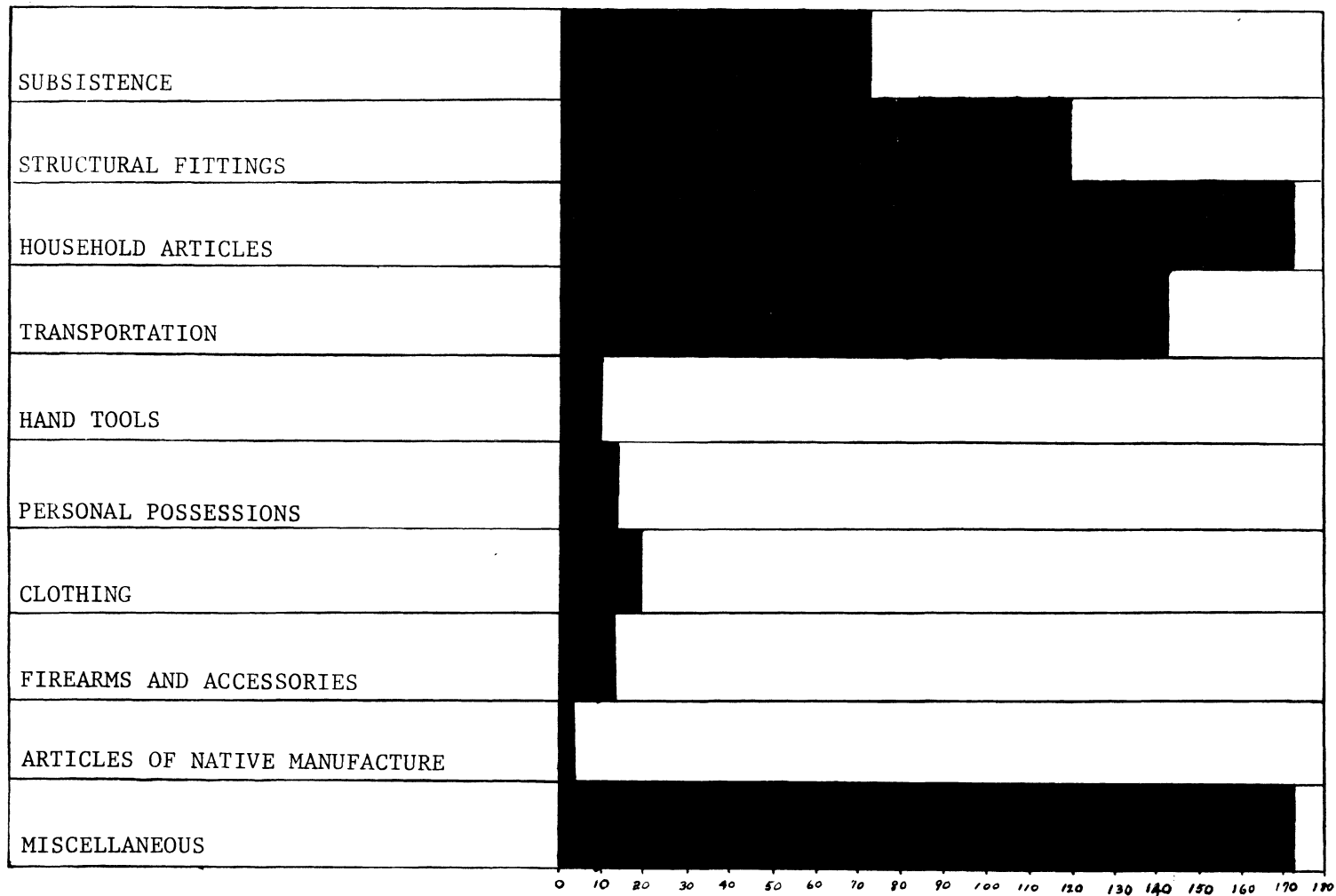


Table 1.--Distribution of Fort Owen Artifacts into Ten Classes Used in This Study

present at Fort Owen. The first was a period between 1850 and the 1870's and the second was a period of occupation by individual families between the 1880's and about 1910.

