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THE
COCHRANE
RANCHE
SITE

Roderick J. Heitzmann



Alberta

CULTURE
Historical Resources

THE COCHRANE RANCHE
HISTORIC SITE:
ARCHAEOLOGICAL EXCAVATIONS, 1977

By
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OCCASIONAL PAPERS

Papers for publication in this series of monographs are produced by or for the four branches of the Historical Resources Division of Alberta Culture: the Provincial Archives of Alberta, the Provincial Museum of Alberta, the Historic Sites Service and the Archaeological Survey of Alberta. Those persons or institutions interested in particular subject sub-series may obtain publication lists from the appropriate branches, and may purchase copies of the publications from the following address:

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Objectives

These Occasional Papers are designed to permit the rapid dissemination of information resulting from Historical Resources' programmes. They are intended primarily for interested specialists, rather than as popular publications for general readers. In the interests of making information available quickly to these specialists, normal publication procedures have been abbreviated.

ABSTRACT

In 1977, archaeological investigations were carried out at Cochrane Ranch prior to the development of the central ranch site as an historic park. The investigations obtained general information about the ranch period of the late 19th century in Western Canada, provided detailed construction information on two buildings, identified the material culture of the inhabitants and provided some evidence of behavioural differences between occupants of the two major residential structures.

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The research here presented was undertaken under Archaeological Research Permit No. 77-71 issued to Michael Forsman, Historic Sites Archaeologist, Archaeological Survey of Alberta. Excavations were carried out under the supervision of Rod Heitzmann. The project was supported by Alberta Culture through the Archaeological Survey of Alberta and the Alberta Historic Sites Service, and by the Alberta Solicitor's General Department.

INTRODUCTION

Archaeological excavations at Cochrane Ranche Historic Site (R7C): EhPo-37, were undertaken by personnel of the Archaeological Survey of Alberta at the request of the Historic Sites Service from July 15 to October 24, 1977. The purpose of the research was to provide information about the historic ranch occupation of the Cochrane Ranche Company and the British American Ranche Company (1881-1888) prior to the development of the area as an historic park by Alberta Culture.

The excavations were carried out under supervision of the author. The work force usually consisted of six to ten inmates from the Calgary Correctional Institute provided through the Inmate Work Programme of the Alberta Solicitor's General Department.

Two buildings, the manager's residence and a bunkhouse, and a well were excavated. Large quantities of historic artifacts were recovered in the excavations. Analysis of the artifacts indicates that these buildings were most intensely occupied in the period 1881 to 1905. There are some indications of social differences between inhabitants of the two buildings.

The excavations at Cochrane Ranche allow a preliminary definition of late 19th century ranching culture component in Alberta. The identification and description of the material culture at the site should aid the study of Western Canadian history. The construction data could permit reconstruction of the two residential buildings.

HISTORICAL BACKGROUND

HISTORY OF COCHRANE RANCHE

In 1881, the North West was on the brink of becoming the great Canadian frontier. The Canadian Pacific Railway was building its link across the continent to join Eastern Canada with British Columbia. The treaties with the plains Indians and control of the plains by the North West Mounted Police meant that colonization and settlement were both possible and desirable.

Development in the Canadian West did not follow the pattern of rowdy and unruly roughness that was experienced in the American West. The Conservative Party policy of Sir John A. MacDonald was directed towards a controlled settlement of Western Canada, as befitted a nation committed to British ideals. Part of this policy was directed toward creating a ranching elite (Breen 1976: 151) through the granting of grazing leases up to 100,000 acres under an amendment of the Dominion Lands Act in 1876.

However, it was not until 1881 that the first grazing lease was issued to the Cochrane Ranche Company Limited, incorporated by a powerful group of eastern capitalists under the leadership of Senator Matthew Cochrane of Quebec (Naftel 1973: 80). The economic potential of this event was significant. Never before was there so great a demand for food in the west. The bison were on the edge of extinction. The Indians and the North West Mounted Police needed food, and the railway would bring more people as agriculturalists and ranchers, all of whom would be interested in raising cattle for food and stock.

The first individuals or companies to take up a grazing lease had many advantages. With the construction of the railway and the great influx of people it would bring, there would be an increasing demand for land and a rise in property values. To be the first to obtain a grazing area meant the company had a wide choice of land locations: the possibility of choosing land that had access to the railway, to population centres and major Indian Reserves. Obtaining the first lease also meant that an area could be chosen with good ranching and agricultural potential.

The Cochrane Ranche Company was to capitalize on their advantageous pioneering situation. With a capitalization of \$500,000, the company was granted a huge lease that straddled the proposed route of the C.P.R., west of Calgary. The lease contained good agricultural land, especially in the valley of the Bow River, as well as good grazing land in the surrounding hills. The ranch was close to the N.W.M.P. Post and town of Calgary, to Morley, a mission settlement, and to both the Stoney and Sarcee Indian Reservations; all of which provided potential markets. The climate of the Bow Valley was known to be advantageous too, for the frequent chinook winds provided periods of moderation to otherwise long cold winters.

The first ranch manager was James Walker, who retired from the N.W.M.P. with the rank of Superintendent. He chose the building site west of the "Big Hill" beside Big Hill Creek where the creek valley joined the major Bow Valley (Figure 1). The north slope of the valley protected the site from the harsh north winds and reflected the sun onto the south-facing buildings. The flat valley floor and higher terraces were covered with the long grass of the Rocky Mountain foothills. The steeper slopes were covered with tall straight pines. This site was to be the heart of a grazing lease which covered close to five townships.

The ranch then needed but one ingredient, cattle. In the fall of 1881, the I.G. Baker Company contracted to move 6,800 head of cattle from the American border to the ranch. The cattle were driven hard to reach Cochrane Ranche before the onslaught of winter. Many head died on the move and, although the cattle arrived before the snow fell, many more were fatally weakened by the trip. Lack of winter fodder and poor herding practices, combined with a severe winter, led to the loss of considerable stock (Brown 1956: 7). The herd was augmented in 1882 by yet more American cattle but similar severe winter conditions, as well as cattle sales, reduced the total of 12,000 head to only 4,000 by the spring of 1883.

The number of cattle on the ranch can be summarized as follows:

			Approximate Total Head on Ranch
Fall	1881 from the U.S.	6,799 (Naftel n.d.:82)	6,799
1 April	1882 estimate of stock loss	1,000 (Naftel n.d.:82)	5,700

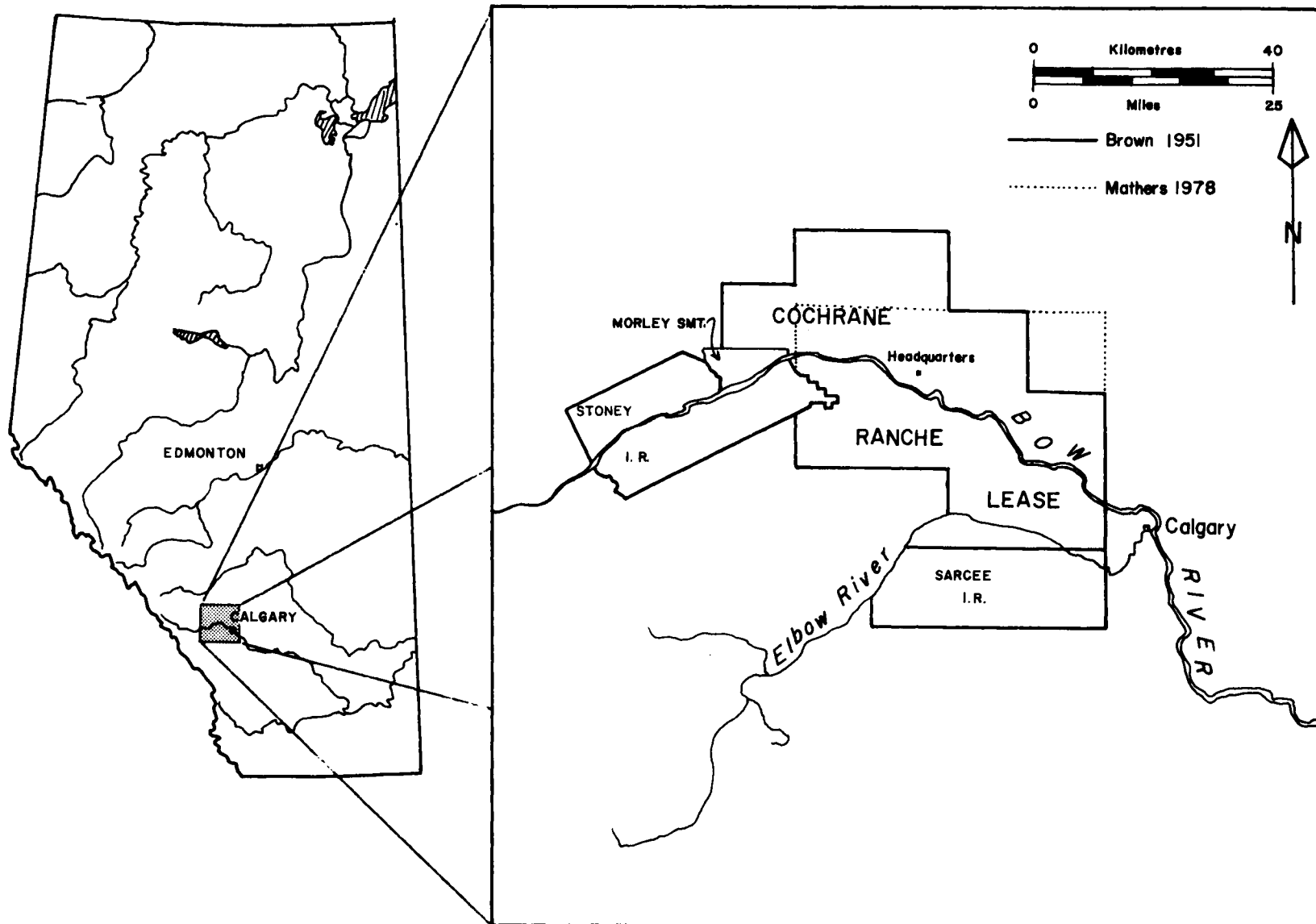


Figure 1: Location of Cochrane Ranche, Alberta, 1881-1889.

			Approximate Total Head on Ranch
19 Oct.	1882 from the U.S.	4,290 (Naftel n.d.:93)	9,900
June	1883 estimate of stock loss	3,000+ (Naftel n.d.:94)	
1881-1883	Sales (approximately)	2,000	
Spring	1883 estimate of stock remaining	4,000 (Naftel n.d.:95)	4,000

Of the cattle sold, approximately twenty head a month were supplied to the police barracks and the company's butcher shop in Calgary. The Sarcee Indian Reserve was supplied with about twenty-five head a month, the Stoney of Morleyville took about twenty head, and the Blackfeet at Blackfoot Crossing about one hundred and thirty, which made a total of two hundred head a month (White 1946: 8).

The losses of cattle during the two winters of 1881/1882 and 1882/1883 were significant. The winters were exceptionally cold and the effects of the chinook winds were discovered to be less favorable than anticipated. Only limited amounts of hay had been put up for the winters. In addition, the herd was bunched rather than allowed to wander freely over the range, as fences were few and there was some fear of depredations by Indians and rustlers.

As a result of these losses, the company decided to seek new pastures farther south. The Cochrane Rancho Company obtained a new lease on the Belly River and relocated the herd there in 1883. The lease at the Big Hill was re-incorporated under the name of the British American Rancho Company and restocked with horses. In 1884, 8,000 sheep were introduced as another component of the ranch in the hopes that sheep ranching would be more viable.

The completion of the railway and the tremendous influx of homesteaders led to considerable pressure to break up such large parcels of land. As the lease on the Bow Valley was so close to the railway and Calgary, additional pressure was exerted towards its being opened to settlement. In 1887, the ranch was divided along the Bow River and the horses were moved to the south side of the river. In 1888, 7,000 sheep and 41,000 acres of the original leased ranch were offered for sale.

THE RANCH BUILDINGS

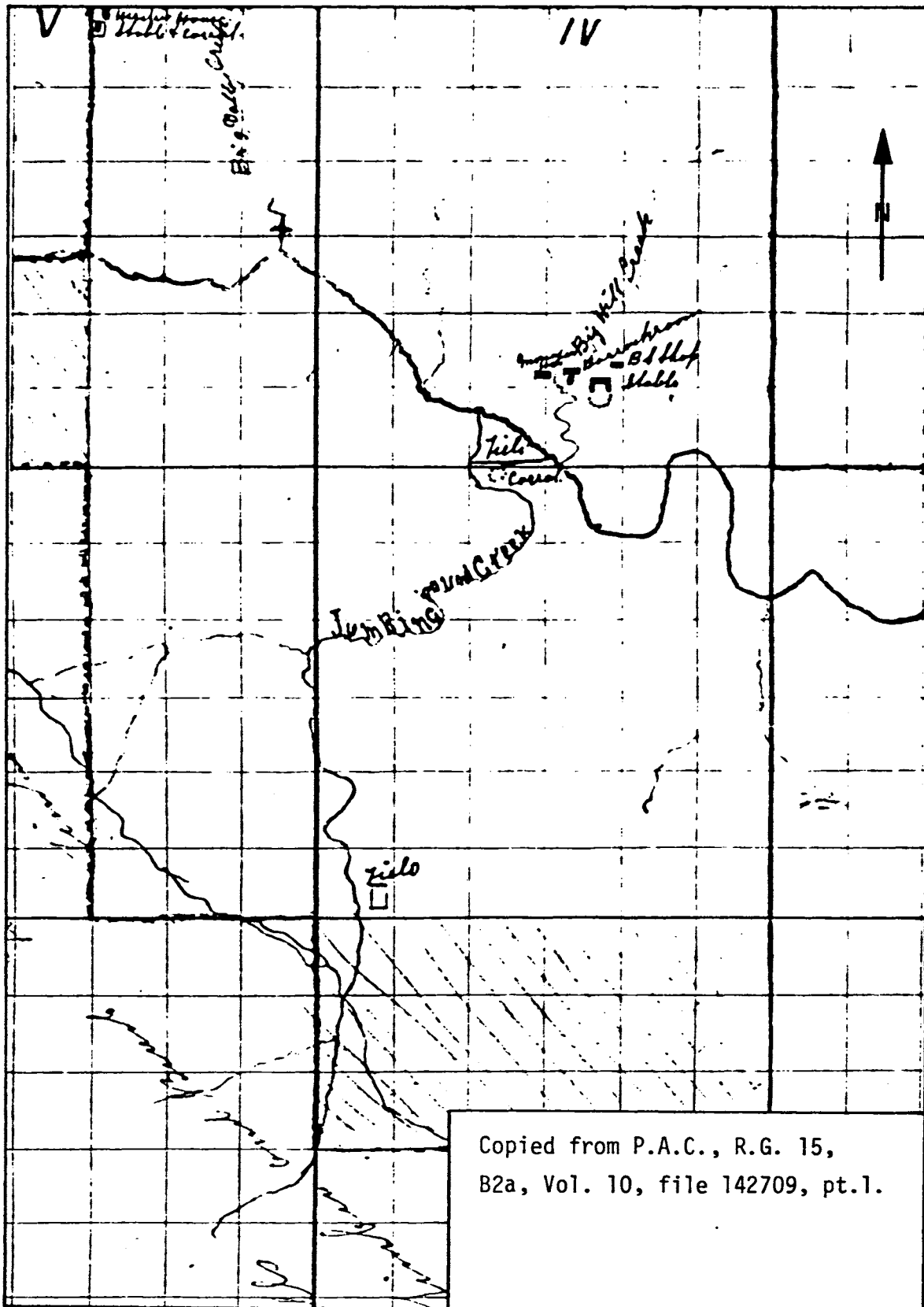
The first buildings were undoubtedly erected during the summer and fall of 1881. Walker's plan of the ranch, probably drawn in the spring of 1882, reveals four buildings: a manager's residence, a T-shaped bunkhouse, a blacksmith shop, and a stable with corral (Babcock 1977: 2; Figure 2, this paper). Only one of these buildings, the manager's house, was situated on the west side of the Big Hill Creek.