### Period 1

The first period of occupancy at Fort Owen is the historic era with which this study is primarily concerned. It was during this time that the Fort was constructed and commerce was carried on with travelers and immigrants bound westward. There is a wealth of historic literature available on the early days of the Fort, including a daily journal kept by John Owen. Thus the general activities of Fort Owen and the events which surrounded it are of no mystery to the scholar. There were, however, gaps in our knowledge of certain cultural aspects of this site which the writer feels have been partially filled now in light of the information available from the archaeological analysis used in this study.

First of all, much of the material recovered from Fort Owen came from a dump located outside the west barracks. Old photographs show a window in this location and apparently garbage and other objects were simply thrown out a window into this dump. As a result fragments of iron stone dishes, bone, and plain iron utensils were found which gives us an indication of the material culture and eating customs of the inhabitants. For the most part, the earthenware

artifacts were of a cheap white glazed iron stone variety with little or no design. The knives, forks, and spoons were also basically plain and it is apparent that beauty and form were not important qualities for tableware to these early pioneers. Better articles, if they had them, did not show up in this dump.

The faunal remains from this dump are made up mostly of cut rib bones from beef cattle. Although this material was not dated, the amount and location of it indicates that the main meals during the whole time of occupancy at Fort Owen were centered around roast beef. Major Owen mentioned frequently in his journals of killing and eating of young beef steers. There were also a certain amounts of bird and fish bones present which hints that these too may have formed at least part of their diet. These meats were probably supplemented with vegetables and fruits which were stored in the root cellar.

Since the one source of business at Fort Owen was trading, it appears odd upon first glance that more articles of trade were not located here. Compared with other posts and forts where thousands of glass beads were excavated, the amount of beads found at Fort Owen is indeed small and insignificant. It appears that trade with the Indians for goods was of secondary importance and that the bulk of the business was carried on with white immigrants. It is also possible that these beads represent the earlier stages of the trading

activities, and as the West developed more and more interest was soon given to cash paying settlers.

Probably the largest collection of artifacts in the entire Fort came from the southeast bastion. Objects apparently were stored here over a number of years until it became a junk pile. Most of the specimens found there were articles dealing with wagons, horses, and machinery of various kinds. Almost half of the total number of artifacts recovered during the five years of fieldwork came from this feature, and certainly indicate the importance of wagons and farriery to the inhabitants of the Fort.

A few medicine bottles were also found in the region of the bastions and some of these may be remnants of a supply once kept in the southwest bastion by a doctor in the 1850's. Several wine and other beverage bottles also found lend considerable credibility to stories of John Owen's excessive drinking, especially during his final years at the Fort.

Over 100 of the artifacts recovered from Fort Owen were objects related to the construction of the Fort. The excavations at Fort Owen revealed that this site was approximately 120 feet wide and 210 feet long. Surrounding the buildings and courtyard was an adobe wall 2 1/2 feet thick with a foundation of large stones. The main entrance to the Fort was a wooden gate centered in the south wall and was flanked by two adobe bastions 10 feet square on both the southeast and southwest corners.

The principal buildings within the walls were two rectangular shaped adobe barracks located adjacent to the east and west walls. The east barracks, which is still standing, is a structure 90 feet long and 18 feet wide. Originally it was partitioned into four separate rooms; the first being a library and office located in the southern end of the building; the second, a bedroom next to this room; the third and fourth, two dormitories in the northern end of the barracks. The first two rooms were divided by thick walls with large open fireplaces built into them to provide heat, and glass windows were located on both the east and west walls to provide light. The interior surfaces of the barracks were lined with a type of white plaster, probably in an attempt to lighten the inside. Access into the east barracks was through three doors located on the west side of the building.

The west barracks, located across the courtyard, is not now standing. This structure was about 80 feet long and 18 feet wide and divided into three separate rooms. The southernmost was the kitchen, and next to that was the dining room. The northernmost room was a trade goods supply room. Like the east barracks this building was separated by thick adobe walls and the remains of an open fireplace were located between the kitchen and the dining room.

Details of the flooring were learned as a result of the excavations in that area. Wooden floor joists 6 inches

by 8 inches were laid lengthways (north-south) in the barracks on a dirt foundation approximately three feet apart, then wooden planks 6 inches wide were nailed over these running in an east-west direction. The west barracks also had the similar set of windows and doors like those found in the east barracks. Although the east barracks had been partially restored during the time of the excavations and much of the original detail lost, it is assumed that the flooring and other features were similar to those found in the west barracks.

Surrounding the west barracks on the south and east sides was a wooden boardwalk 2 1/2 feet wide. The construction consisted of braces 2 inches by 6 inches running the length of the building with planks nailed across the top. Again it is presumed that a similar feature was found at the east barracks.

Other important structures found in the Fort included a stone and dirt root cellar approximately 15 feet square with a door on the west wall and an outhouse located south of the west barracks. North of the west barracks was a stable and probably a small blacksmith's shop where repairs on wagons and fittings for the livestock could be made, and a well was located in the center of the courtyard.

From its beginning in 1850 to approximately 1862, the major activities of Fort Owen were centered around trading and the construction of the various structures



found there. Major Owen was involved in many trips to obtain trade goods which took him to Oregon, Washington, and Eastern Montana, and occupied a good deal of his time. Immigrants heading west found Fort Owen and the Bitterroot Valley a good place to trade and to rest their livestock.

Because the Fort was mostly self-sufficient, agricultural activities were important in the daily life, and as a result a grist mill was operated nearby to make flour. Likewise, a small lumber mill provided logs and lumber for the construction for the buildings and palisades of the Fort. Thus it appears from the artifacts examined that most days at the Fort were spent working at these various jobs. The few women there probably were busy with domestic duties, and John Owen mentioned in his journal that his wife Nancy spent considerable time fishing in the Bitterroot River and picking berries for the table.

Recreation and social life consisted mainly of visiting with neighbors and the immigrants in the area. Holidays such as Christmas, New Years, and the Fourth of July were celebrated with parties, dancing, and drinking.

### Period 2

This latter period of the Fort's occupancy is shown in both the literature and the artifacts located within its confines. Photographs dating back to the 1880's show a family with children living in the east barracks of the

Fort, and other sources speak of persons living there until about 1912 when the west barracks were pulled down to avoid an accidental cave-in on children playing in the area.

Archaeologically there are several artifacts which date exclusively in this period, and show proof of family household activities taking place. There are dishes (English imports), cartridges, rifles, dolls, and fruit jars present which all date post 1880.

Farm implements and wagon parts, which were so important to the early inhabitants of the Fort, were also related to this later period. Three universal joints, of a kind used on early tractors, were found in the southwest bastion and indicate that perhaps mechanization was replacing horse-drawn rigs about the turn of the century. Probably much of the metal junk found in the southeast bastion is from this period and may have been parts of various machines.

### Conclusions

There appear to have been relatively few material culture changes between the periods of occupancy at Fort Owen. It is true that many artifacts of a better quality such as dishes, cut glass, and porcelain dolls were found in the latter period as compared with the simple utensils which were used in period 1. There were also some improvements in the metal objects, the earlier forms generally

being hand forged and the later materials were usually machine made. Over a span of sixty years that the Fort was occupied, the basic economy changed from trading to agriculture and yet the day-to-day life probably changed very little.

The faunal remains from the west barracks dump tell us that eating preferences remained basically the same and that beef roasts were the main staple. Although the area abounded in game, there is little more than a suggestion that these animals were used for food.