In August, 1884, George Ross, Dominion Land Surveyor, mapped the ranch headquarters of the British American Rancho Company. That plan shows four buildings: three log houses and a log stable (Figure 3). Two of the houses were located on the west side of Big Hill Creek and the third house and the stable are positioned on the east bank.

The two buildings on the west side of the creek are the primary subject of this report. From 1889 to 1895 the site was occupied by W.B. Elliot, who used these buildings as the headquarters for a small farm (Mather 1978). After 1895, the site was used for a variety of activities: a brick yard, 1898-1919; a dairy, 1919-1950; and a ranch operation, 1950-1971 (Adams 1975).

SOCIAL CONDITIONS AT COCHRANE RANCHE

The system of large leased ranges established a kind of class system in the Canadian West. "Stock raising, unlike farming, demanded an initial capital investment that was substantial and therefore tended to eliminate those of lesser means" (Breen 1976: 153). The owners of the leases were generally upper or middle class residents of Eastern Canada or England. The men chosen to manage the large company ranches were very much of the same background. At Cochrane Rancho the managers were James Walker, Frank White, A.E. Cross, and finally Ernest Cochrane. Each of these men were well educated and "of good family". James Walker was a former N.W.M.P. superintendent. Frank White's brother was the personal secretary of John A. MacDonald in 1880-1882. A.E. Cross was the son of a prominent Montreal jurist (Mather 1978). The last manager of the ranch was Ernest Cochrane, the Senator's youngest son. These men contributed to a manager-employee relationship that was "... particularly suitable for the support of the English Country Estate Ethos" (Breen 1976: 153).



Copied from P.A.C., R.G. 15,
B2a, Vol. 10, file 142709, pt.1.

Figure 2: Portion of James Walker's Map of the Cochrane Ranche, 1882.

*PLAN OF
THE TRAVERSE OF IMPROVEMENTS
of
"BRITISH AMERICAN RANCHE CO."
(Limited)*

In Sec^s 3 & 10, T² 20, R. 1, W. 5TH M.

Scale 20 Chains to an Inch.

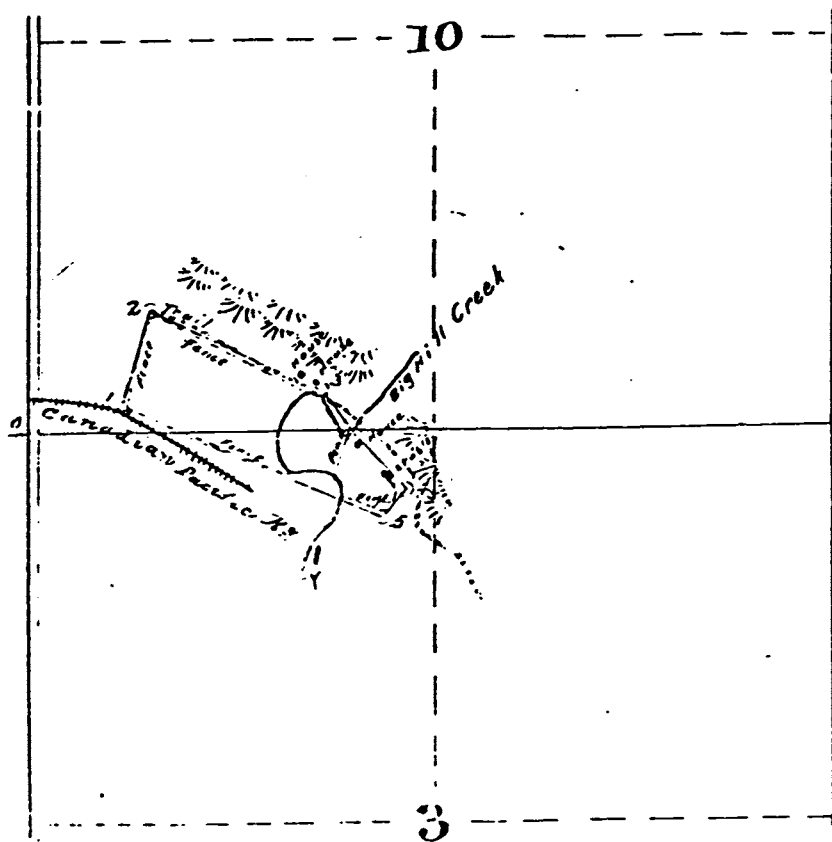


Figure 3: George Ross Survey of the Site in 1884.

Cowboys and rangemen formed a second class of men on the ranches. These were often drifters, many from the United States and the east but generally possessing little education or wealth. Often they would work for a short time to obtain money for stock or improvements to their own slowly-developing "spreads". These people eventually led the fight which resulted in the disintegration of the large lease-held lands.

The class distinction hinted at by historical documentations was given further credence by results of the archaeological investigations. This interpretation was supported by an examination of type, frequency and distribution of the artifacts recovered at Cochrane Rancho.

THE BUNKHOUSE (R7C1)

A building marked "bunkhouse" or "barracks" appears on opposite sides of the creek on the 1882 Walker plan and the 1886 Ross survey (Figures 2 and 3). The building discussed below is on the west side of the Big Hill Creek as indicated by Ross. This building remained standing until it was dismantled by the Historic Sites Service in 1977. There has been considerable discussion as to the date of construction (Babcock 1977). This report provides much new information relating to this aspect.

CONSTRUCTION

The bunkhouse at Cochrane Ranche appears to have been built in several stages. The final configuration is that of an inverted "T" - shape (Figure 4). In recent times the east wing contained two bedrooms and a living room. The west wing contained additional bedrooms and the central wing was a dining room. The junction of the "T" was occupied by a short stairway connecting the dining room with the livingroom. At the base of the "T" was a root cellar or pantry. To the west of the dining area was a small frame kitchen. Most of the building was log construction with saddle-notched corners, except the kitchen and the west wall of the west wing which were of frame construction.

Prior to excavations, each room in the building was given an operation number (see Figure 5). Investigation involved the removal of floor boards from all areas and the excavation below these floors to locate historic information. Excavations were also carried out beside the root cellar at the rear of the dining room. In front of the building a brick veranda was uncovered, with a wooden step in front of the front door.

East Wing

Living Room and Bedrooms: The east wing (Figure 6) may have contained the oldest component in this building. The floor structures were of two types. Double flooring running north-south extended across the entire area. Lower plants (7.5 x 1.5 cm) were covered by tongue and groove (7.5 x 1.5 cm) flooring. In the area of the sleeping rooms (R7C7 and 71) these were attached to rough, partly-axed log joists, with cut nails.

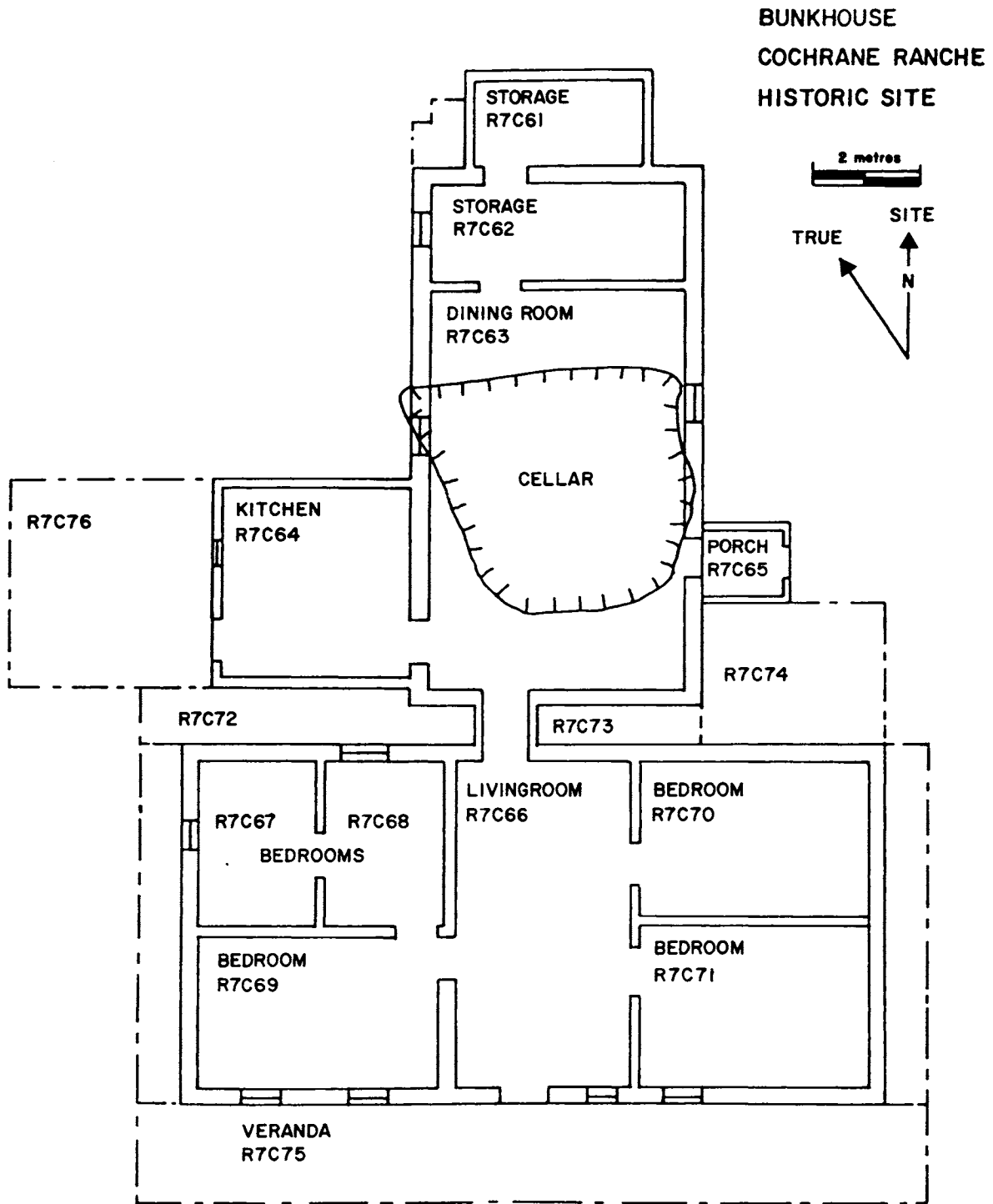


Figure 5: Bunkhouse Excavations, Operation - Artifact Provenience Units.

COCHRANE RANCHE HISTORIC SITE
1977 EXCAVATIONS
BUNKHOUSE, EAST WING

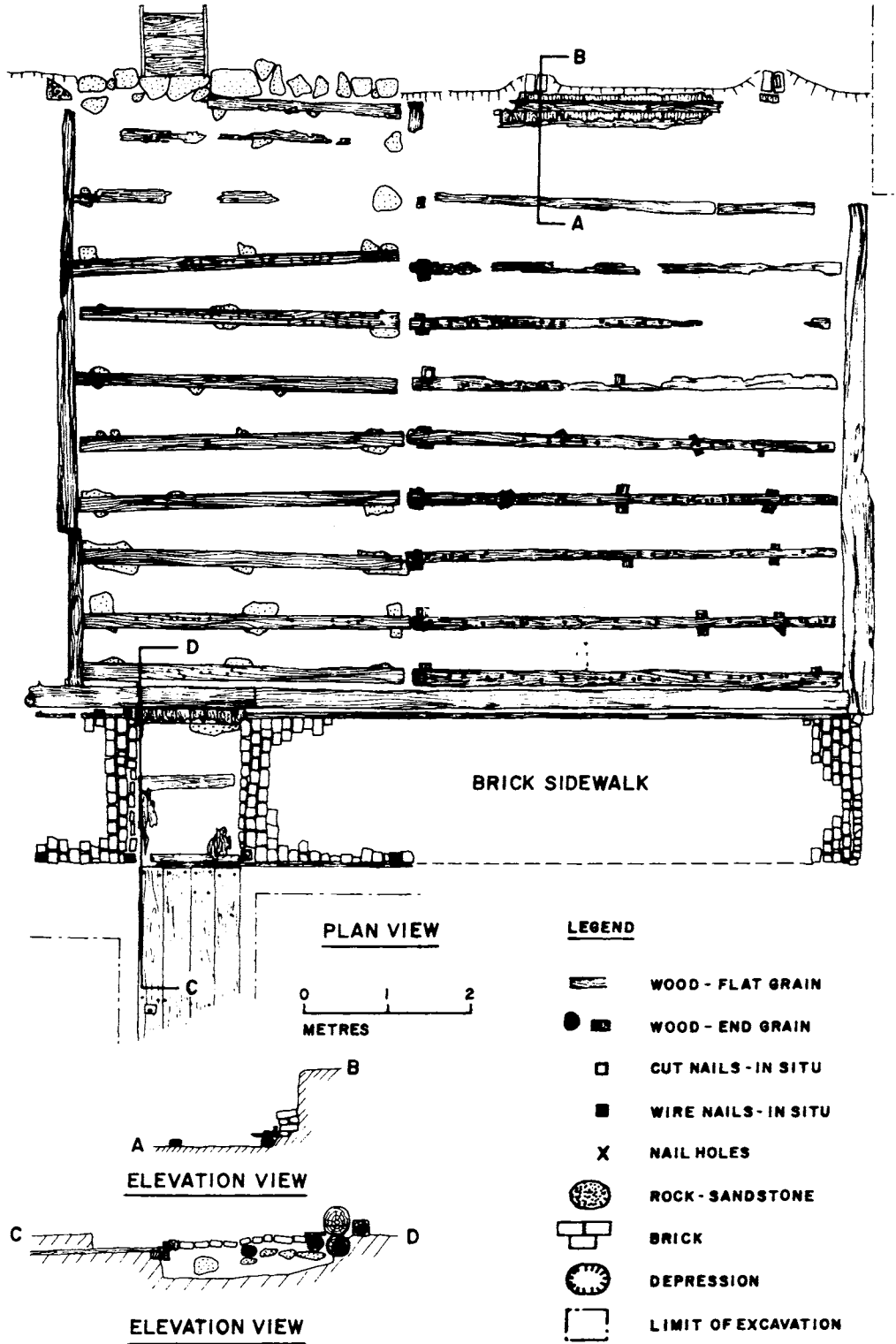
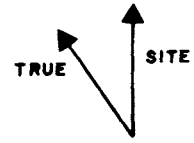


Figure 6: Bunkhouse, Structural Remains of East Wing

These joists in turn were placed on small wooden milled shims irregularly spaced. In the area under the living room, however, the floor boards were attached to milled joists (15.8 x 15.8 cm) with primarily wire nails. These joists were placed on rough sandstone shims. In both cases, the joists were spaced at approximately 45 cm intervals.

Under the east and north walls of this building, small support columns of small, locally-made bricks were present. These may have been added some time after 1898 to support already sagging and possibly rotting walls. Along the north side of the living room area, on either side of the stairway was a low retaining wall of sandstone blocks (Figure 7).

Veranda: A veranda or sidewalk was uncovered along the front of the building. This veranda had a width of 150 cm and was made of locally manufactured brick. Almost without exception these bricks could be called "seconds"; many were incomplete, cracked or broken. Bricks were made on the site in large numbers from 1898-1919 (Adams 1975:11). A wooden frame surrounded the edges of the veranda. In the centre of the veranda and in front of the main door of the house was a wooden step 10 cm above the veranda level (Figure 8). Along its outer edge were remnants of upright posts placed at irregular intervals which supported the veranda roof. These uprights were square posts measuring approximately 10 x 10 cm.

Extending from the front step and veranda was a wooden boardwalk. This walk is 102 cm wide and extends out from the main doorway 5.30 m. (Figure 9). The walk was composed of four planks, each 25.0 x 2.5 cm. These were nailed to underlying cross pieces with wire nails.