The relatively few number of personal possessions found, especially from the early period, indicates that life was rather harsh and that the extras remained second to the needs for tools, wagon parts, and machinery so necessary for survival.

## LITERATURE CITED

### ANONYMOUS

- 1920 Daily Missoulian, September 12.  
1927 Roundup Tribune, August 25.  
1928 Missoulian, September 2.  
1930 Daniels County Leader, March 27.

### ARTHUR, GEORGE

- 1961 Unpublished Field Notes on Fort Owen. University of Montana. Missoula, Montana.

### BLUMENSTEIN, LYNN

- 1963 Old Time Bottles Found in The Ghost Towns. Old Time Bottle Publishing Co. Salem, Oregon.  
1966 Bottle Rush, U.S.A. Old Time Bottle Publishing Co. Salem, Oregon.

### BROSE, DAVID S. AND DAVID W. RUPP

- 1967 The Custer Road Dump Site: An Exercise in Victorian Archaeology. The Michigan Archaeologist Vol. 13 No. 2. Michigan Archaeology Society. Ann Arbor, Michigan.

### BURROUGHS, RAYMOND D.

- 1961 The Natural History of the Lewis & Clark Expedition. Michigan State University Press. Lansing, Michigan.

### BURTON, W. AND R. L. HOBSON

- 1919 Handbook of Marks on Pottery and Porcelain. London, England.

### CALLAWAY, LEWIS L.

- 1950 Route of the Covered Wagon 1865, Itinerary of the Mullen Road From the Missouri to the Columbia. Montana Magazine of History Vol. I No. 2. Montana Historical Society. Helena, Montana.

### CARMICHAEL, GLENN A.

- 1961 Unpublished Field Notes on Fort Owen. University of Montana. Missoula, Montana.

- COX, LEWIS L.  
1944 The Book of Pottery and Porcelain. Vol. II.  
Crown Publishers. New York, New York.
- DICKENSON, LOUISE  
1960 Unpublished Field Notes on Fort Owen. Univer-  
sity of Montana. Missoula, Montana.
- DUNBAR, SEYMOUR AND PAUL C. PHILLIPS  
1927 Owens Journals and Letters. Vol. I and II.  
Edward Eberstadt, Publisher. New York, New York.
- EWERS, JOHN C.  
1965 Artists of the Old West. Doubleday & Co.  
Garden City, New York.
- FAWCETT, CLARA H.  
1964 Dolls: A New Guide For Collectors. Charles T.  
Branford Co. Boston, Mass.
- FERRARO, BOB AND PAT  
1966 A Bottle Collector's Book. Western Printing &  
Publishing Co. Sparks, Nevada.
- FLORIAN, MARTIN REV.  
1965 The Story of St. Mary's Mission. Stevensville,  
Montana.
- FORBIS, RICHARD  
1951 The Flathead Apostasy: An Interpretation.  
Montana Magazine of History. Vol. I No. 4  
pp. 35-40. Montana Historical Society.  
Helena, Montana.
- GARRAGHAN, GILBERT J.  
1938 The Jesuits of the Middle United States.  
Vol. II. New York American Press. New York,  
New York.
- HAGOOD, DONALD M.  
1958 Unpublished Field Notes on Fort Owen. Univer-  
sity of Montana. Missoula, Montana.
- HOWARD, HELEN A.  
1963 Northwest Trail Blazers. Caxton Printers Ltd.  
Caldwell, Idaho.
- HUSSER, JOHN A.  
1957 The History of Fort Vancouver and its Physical  
Structure. Washington State Historical Society.  
Seattle, Washington.