Stairway: The stairway/passageway from the lower area to the upper dining room was of considerable interest. Along the north wall of the living room ran a low sandstone retaining wall composed of rough flat sandstone flags without mortar. This wall did not extend the full length of the building but only the width of the living room. This stone retaining wall flanked the stairway which was built of wood and had four vertical risers. A number of rough sandstones were piled randomly under the wood steps. The function of these sandstones and the retaining wall is unknown but may be related to keeping the wood dry and free of rot. Alternative suggestions are that they constituted rubble from the cutting



Figure 7: Bunkhouse, Sandstone Retaining Wall.



Figure 8: Bunkhouse, Veranda in Front of Main Door.

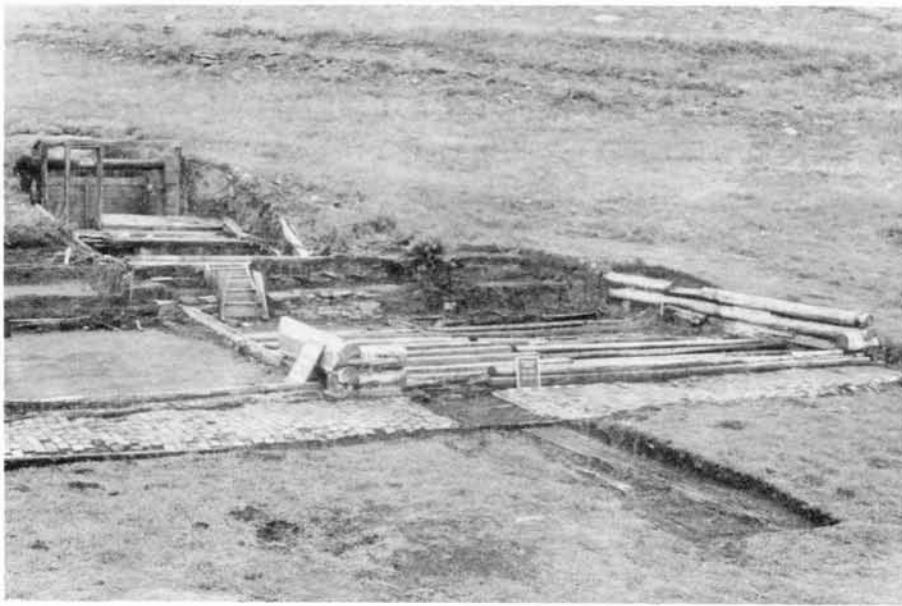


Figure 9: Bunkhouse, View of Brick Veranda and Wooden Boardwalk.

of a stairway through a continuous wall or are remnants of a collapsed stone stairway. If this latter were the case, they would not have been effective in blocking out the cold.

West Wing and Kitchen

Bedroom: The west wing (Figure 10) has been interpreted as a later addition (Babcock 1977). This conclusion is based principally on the frame construction of the west wall. In this area a few floor joists were located along the north wall, running north-south. The floor boards in this area would therefore have run east-west. In the northeast corner of this wing, a large irregular cement block may have supported the logs of the north wall. The building's west wall was of frame construction and built upon a foundation of sandstone and brick rubble. Within this rubble was found a penny dated 1920.

Kitchen: The kitchen was a frame constructed late addition. Two floor support boards (4½ x 9 cm) were laid at right angles to form a cross beneath the floor. On the west side of this building was a wooden step and boardwalk. This boardwalk extended 2.5 m west of the kitchen. Beside the step was a broken spade set upright into the ground as a boot scraper. Along the exterior south wall of the kitchen was a narrow trench (approximately 25 cm wide) which contained numerous spent cartridge cases and coal chips. This trench had a wood plank laid lengthwise and on its side on the south side of the trench. The function of this trench is not clear but it may have been used for coal storage.

North Wing

Dining Room: Research investigations in the dining room area of the North Wing (Figure 11) consisted first of the removal of the linoleum floor coverings which had newspaper underlinings dating to 1929 and 1937 (Figure 12). After the floor boards had been removed, the spaces between the joists were excavated. The joists were rough logs, broad-axed on one surface. There were no shims and the joists were spaced approximately 40 cm apart. The floor boards were connected to the joists with both cut and wire nails.

**COCHRANE RANCHE HISTORIC SITE
1977 EXCAVATIONS
BUNKHOUSE, WEST WING & KITCHEN**

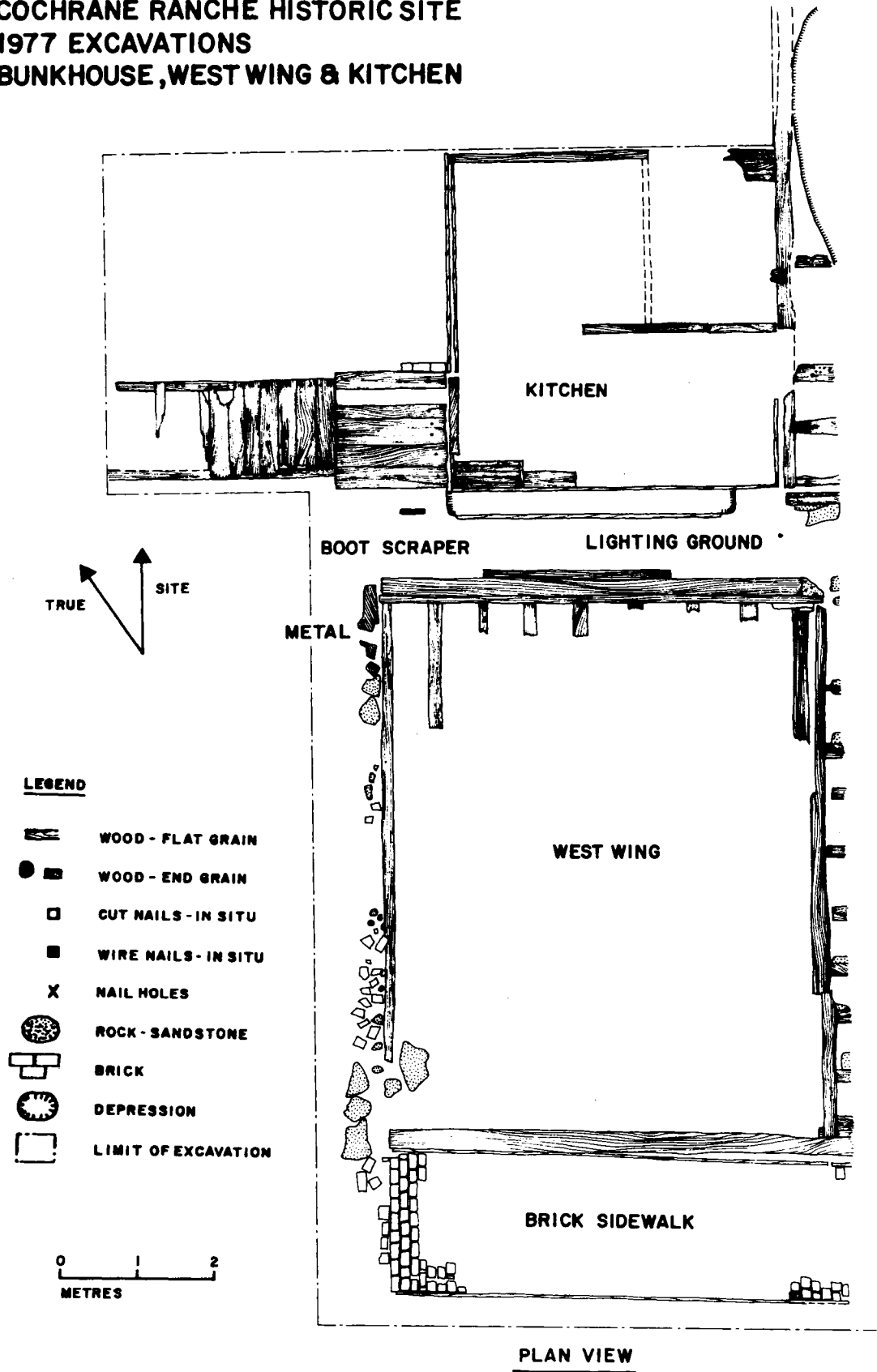
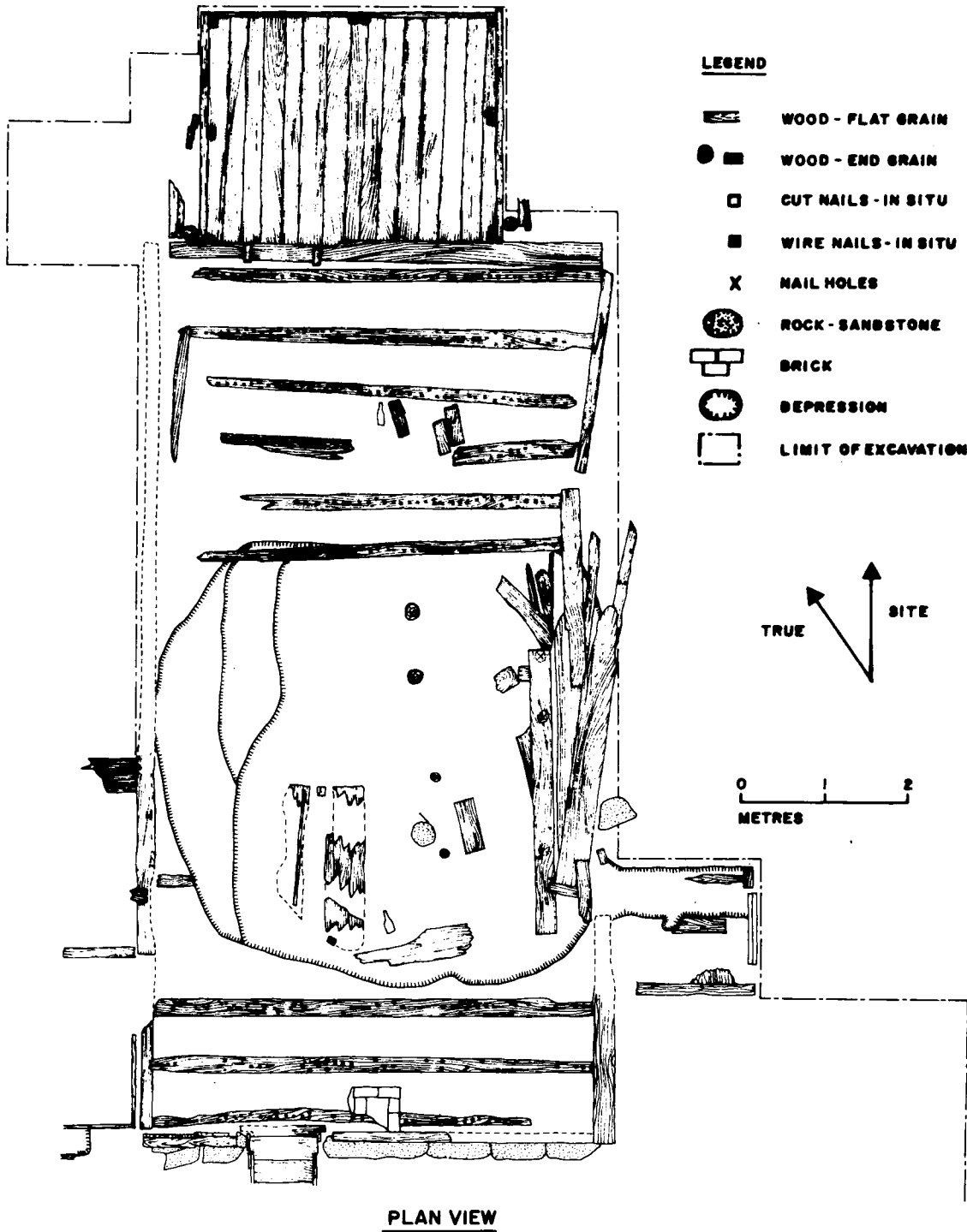


Figure 10: Bunkhouse, Structural Remains of West Wing and Kitchen.



**COCHRANE RANCHE HISTORIC SITE
1977 EXCAVATIONS
NORTH WING**

Figure 11: Bunkhouse, Structural Remains of North Wing.

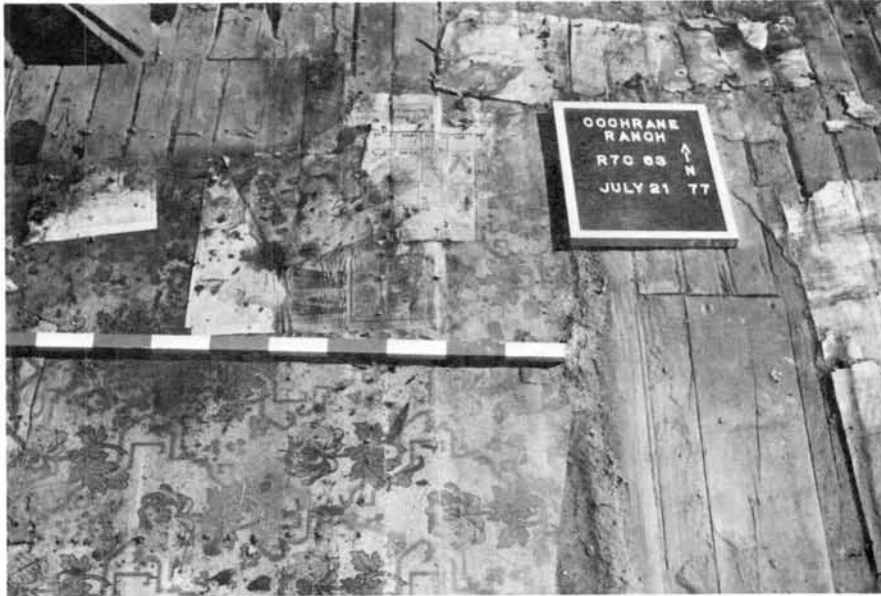


Figure 12: Dining Room Floor, Scale in 10 cm Increments.



Figure 13: Dining Room, Brick Chimney Base, View to East.

At the south end of the dining room was a brick chimney built of bricks labeled CHELTENHAM ST. LOUIS; brick size 22 x 11 cm (Figure 13).

The centre of this area overlaid a large cellar approximately 4 x 4 meters. This cellar was reached by a wooden stairway from the dining room. The east and west walls of the cellar were wooden retaining walls constructed of log uprights, with loose plank horizontal bracing. These retaining walls may have been a necessary refurbishing after the cellar collapsed either during its original excavation or some time after construction. The actual edges of the cellar extended further east and west than did the building walls and so the retaining walls were required to support the soft unconsolidated gravels.

At the north end of the dining room along the east and west walls were external retaining walls. These were built of planks and uprights ($4\frac{1}{2}$ x 9 cm). These seem to have functioned as insulation and to keep the log walls of the building dry and rot-free.

Root Cellar: North of the dining room there was a root cellar. The floor of this cellar was approximately 45 cm below the level of the dining room. Investigations here involved removal of the sod roof and roof planking (Figure 14). The roof had a layer of sod about 20 cm thick. This covered two layers of wooden planks (generally 5 x 26 cm). This roof was attached to single 15 x 5 cm boards at the front and rear of the root cellar. At the centre was a log crossbeam 20 to 25 cm in diameter. Cuts at various locations along the log indicate that it had been "recycled".

Excavations were also carried out on the west outer side of this root cellar. Here there seems to have been a double walling system. The lower 85 cm of the outer wall was composed of small logs laid lengthwise against upright posts at the corners of the cellar. Above this was a plank and upright board ($4\frac{1}{2}$ x 9 cm) system. On the inside of the corner posts large planks (5 x 26 cm) had been nailed horizontally. Upright boards (15 x 5 cm) had been used to brace these planks and to provide support for interior shelving.

CONSTRUCTION SEQUENCE

The Cochrane Rancho bunkhouse was clearly built in a number of separate

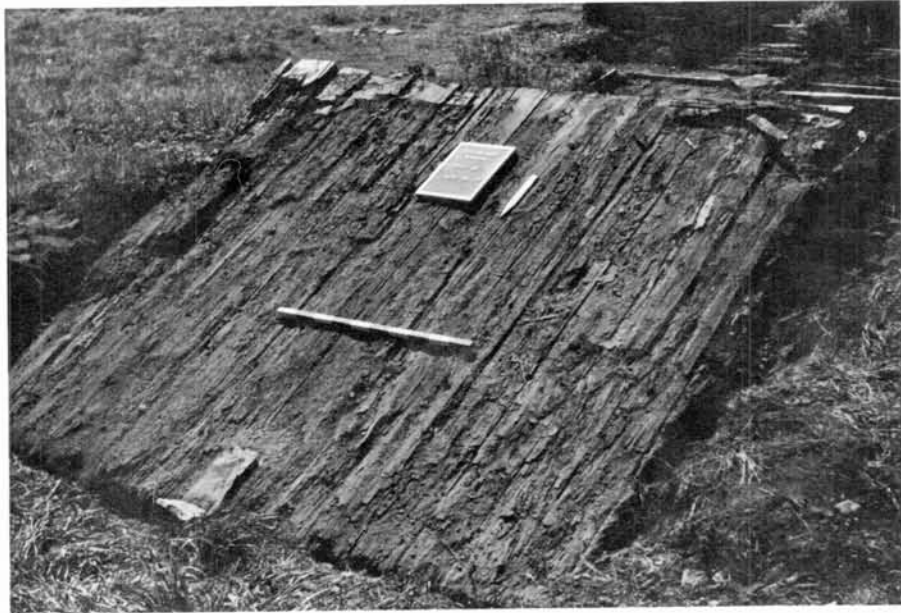


Figure 14: Root Cellar Roof.

stages. The following statements attempt to establish the proper sequence of construction of the bunkhouse:

1. There were five basic parts to the bunkhouse:
 - (a) east wing (divided into living room and bedrooms).
 - (b) west wing (bedrooms).
 - (c) north wing (dining area).
 - (d) kitchen.
 - (e) root cellar.
2. Two separate sources of information can be used for dating:
 - (a) historic records.
 - (b) archaeological data relating to the construction phases.

Historic Records and Archaeological Data

1. James Walker's 1882 map was assumed to be correct in representing the relative locations and configurations of the main buildings (Figure 2).
2. George Ross's 1884 land survey was also considered to be correct in two important respects (Figure 3):
 - i) Distance measurements and building location.
 - ii) Representation of overall building plans.This assumption is based on the facts that:
 - a) The distances on George Ross's survey (Figure 3) were given to the corners of major buildings, and given in hundredths of chains (Brown 1961).
 - b) The shape and orientation of buildings were also represented. In Ross's survey notes the "log house" and "log stable" on the east side of the creek were clearly identified and their overall plans represented (Brown 1961).
3. On Walker's 1882 map the only building west of the creek was labelled the "manager's house" (Figure 2).
4. A new bunkhouse was reported under construction in October 1882 (White 1946:241).
5. Ross's 1884 survey map illustrated two "log houses" west of the creek (Figure 3).
6. The westernmost log house had a surveyed east-west dimension of 9.05 m. The archaeological length of the westernmost excavated structure was 9.25 m.

7. The distance between the buildings was surveyed at 22.93 m. The archaeologically determined distance was 18.20 m. The difference here was 3.73 m.
8. The second "log building" had a surveyed length of 8.45 m. The archaeologically determined east-west dimension was 12.5 m. The difference here was 3.95 m.
9. Both structures had a square shape; that is, no "wings".
10. The manager's house burned in 1906 (Babcock 1977:4). The westernmost excavated structure was found to have burned, and dated to the early 20th century.

Architectural Factors

1. Overall plan of the bunkhouse had a "T" shape.
2. West wing -
 - a) no shims under joists, joists lie north-south.
 - b) cut nails in flooring.
 - c) brick sidewalk along south side.
 - d) brick rubble under west wall, 1920 cent piece in rubble.
 - e) west wall of frame construction with wire nails, other walls of logs.
 - f) concrete block under north-east corner of log walls.
3. East wing -
 - a) bedroom area - board shims under joists, joists are logs or hewn log, joists lie east-west, high frequency of cut nails, 1937 penny between floors.
 - b) living room area - sandstone shims under joists, joists are of milled timber, joists lie east-west and do not overlap with joists under bedroom, high frequency of wire nails in joists.
 - c) foundation - sandstone wall under logs north of living room area, brick piers under east wall and under logs north of the bedroom area.
 - d) sidewalks - brick walk extends full length of south wall, wooden boardwalk in front of door has wire nails in its construction.
4. North wing -
 - a) shims not known under joists.
 - b) log joists laid east-west, high frequency of cut nails in joists.
 - c) brick under south joist but not a shim.
 - d) 1929 and 1937 newspapers under the linoleum.

Discussion

From the above it should be obvious that improvements or modifications had been made to almost all the constructional elements of the bunkhouse.

An estimate of the modifications was derived from the following:

1. As the difference between the surveyed distance of the two buildings in 1884 was 22.93 m and the archaeologically-determined distance was 18.20 m with a variance of 3.73 m, this difference could be accounted for if the west wing had not been added until after 1884. This was confirmed in that a difference of 3.95 m existed between the surveyed length of 8.45 m and the archaeologically-observed length of 12.50 m.
2. In the 1884 survey both buildings had a square or rectangular shape. Consequently it was interpreted that the dining room area, kitchen and root cellar had not yet been added by that date.
3. As the brick sidewalk on the front of the house runs the full length of the building with no evidence of joists, it was concluded that the walk was added after the west wing had been added.
4. As the walk is composed of brick which appeared to have been locally made as well as being "seconds"; that is, generally soft and largely broken, it could be assumed that the walk was added in the brick-making period (1898-1919).
5. Similarly, bricks were used extensively as supports under several walls. These appeared to be supports which were added sometime after the walls had been erected.
6. The variations in floor construction included use of different joists, shims and nails. This suggested that some and probably all floors were rebuilt at some time during the life of the building.

From these data an hypothesized construction sequence may be inferred:

1. construction of east wing, 1882 - 1883
2. construction of dining area - after 1884
3. construction of west wing - after 1884 but before 1898
4. addition of brick walk, 1898 - 1919
5. addition of brick foundation supports - after 1898
6. rebuilding of floors (before 1929 in the dining area and before 1937 in the east wing).
7. construction of the root cellar sometime after the construction of the dining area.

TABLE I: ARTIFACT GROUPS FROM THE BUNKHOUSE

Operations	Kitchen	Architectural	Furniture	Arms	Tools	Transportation	Clothing	Personals	Others	Total Number	Known Usage
61	57/58.8	32/33.0	1/1.0	--	1/1.0	5/5.2	---	1/1.0	---	97	Root Cellar
63	140/54.7	81/31.6	5/1.9	1/0.4	1/0.4	1/0.4	8/3.1	12/4.7	7/2.8	256	Dining Room/Cellar
64	68/24.3	175/62.5	7/2.5	3/1.1	4/1.4	1/0.4	12/4.3	4/1.4	6/2.1	280	Kitchen
66	6/12.0	34/68.0	1/2.0	3/6.0	---	---	2/4.0	2/4.0	2/4.0	50	Living Room
67	37/67.3	17/30.9	---	---	1/1.8	---	---	---	---	55	Bedroom
69	10/17.9	30/53.6	---	4/7.1	2/3.6	---	4/7.1	4/7.1	2/3.6	56	Bedroom
70	24/21.0	76/66.7	1/0.9	3/2.6	2/1.7	---	6/5.3	1/0.9	1/0.9	117	Bedroom
71	17/33.3	22/43.1	---	3/5.9	---	---	---	3/5.9	6/11.8	51	Bedroom
72	239/48.6	176/35.8	3/0.6	27/5.5	3/0.6	9/1.8	16/3.3	8/1.6	11/2.2	492	Midden
73	151/65.4	55/23.8	5/2.2	---	3/1.2	5/2.2	5/2.2	5/2.2	2/0.8	231	Midden
74	130/57.0	62/27.2	5/2.2	4/1.8	5/2.2	---	9/3.9	10/4.4	3/1.3	228	Midden
<hr/>											
TOTAL	879/46.0	760/39.8	28/1.5	48/2.5	22/1.2	21/1.1	62/2.6	50/2.6	40/2.1	1910	

Actual number of artifacts/Percentage of all artifacts in the operation.

ARTIFACT DISTRIBUTIONS AND ACTIVITY AREAS

Large numbers of artifacts were recovered from the bunkhouse (Table 1). Of the total 1,910 artifacts, 46% were classified in the kitchen group. Of these, 59.3% came from three midden areas. Only 23.6% came from the known kitchen and dining room areas (Appendix 1).

Most of the kitchen artifacts were either bottles or ceramics. Of the total 61 identifiable bottles, 28% (17) were medicinal or condiment bottles, 11.5% (seven) were tall bottles, that is, alcohol or liquor bottles, 24.5% (15) were pop or beer bottles and 36% (22) were screw-top bottles.

Ceramics form another large class of artifacts. There were 20 complete vessels identified (Table 2).

TABLE 2: IDENTIFIED CERAMIC FORMS RECOVERED FROM THE BUNKHOUSE

Form	Number	Per Cent
Cup	1	5.0
Saucers	4	20.0
Plates	8	40.0
Bowls	6	30.0
Flower Pot	1	5.0
	<hr/>	<hr/>
	20	100.0

Of those vessels with identifiable manufacturer's marks, four date after 1891, one dates to the period 1871-1890 and one was manufactured after 1908 (Table 3).

Many other kitchen items were recovered. These included a variety of glassware; bottle stoppers of cork, glass or metal; food storage jars, lids and cups; wooden box fragments, a wooden clothes pin and some fruit pips.

Architectural wares form 39.8% of the total artifact assemblage from the bunkhouse (Table 1). Of these, 38.6% came from three midden areas while 33.7% came from the kitchen and dining room areas. The configuration of the 330 measurable nails were 63% cut and 37% wire. The different lengths of nails are plotted on Figure 18. All the door knobs recovered were metal.

Other architectural items included linoleum fragments, door hinges and electrical fittings (Appendix 2).

Only limited evidence of furnishings were found - less than 1.5% of the total assemblage of the bunkhouse (Table 1). Very few furniture items were found in bedroom areas and most were from the middens or the kitchen and dining room. One stove fragment was marked CANADA 14/FRONT END/REGISTERED 1906. This stove related to the period of occupation in the bunkhouse by the family of E. Davis after 1905 (Babcock 1977: 4). Four glass lamp chimneys indicated that lighting was originally supplied by kerosene lamps, although an electric light switch and a porcelain light base suggested that electricity was installed later. Of the lamp chimneys recovered, three styles occurred in the bunkhouse (Figure 15). A single bell (R7C72A-1) suggested that a telephone or clock was also part of the bunkhouse furnishings. Other miscellaneous items included a chair cross-piece, a bedstead knob, a drawer handle and a metal hasp (Appendix 3).

TABLE 3: IDENTIFIABLE MANUFACTURERS OF CERAMICS
RECOVERED FROM THE BUNKHOUSE

<u>Ceramic Type*</u>	<u>Pattern Name</u>	<u>Date</u>	<u>Manufacturer</u>
B2	Blue Willow	1891 -	WA ... & Son Staffordshire
B4	... el (?)	1892 - 1941	E. Bourne & J. E. Leigh Burslem, Staffordshire
B7	Colwy	1886 - 1936	Keeling & Co. (Ltd.) Staffordshire
C2	Clarence	1891 - 1920	Ridgeways Hanley, Staffordshire
E2	Ceres or Wheat	1878 - 1891	Robert Cochran & Son Glasgow (other makers are possible)
P11	---	1890 +	J & G Meakin Hanley, Staffordshire
P12	---	1871 - 1890	T. Furnival Hanley, Staffordshire
D6	---	1908 +	Wedgwood & Co. Tunstall, Staffordshire

* See Appendix 1 for further description.

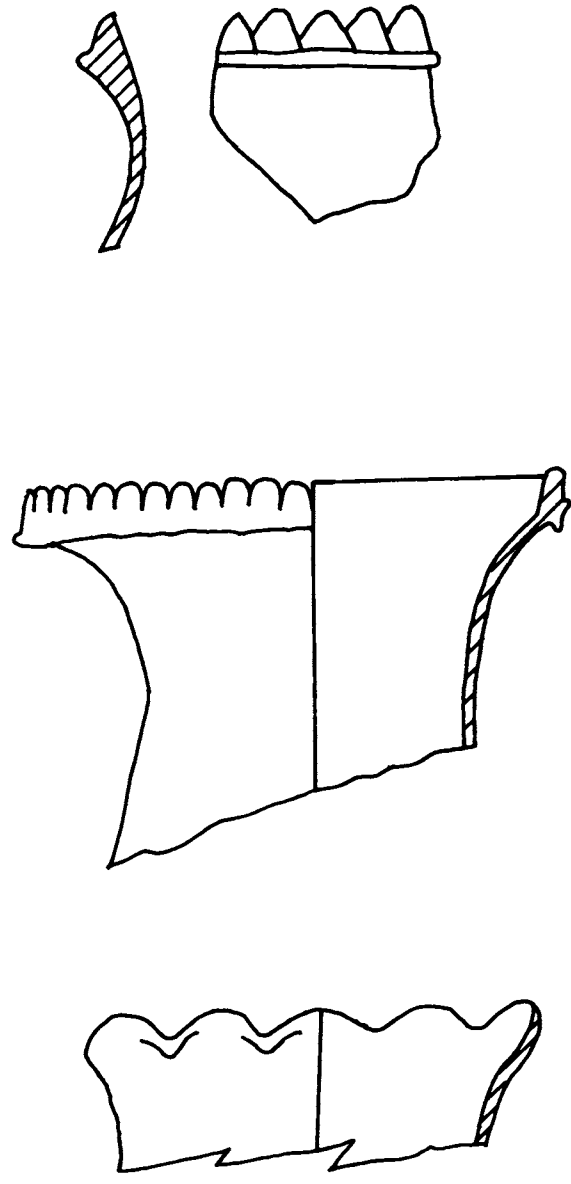


Figure 15: Lamp Chimneys from Bunkhouse, Scale 1:1.

Arms made up 2.5% of the total bunkhouse assemblage. However, this is 46% of all arms recovered site-wide. 56.3% of the arms in the bunkhouse were from a single midden (R7C72). Shotgun shell cases were the most popular type of ammunition compared to rim-fire cartridge cases and centre-fire cartridge cases (Table 4). This preference for shotgun shells is also significant as it formed 65.9% of all shotgun shells on the site. The most commonly used shotgun shells were of British manufacture, followed by American and Canadian shells (Appendix 4).

TABLE 4: ARMS-RELATED ARTIFACTS RECOVERED FROM THE BUNKHOUSE

Type	Number	Per Cent
Rim Fire Cartridges	6	15.4
Centre Fire Cartridges	4	10.3
Shotgun Shells	<u>29</u>	<u>74.3</u>
	39	100.0

The 3.2% of the bunkhouse assemblage that was included in the clothing group was largely composed of buttons. These are plotted on Figure 16. Most of the buttons were from the kitchen area (10), the dining room (6), bedrooms (8) and midden areas (7). The 36 buttons recovered were made of shell (15), glass (4), iron (8) and other materials (9). Other clothing items from the bunkhouse included a garter hook, button hook and three cloth fragments (Appendix 5).

Personal items made up 2.6% of the total artifacts in the bunkhouse. These are plotted on Figure 17. These included beads, coins, harmonica parts, a jack knife, jewellery, pipe fragments, pins, stationery, toys and watch fragments (Appendix 6).

In the bunkhouse, personal items such as hair-pins, a fingernail file and a cuff link were found exclusively in the bedroom areas. It appeared that sports items like a skate blade and a bar bell were stored in the cellar.