- HUTCHISON, DAVID M.  
 1959 Volcanic Ash in the Bitterroot Valley. Ravalli County Montana. Unpublished Master's Thesis. University of Montana. Missoula, Montana.
- KIRKWOOD, J. E.  
 1930 Northern Rocky Mountain Trees and Shrubs. Stanford University Press. Stanford University, California.
- MILLER, CARL F.  
 1960 The Excavation and Investigation of Fort Lookout Trading Post II (site 39lm57) in the Fort Randall Reservoir, South Dakota. River Basin Survey Papers. Smithsonian Institution, Bureau of American Ethnology, Bulletin 176.
- MINNA, ARDRIS  
 1959 Unpublished Field Notes on Fort Owen. University of Montana. Missoula, Montana.
- OLSON, HAROLD D.  
 1958 Unpublished Field Notes on Fort Owen. University of Montana. Missoula, Montana.
- ORCHARD, WILLIAM C.  
 1929 Beads and Beadwork of the American Indians. Museum of the American Indian, Heye Foundation Contributions No. 11.
- PALLIDINO, FATHER  
 1894 Indian and White in the Northwest. John Murphy & Co. Baltimore, Maryland.
- PARTOLL, ALBERT J.  
 1939 Fort Connah, A Frontier Trading Post 1846-1871. Pacific Northwest Quarterly. Vol. 30, pp. 399-415. University of Washington. University Station. Seattle, Washington.
- REYNOLDS, HELEN M.  
 1937 Some Chapters on the History of the Bitterroot Valley. Unpublished Master's Thesis. University of Montana. Missoula, Montana.
- ROUSE, IRVING  
 1960 The Classification of Artifacts in Archaeology. American Antiquity, Vol. 25 No. 3 pp. 313-323. Salt Lake City.

SHAEFFER, CLAUDE

- 1937 The First Jesuit Mission To the Flathead 1840-1850: A Study in Culture Conflict. Pacific Northwest Quarterly Vol. 28 pp. 227-250. University of Washington. Seattle, Washington.

SMITH, HUBERT G.

- 1960 Fort Pierre II (39ST217) A Historical Trading Post in the Oahe Dam Area, South Dakota. River Basin Survey Papers. Smithsonian Institution, Bureau of American Ethnology Bulletin 176.

STUBBS, RON D.

- 1966 An Investigation of the Edible & Medicinal Plants Used by the Flathead. Unpublished Master's Thesis. University of Montana. Missoula, Montana.

STONE, ARTHUR L.

- 1913 Following Old Trails. Missoulian Publishing Co. Missoula, Montana.

TAYLOR, MARGARET M.

- 1962 A Dictionary of Marks. New York, New York.

TAYLOR, DEE C.

- 1958 Unpublished Field Notes on Fort Owen. University of Montana. Missoula, Montana.

- 1962 Archaeological Investigations of the Elkhorn Ranch Site. Report to the National Park Service. University of Montana. Missoula, Montana.

TOOLE, KENNETH R.

- 1959 Montana An Uncommon Land. Norman, University of Oklahoma Press.

WEISEL, GEORGE F.

- 1953 The Diary of John F. Dobson; His Journey From Illinois To His Death At Fort Owen in 1852. Montana Magazine of History Vol. 3 No. 2 pp. 24-33. Montana Historical Society. Helena, Montana.

- 1955 Men and Trade on the Northwest Frontier as Shown By the Fort Owen Ledger. University of Montana Press. Missoula, Montana.

- 1956 Fish Guide For Intermountain Montana. University of Montana Press. Missoula, Montana.

- WILLARD, DANIEL E.  
1935 Montana, The Geological Story. Science Press.  
Lancaster, Penn.
- WHITEFORD, A. H.  
1947 Description for Artifact Analysis. American  
Antiquity, Vol. 12, No. 4 pp. 226-237. Menasha.
- WOOD, SERRY  
1959 English Staffordshire. Watkin Glen, New York.
- WOOLWORTH, ALAN R. AND RAYMOND W. WOOD  
1960 The Archaeology of a Small Trading Post, Kipp's  
Post (32MN1) In the Garrison Reservoir, North  
Dakota. River Basin Survey Papers. Smithsonian  
Institution, Bureau of American Ethnology  
Bulletin 176.