Tools found in the bunkhouse are plotted in Figure 18 and listed in Appendix 8. Most of these were located outside the bunkhouse. Not

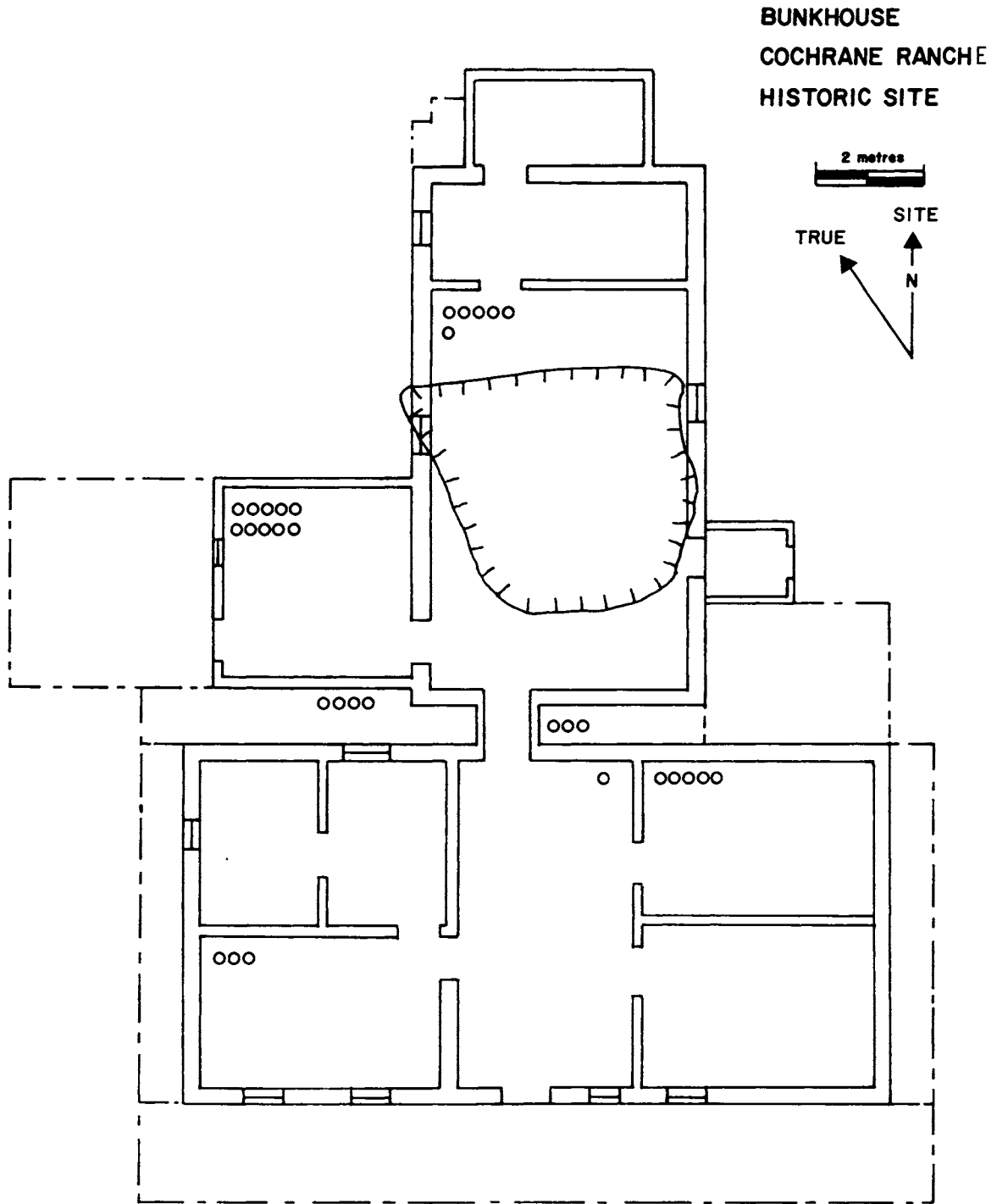


Figure 16: Button Distribution, Bunkhouse

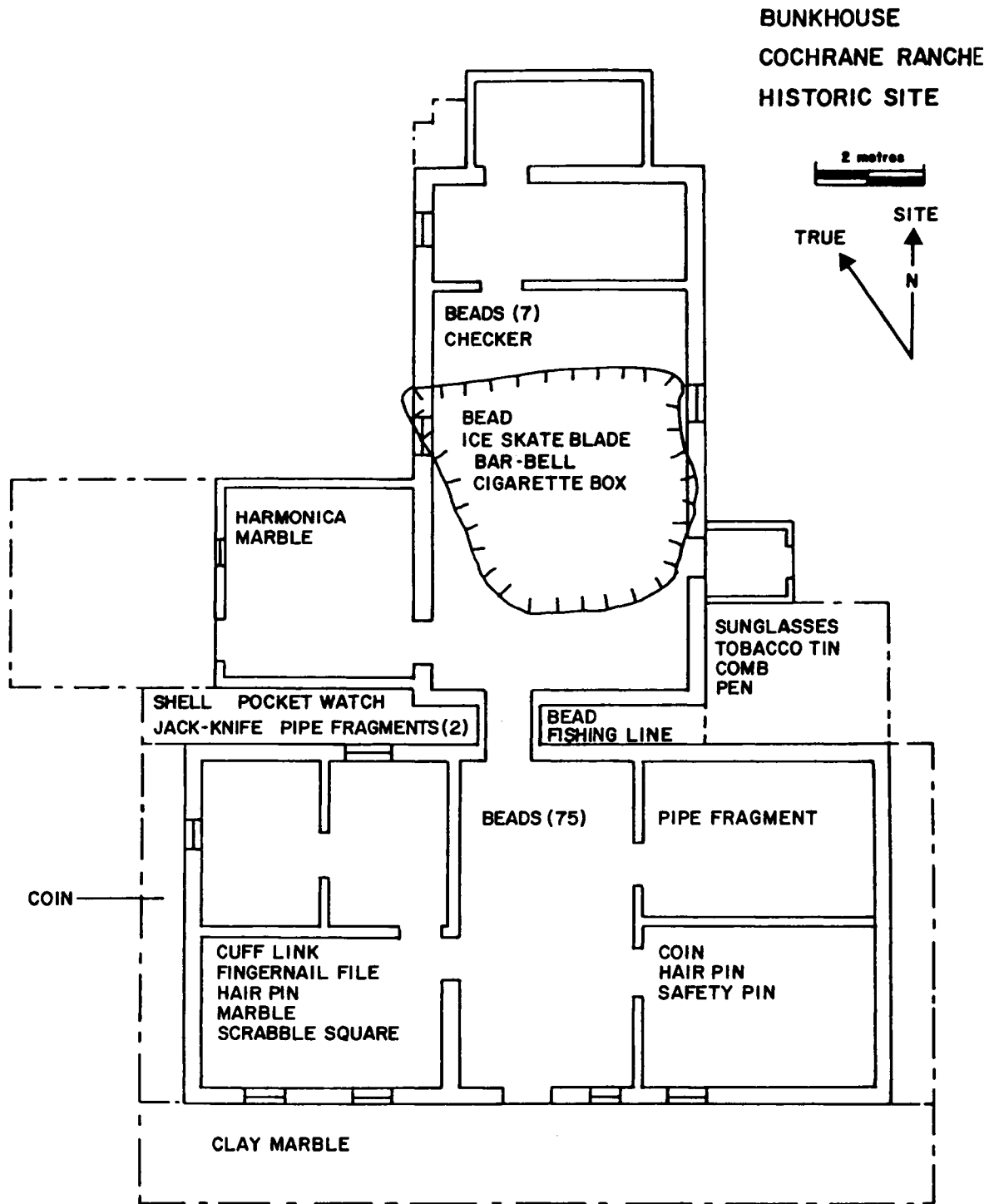


Figure 17: Personal Artifacts Distribution, Bunkhouse

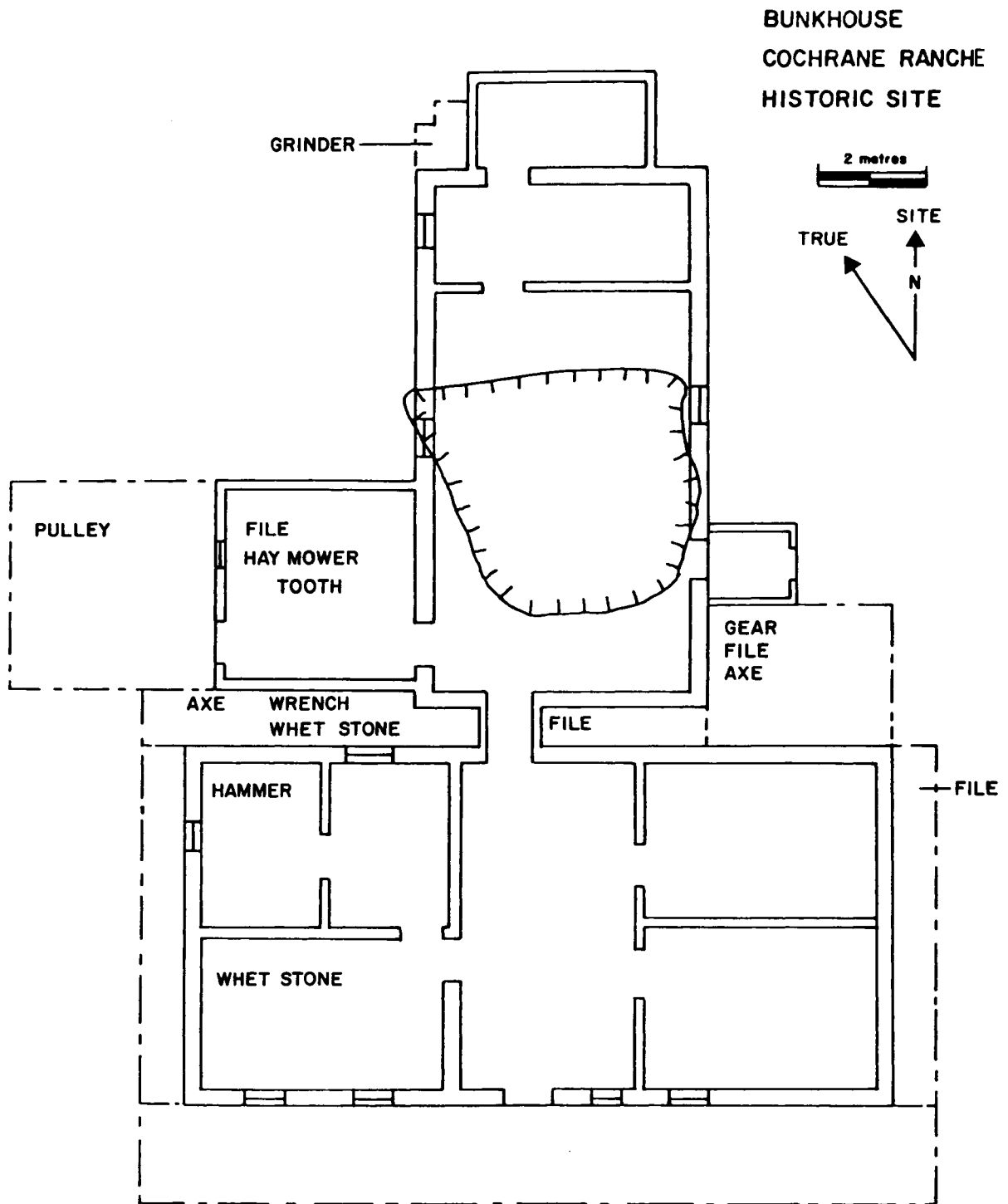


Figure 18: Tool Distribution, Bunkhouse.

surprisingly, woodworking tools were the most common and included four files, two axes and one hammer. Other tools may have been related to farming activity, such as the gear, the haymower tooth, and the pulley.

Discussion

Most of the areas within the bunkhouse have been identified through discussion with informants. Rooms could be identified as being the living room, dining room, kitchen, etc. Much recent archaeological theory has been concerned with identifying activity areas through artifact content analysis: could we identify activity areas within the bunkhouse if we lacked historic activity information? How closely did the artifacts generally identified with specific activities correspond to the known historic activity areas?

Table 1 shows the actual number of artifacts recovered from the bunkhouse. It should be noted that the highest number of kitchen group artifacts came from the dining room-kitchen area and the three midden areas. Architectural items from the kitchen outnumbered those from the dining room area in a ratio of almost 2:1. This may be because the kitchen was built of frame construction whereas the dining room was of log construction.

The number of items in all other groups is lowest from the bedroom areas and highest in the midden areas. It would appear therefore that the type of artifacts is not particularly significant in identifying activity areas in historic buildings. Rather, the relative number of artifacts may indicate areas of high and low levels of tool use. Kitchen and dining areas might be areas of high artifact yield whereas bedroom areas would have low artifact yields.

THE MANAGER'S RESIDENCE (R7C2)

The manager's residence was located approximately 20 meters west of the bunkhouse. This building was erected early in the history of the ranch and appeared on James Walker's 1882 map (Figure 2).

In 1974, Gary Adams excavated several test-trenches which exposed a series of burned floor-boards which were presumed to be evidence of this building. Excavations in 1977 confirmed that a large domestic building was located in this area.

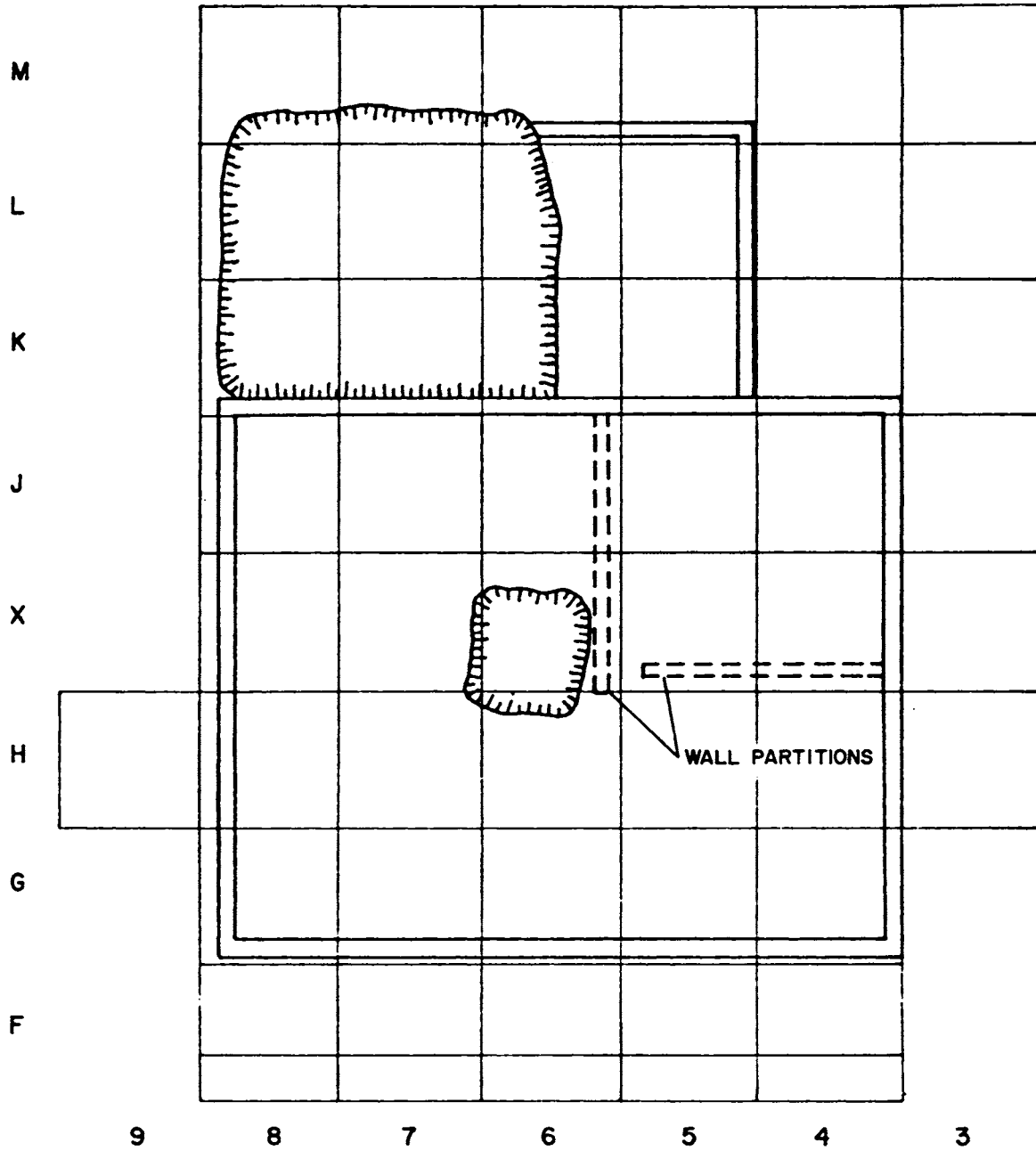
Excavations were carried out using a 2 x 2 meter grid system over the entire area of this building (Figure 19). The overburden (from as little as 15 cm in depth to more than 1 meter) was removed to expose the entire building. Most of the building had been so extensively burned that collapsed upper structural elements such as roof beams were commonly found above the floor. Because of the apparent intensity of the fire, the actual structural configuration of the roof was no longer determinable.

CONSTRUCTION

The manager's house had been built in two main stages. The original building was almost square. To this was later added an addition on the north side, consisting of a kitchen with a large cellar (Figure 20).

In extant photographs from 1887 - 1888, several constructional features could be noted (Figure 21). The walls were composed of squared logs with dove-tailed corners. The front door was located in the middle of the building, with a single window on either side. In front of the building, there was a wooden veranda with six posts supporting the roof. A chimney was present at the approximate centre of the building, and visible in the photographs. One of the photographs shows a window located on the east side of the building.

Dimensions of the original residence were 9.25 m east-west and 9.8 m north-south. The floor of this building had been constructed in a number of different ways. Log floor joists running east-west, were spaced approximately 70 cm apart. Rough sandstone shims were placed under some of the floor joists. On top of the floor joists, double flooring was laid. For most of the building this double flooring consisted of a lower floor

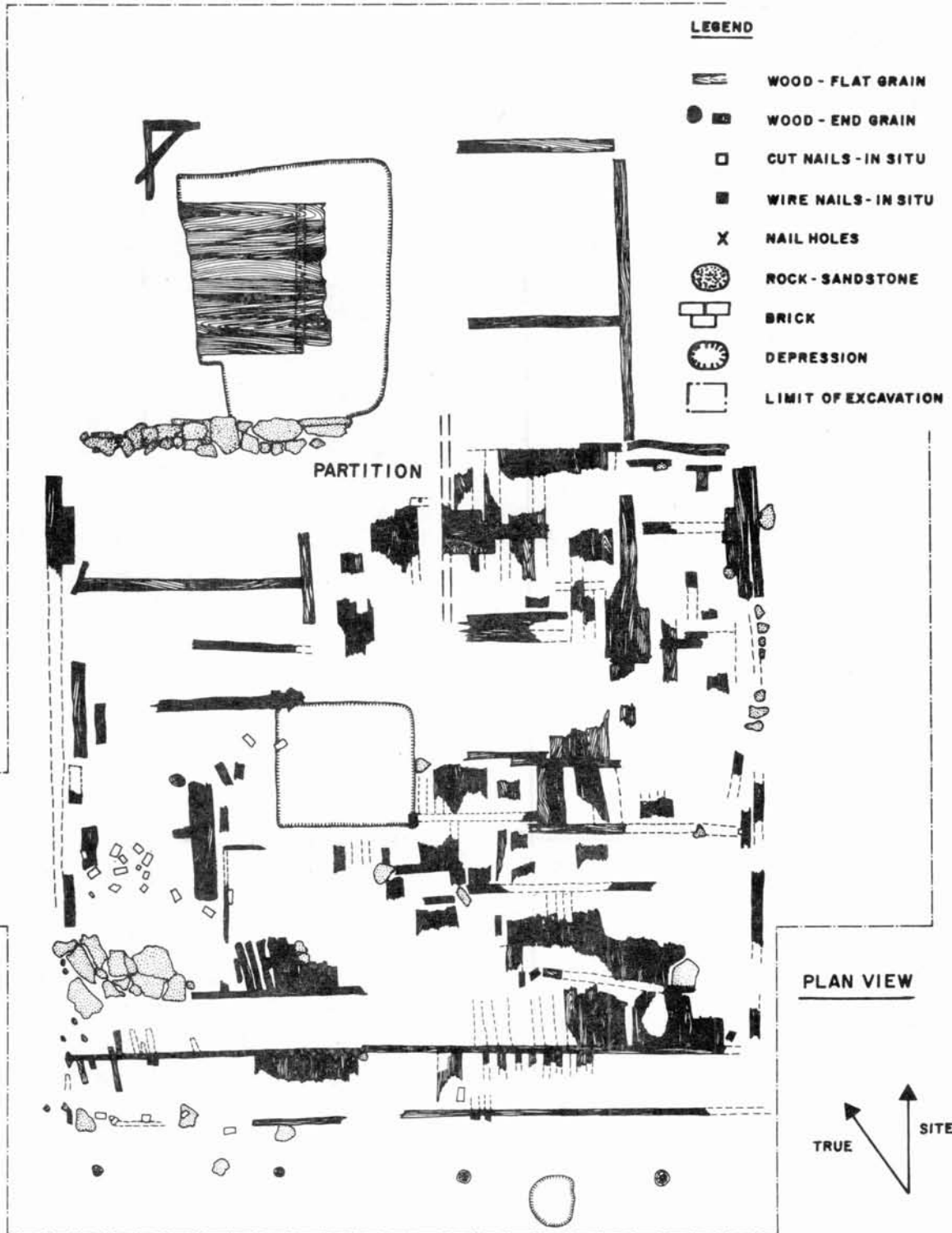


MANAGER'S RESIDENCE
COCHRANE RANCHO

0 1 2
METRES



Figure 19: Manager's Residence, Excavation Units.



COCHRANE RANCHE HISTORIC SITE
1977 EXCAVATIONS
MANAGER'S RESIDENCE

Figure 20: Manager's Residence, Structural Remains.

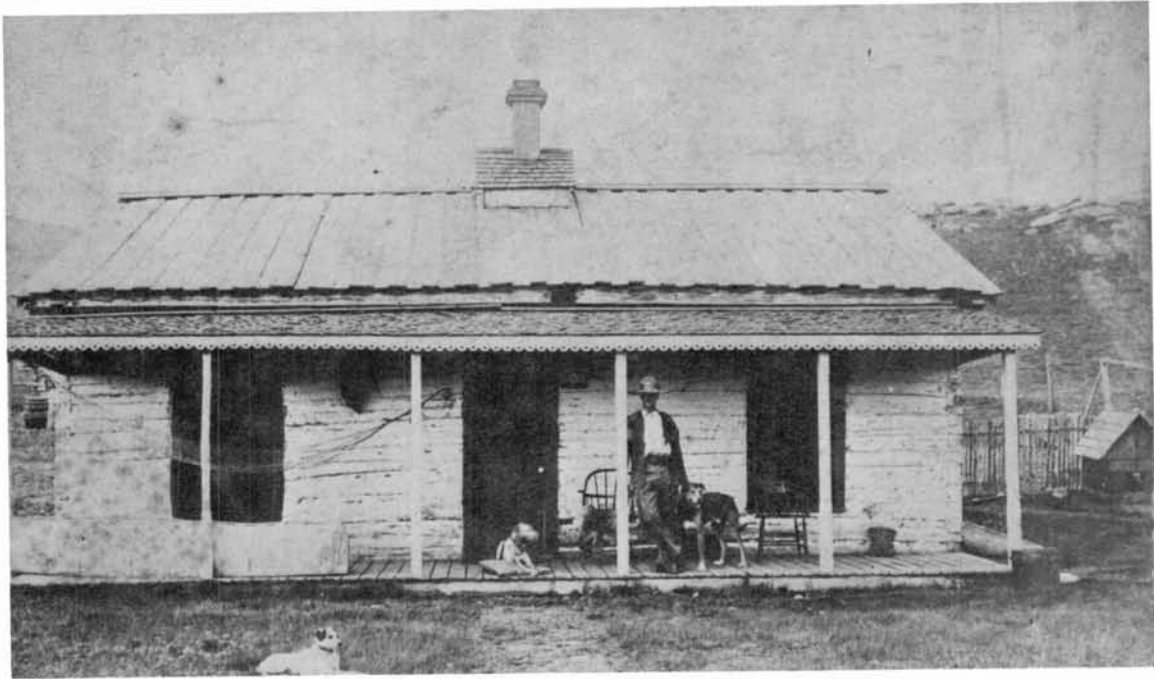


Figure 21: Two views of Manager's Residence.

composed of 11 x 2 cm boards overlaid by an upper tongue-and-groove flooring (11 x 2 cm boards) running parallel to the lower boards. In the north-eastquarter of the building, the floor was constructed differently. First a 16 x 2 cm board-floor was laid north-south across the floor joists. Above these were laid boards (22 x 2 cm) running east-west. Throughout the building both cut and wire nails were used. Nails 66 or 76 mm long were most commonly used for attachment of floor boards to joists. The ratio of cut nails to round nails was approximately equal.

Two interior wall partitions were uncovered in the excavations. In square R7C2J6, a portion of interior wall construction was located. Here, upright boards (12 x 3 cm) were placed side by side. Base boards (2 cm wide) braced the uprights where they met the floor. The second partition present in R7C2X5 was a single log without nails, which the floor boards touched but did not cross. These walls divided the house into a minimum of two rooms.

The west half of the building contained fewer well-preserved wood and other construction features. Traces of joists were located but it appeared that most floor boards had been removed after the fire. Inside the south-west corner of the building was an area of numerous rough sandstones and locally fired brick. The function of these items was not clear but they probably were remnants of the chimney.

Below the floor in the centre of the manager's residence was a small cellar. This feature measured 160 cm x 160 cm x 150 cm deep. The fill contained multiple layers of charred and uncharred grain, and layers of charcoal and burned wood. It appeared that at the time of the fire (ca. 1906) this cellar was being used for grain storage.

At the front of the manager's residence was a wooden veranda. On an historic photograph, six evenly-spaced posts could be seen. The 1977 excavation uncovered four evenly-spaced posts of greater intervening distance, so these were not the originals. The veranda floor was constructed of planks (11 x 2 cm) placed north-south along the front of the building over two east-west running joists. Beneath these joists were rough sandstone shims. In the west area of the veranda were a number of bricks which could also have been from the collapsed chimney.

On the north side of the manager's residence was a kitchen and large

cellar. This area measured 6.25 m east-west and 4 m north-south. The outlines of the kitchen were represented by the presence of two log runners along the east and the north sides, and by a log construction at the north-west corner. Below this kitchen, a large cellar with dimensions of approximately 3 x 3 m and a depth of 160 cm had been dug. The cellar had a floor composed of large wood planks, 30 x 2.5 cm in size. These were placed east-west on large north-south floor joists, and joined to the joists by large spikes. To facilitate the original excavation of the cellar, a sandstone retaining wall had been constructed under the north-west corner of the original building. This wall consisted of rough sandstone flags placed in two or three courses and were without mortar.

The diary of A.E. Cross, one of the early managers of the ranch, contained a reference to June 1884 in which he stated that one of his first jobs was digging a deep cellar under part of the manager's residence (Glenbow-Alberta papers A C 951, Kenneth Mather, personal communication, 1978). It is likely that this statement referred to the cellar under the kitchen.

ARTIFACT DISTRIBUTIONS AND ACTIVITY AREAS

The number of artifacts recovered from the manager's residence totalled 9,254. Of these, 44.2% were kitchen artifacts and 49.3% were architectural wares, with the remaining groups occurring in minor frequencies (Table 5). The largest proportion of almost all groups was recovered from the kitchen cellar area. Only the arms and transportation groups had higher frequencies in other areas.

The large kitchen group had materials concentrated in the kitchen and cellar areas. Of the total of 130 identifiable bottles in the manager's residence, 40% were short medicine or condiment bottles, 47% were liquor or wine bottles, 7% were pop or beer bottles and 6% were screw-topped bottles. Of all the tall bottles (liquor or wine) found on the site, 72.5% of these came from the manager's residence.

Ceramics also formed an important subgroup in the kitchen artifacts (Appendix 1). The 46 identifiable ceramic vessels recovered included cups, saucers, plates, bowls, a teapot lid, jar lid, ceramic bottle, crock, jug, and two tureens (Table 6).

TABLE 5: ARTIFACT GROUPS FROM THE MANAGER'S RESIDENCE

Units	Kitchen	Architectural	Furniture	Arms	Tools	Transportation	Clothing	Personals	Others	Totals	Location
2F4- 2F8	249/34.9	392/54.9	19/2.7	10/1.4	3/0.4	8/1.1	11/1.5	12/1.7	10/1.4	714/100	Veranda
2G4,5 2H4,5	105/13.8	566/74.7	67/8.8	2/0.3	5/0.7	1/0.1	3/0.4	3/0.4	6/0.8	758/100	S.E. Room
2X4,5 2J4,5	195/31.7	390.63.5	26/4.2	1/0.2	1/0.2	---	---	1/0.2	---	614/100	N.E. Room
2G6,7,8 2H6,7,8	264/24.6	752/70.1	6/0.6	4/0.4	7/0.6	11/1.0	3/0.3	4/0.4	21/2.0	1072/100	S.W. Quarter, Interior
2K6,7,8 2J6,7,8	117/25.8	327/70.7	3/0.5	2/0.3	9/1.8	4/0.8	1/0.2	2/0.3	1/0.2	466/100	N.W. Quarter, Interior
2K5,6 2L5,6 (Upper)	311/50.0	430/42.1	15/1.5	1/0.1	7/0.7	4/0.4	5/0.5	1/0.1	47/4.6	1021/100	Kitchen
2K6,7,8 2L6,7,8 (lower)	1667/55.1	1173/38.3	89/2.9	5/0.2	12/0.4	9/0.3	32/1.1	19/0.6	19/0.6	3025/100	Cellar
2H3, 2X3 2J3	290/60.0	157/32.5	21/4.3	1/0.2	5/1.0	3/0.6	3/0.6	2/0.4	2/0.4	484/100	East Exterior
2K3,4 2L3,4	645/62.8	353/34.4	8/0.8	3/0.3	4/0.4	4/0.4	3/0.3	3/0.3	3/0.3	1026/100	N.E. Exterior
2H9	44/59.6	26/35.1	2/2.7	1/1.3	1/1.3	---	---	---	---	74/100	West Exterior
TOTALS	4087/44.2	4566/49.3	256/2.8	30/0.3	51/0.6	44/0.5	61/0.7	47/0.5	109/1.1	9254/100	

Actual number of artifacts/Percentage of all artifacts in the unit group.

TABLE 6: CERAMICS RECOVERED FROM THE MANAGER'S RESIDENCE

Form	Number	Per Cent
Cups	10	21.7
Saucers	8	17.4
Plates	16	34.8
Bowls	5	10.9
Other	<u>7</u>	<u>15.2</u>
	46	100.0

Of these, there were two identifiable sets of ceramic vessels. One set, called "Asiatic Pheasant", consisted of a soup tureen, two large plates, two medium-sized plates and three small plates. The other set has not been identified by name (Pattern G1) but consisted of five cups and six saucers. Of those patterns with identifiable maker's marks, four were manufactured before 1891 and seven were produced after 1891 (Table 7).

Other kitchen items were also recovered including a variety of glassware; bottle stoppers of cork, glass or metal; food storage jars and lids; cutlery; tin cans and other miscellaneous items.

Architectural wares formed 49.3% of the total artifacts recovered in this area. Most of these items were nails. Twelve porcelain door knobs and a variety of other architectural items were also found (Appendix 2).

Positions of the fragments of glass recovered are plotted in Figure 22. It was hoped that this might give an indication of window placement. On the historic photographs, three windows could be observed. It might be assumed that these would be areas of high window-glass fragment concentration. Such areas would be along the front of the building and near the north-east corner. In fact, these areas were found to exhibit a high frequency of glass fragments. Could other window locations be identified by high window-glass fragment concentrations?

The highest concentration however, was in the area of the cellar. It could be assumed that this would be a location where broken glass might be thrown away and so it was not possible to identify windows in the cellar or kitchen, area, although windows must have existed for the kitchen. An-

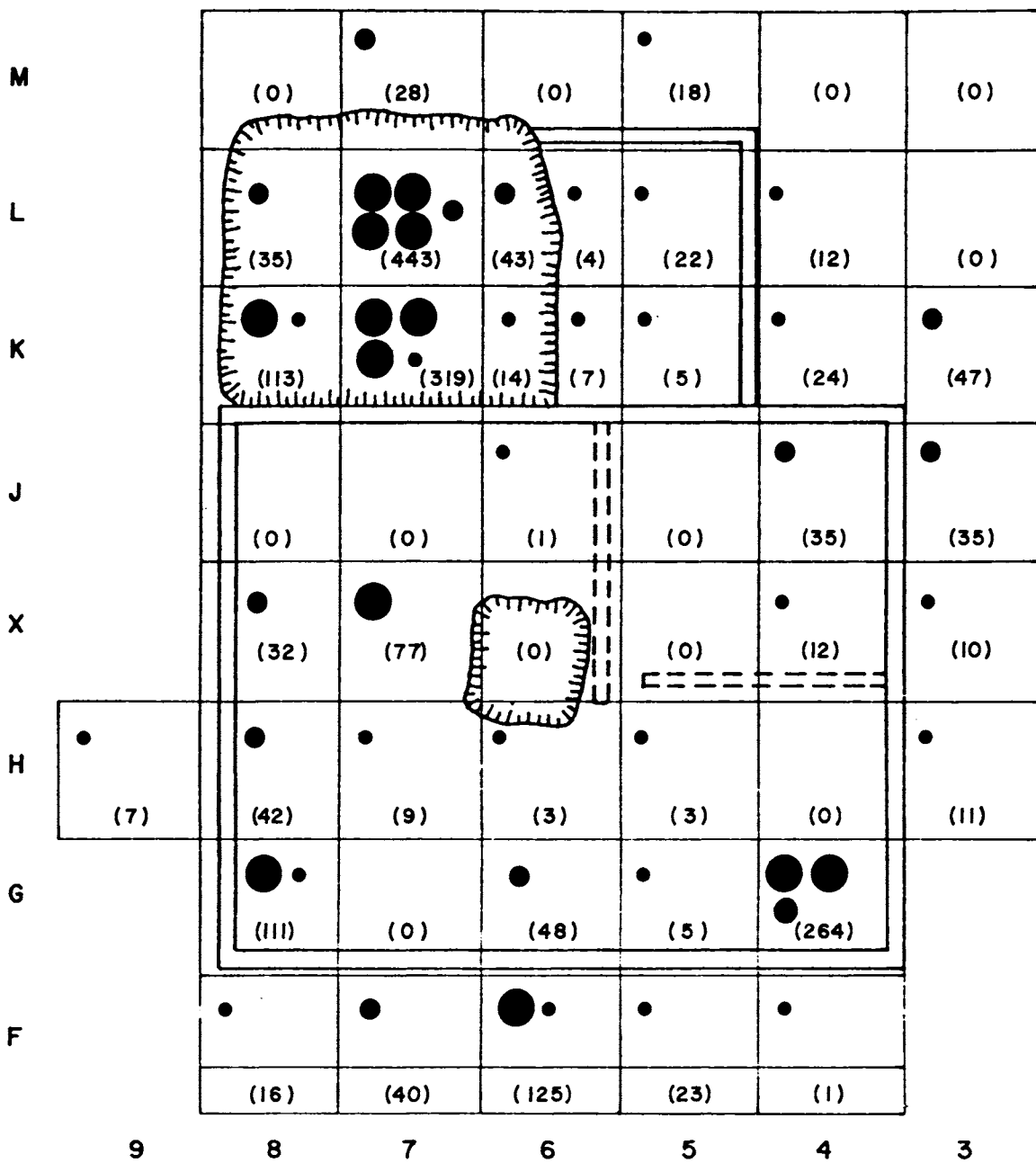
TABLE 7: IDENTIFIABLE MANUFACTURERS OF CERAMICS
RECOVERED FROM THE MANAGER'S RESIDENCE

Ceramic Type *	Pattern Name	Date	Manufacturer
B2	Blue Willow	1891 +	Wa... & Son Staffordshire
B4	...el (?)	1892 - 1941	E. Bourne & J.E. Leigh Burslem, Staffordshire
B5	Asiatic Pheasant	1875 - 1890	John Tams (LTD) (?) Staffordshire
B6	Unknown	Registered 17 January 1883	
C2	Clarence	1891 - 1920	Ridgways Hanley, Staffordshire
E2	Ceres or Wheat	1878 - 1891	Robert Cochran & Son Glasgow (other makers are possible)
P1	None	1891 -	Alfred Meakin Tunstall, Staffordshire
P5	None	1864 - 1891	W. & E. Corn Burslem, Staffordshire
P8	None	1891 - 1913	Johnson Brothers Hanley, Staffordshire
P9	None	1913 +	Johnson Brothers Hanley, Staffordshire
D2	--	?	P.T. Germany
S1	The Weir	1901 +	----

* See Appendix 1 for further description.

nother concentration of window-glass fragments occurred in units R7C2H8, R7C2X7 and R7C2X8. This would parallel the window in the east wall seen in Figure 22. From this information it was concluded that there was also a window in the west wall.

Limited evidence for furnishings was recovered - 2.8% of the total artifacts recovered. Two stoves were in use at the time of the fire. One of the stoves was embossed DESIGN REG^D 1888... (I)LTON ONT... and the other



MANAGER'S RESIDENCE
COCHRANE RANCHE



- 0 - 25 FRAGMENTS
- 25 - 50 FRAGMENTS
- 50 - 75 FRAGMENTS
- 75 - 100 FRAGMENTS

Figure 22: Window Glass Distribution, Manager's Residence

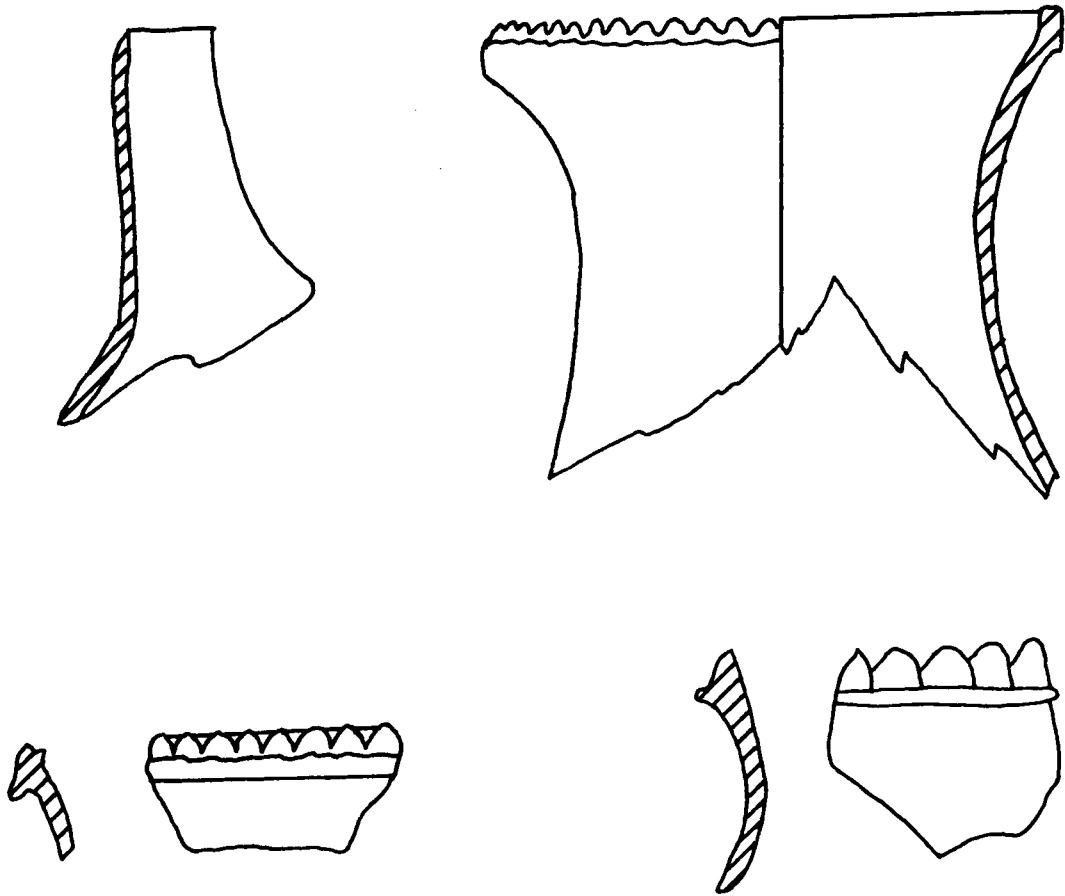


Figure 23: Lamp Chimneys from the Manager's Residence, Scale - 1:1.

was marked 1884/HOTEL COOK. The first of these was probably a heater used in the central part of the building while the second was a cooking stove for use in the kitchen.

Six glass lamp chimneys indicated that the original lighting was supplied by kerosene lamps. There were four styles of chimneys used (Figure 23). Wire insulators, a fuse, a light switch, and three light-bulb bases suggested that electricity was installed before 1906.

Two bells provided evidence that a telephone or clock was part of the manager's residence furniture. Other items included clock parts, various drawer pulls, the end of a roller blind and a glass vase (Figure 24 and Appendix 3).

Of all the arms-related artifacts recovered on the site, 34.5% came from the area of the manager's residence (Table 8). This group, however, constituted only 0.3% of the total artifacts recovered from this part of the site. Of this arms group, most were shotgun shells, followed by centre-fire cartridge cases and rim-fire cartridge cases. Of the 12 shotgun shells, seven were British made, four were Canadian made and only one was American made (Appendix 4).

TABLE 8: ARMS-RELATED ARTIFACTS RECOVERED FROM
THE MANAGER'S RESIDENCE

Type	Number	Per Cent
Rim-Fire Cartridge	7	24.1
Centre-fire Cartridge	10	34.5
Shotgun Shells	<u>12</u>	<u>41.4</u>
	29	100.0

In the clothing group, over half (52.5%) came from the cellar area. Most of these were buttons but this group was also represented by a belt buckle, a coat hook, a garter hook and a corset stay. The total of 16 buttons were found concentrated primarily in the veranda area (Figure 25). These were made of shell (4), glass (4), iron (3) and other materials (3) (Appendix 5).

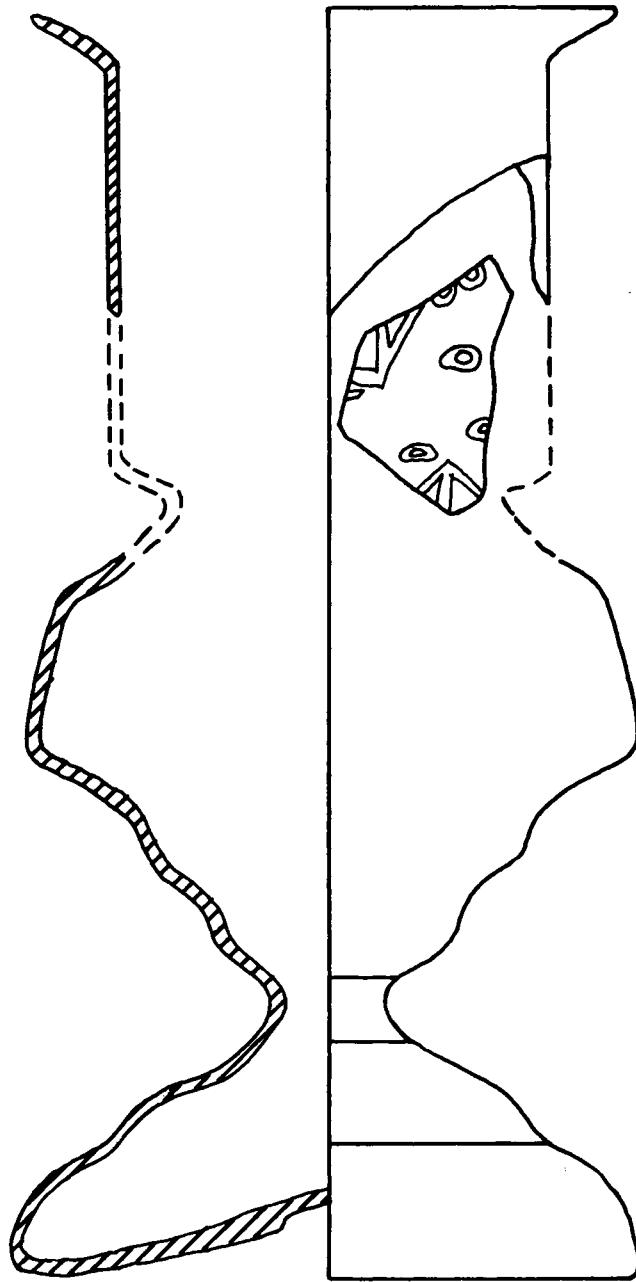
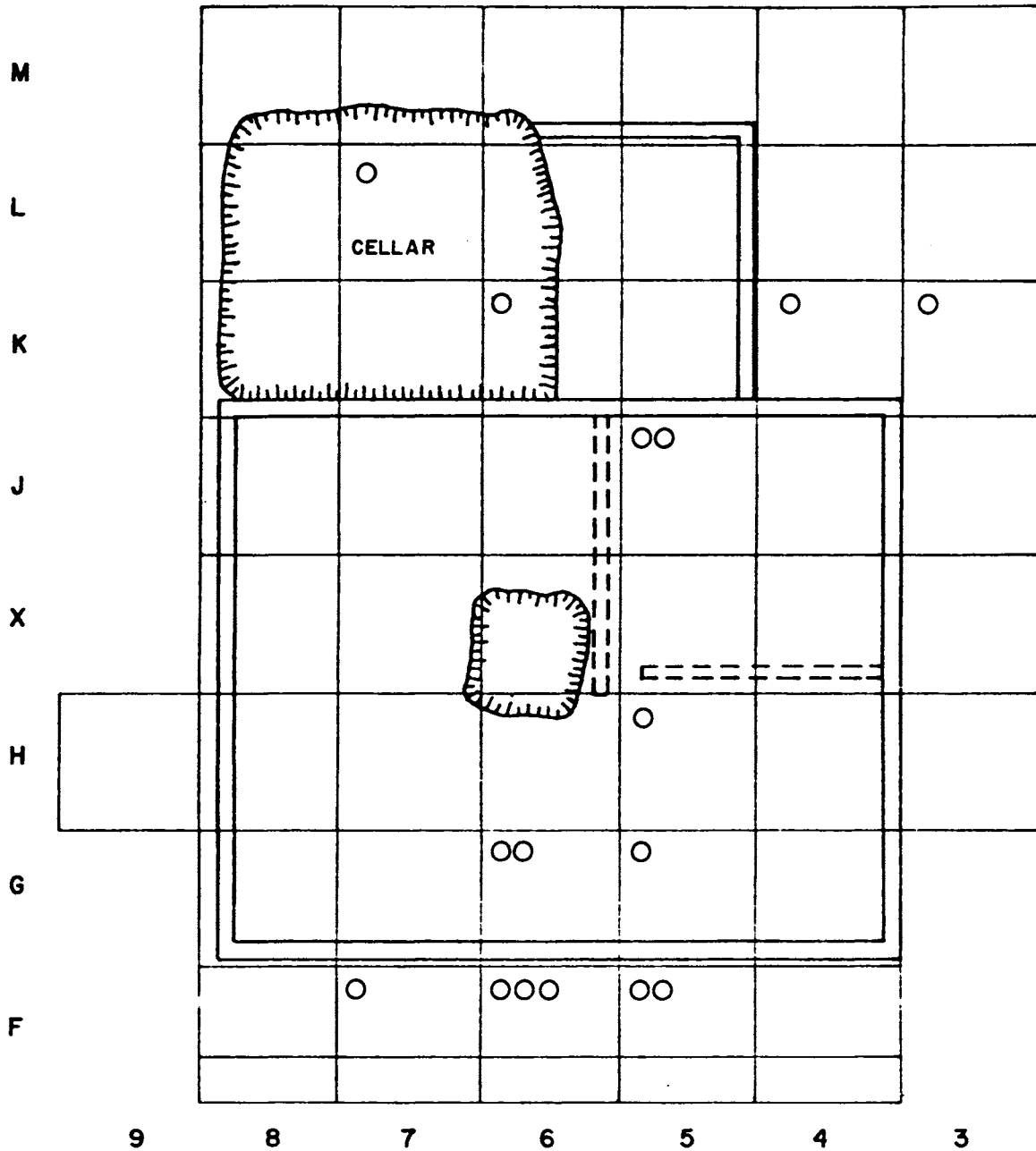


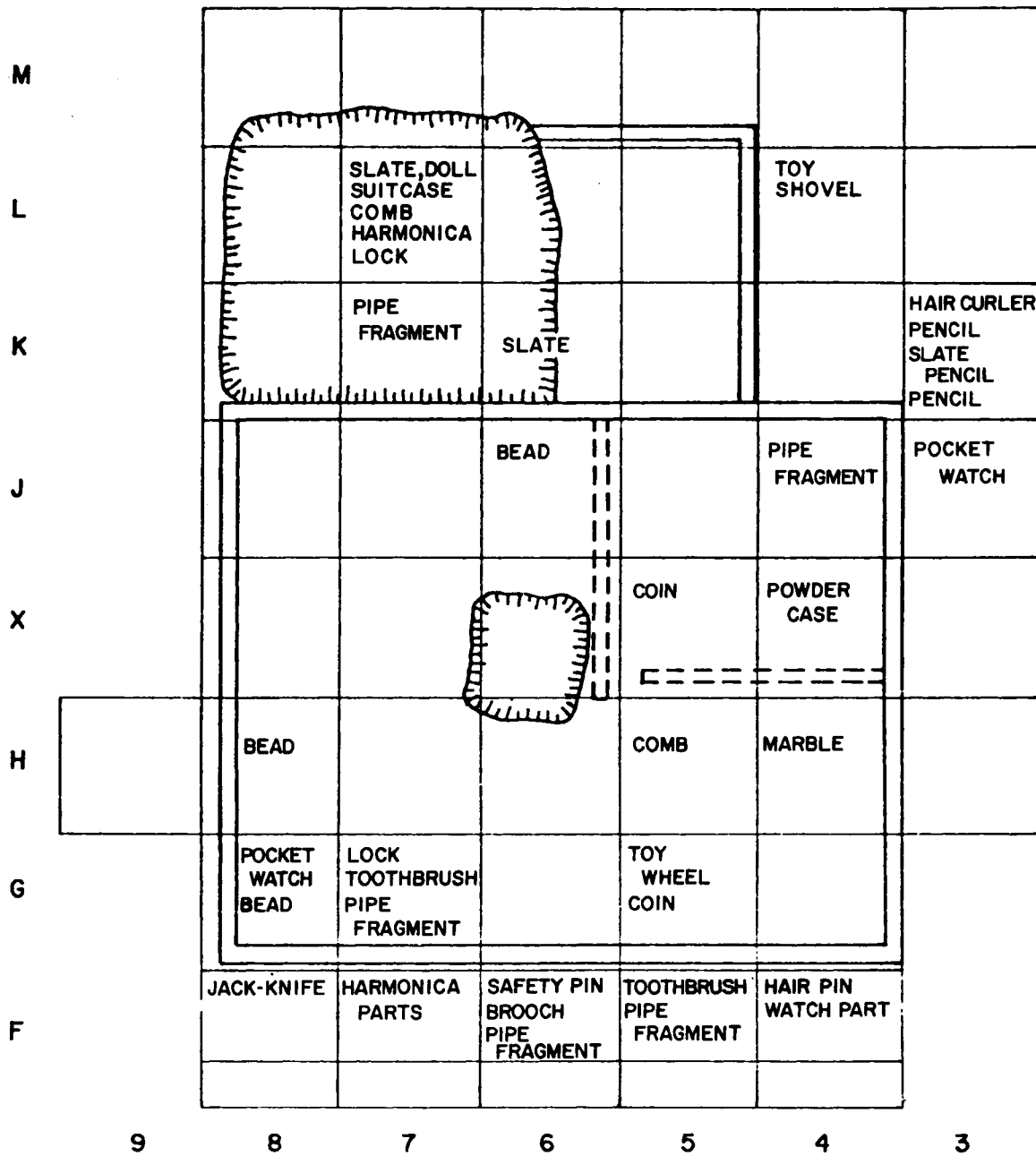
Figure 24: Glass Vase from the Manager's Residence, Scale-1:1.



MANAGER'S RESIDENCE
COCHRANE RANCHE



Figure 25: Button Distribution, Manager's Residence.
One circle represents one button.



MANAGER'S RESIDENCE
COCHRANE RANCHE



Figure 26: Personal Artifacts Distribution, Manager's Residence.

Personal items formed 0.5% of the total artifacts recovered from the manager's residence. Their distribution is plotted on Figure 26. These included beads, coins, harmonica parts, a jack knife, jewellery, pipe fragments, pins, stationery, toys and watch fragments (Appendix 6). Two coins were found in the manager's residence. One was an 1864 British florin. This must have been a keep-sake even in 1881 when the ranch was established. The second coin found, an 1898 Canadian five-cent piece, was pierced for attachment to a necklace or bracelet.

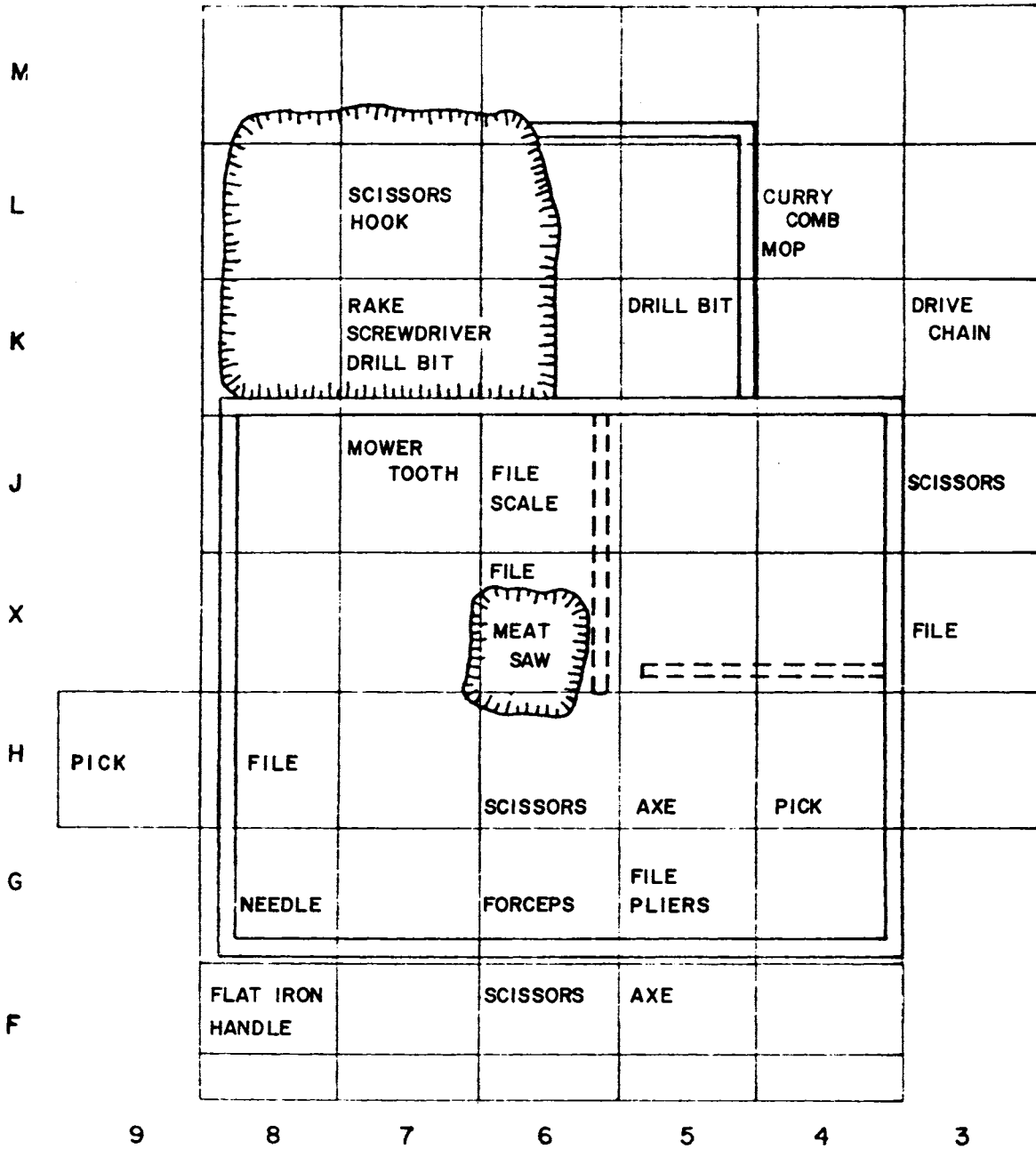
The 51 tools were generally well scattered over the manager's residence area (Figure 27). Woodworking tools included five files, two axes, a screwdriver and two drill bits. Farm or ranching-related tools included two picks, a meat saw, forceps, a mower tooth, a curry comb, and a drive chain. Household tools included a needle, a mop, four scissors and a flat-iron handle (Appendix 7).

Discussion

Activity areas as represented by artifact distributions have been somewhat obscured by actions taken immediately after the burning of the building. Much modification of artifact distribution occurred as a result of salvage operations looking for valuables as well as by the infilling of the kitchen cellar. Modification of artifact distributions occurred to a greater extent on the west side of the residence where few floor boards remained.

Some indications of the interior arrangement of the building is available. Wall partitions were partly identified and suggested a room layout. Distribution of stove parts indicated one heater-type stove was located in the kitchen area.

The two cellar areas of the manager's residence were probably used for different purposes considering their respective sizes. The small cellar near the centre of the building contained many layers of burned and unburned grain and very few artifacts. It can therefore be inferred that this cellar was used for grain storage at the time of the fire. The large cellar at the rear of the building contained considerable kitchen-related artifacts but most of these constituted refuse used to fill the cellar after the fire.



MANAGER'S RESIDENCE
COCHRANE RANCHE



Figure 27: Tool Distribution, Manager's Residence.

THE WELL (R7C81)

Mechanized stripping of a large area to the north of the manager's residence was carried out to locate possible features associated with the manager's residence and the bunkhouse, in particular privies or refuse pits. No privies were located but an historic well was uncovered, situated between the two residential buildings (Figure 4).

CONSTRUCTION

The well was square, measuring approximately 1.25 m east-west by 1.25 meters north-south. The depth of the well is more than 6 meters. The 1977 excavations were halted at this level for reasons of safety. The well had been cribbed with a complicated system of wooden planks and supporting uprights (Figure 28). At a depth of 5.50 m, a circular barrel-shaped cribbing was found. The diameter of this barrel was approximately 75 cm.

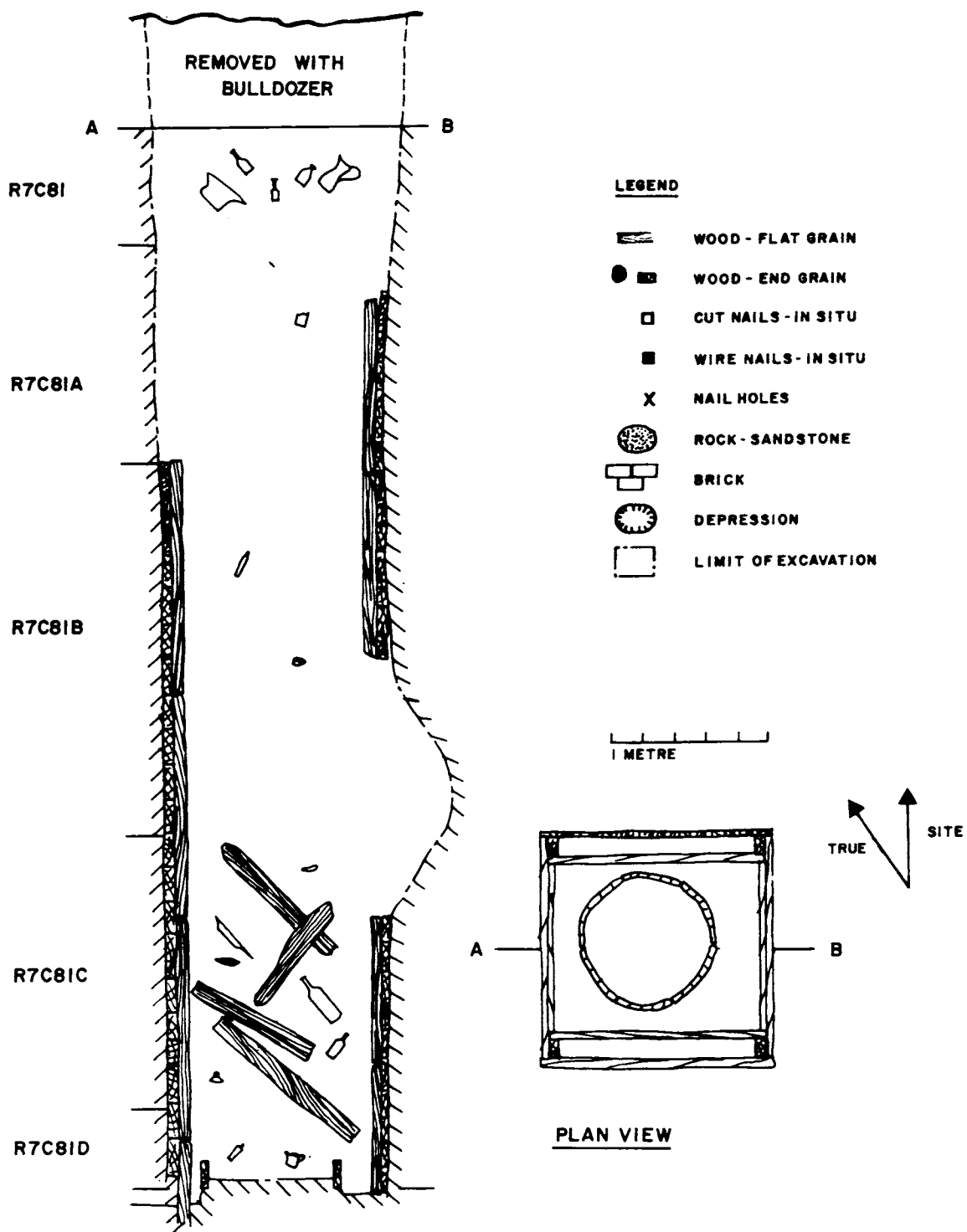
The well had partially slumped sometime prior to refilling. This problem with slumping may, in fact, be the reason why use of the well was discontinued. In any event, sometime around 1905, this well was refilled with partly-collapsed wooden cribbing, earth and considerable domestic refuse.

ARTIFACT DISTRIBUTION AND ACTIVITY AREA

Obviously the principal use for the well was to supply water. In addition to this, historic wells, because of their great depth and coolness, were often used for storage of perishable items. These were often placed on a shelf or ledge far down in the shaft. Two items found in the well may suggest this use. One was a large block of lard and the other was a wood bucket containing animal soap or tallow.

When the well was refilled, it served as a midden for numerous domestic refuse items.

COCHRANE RANCHE HISTORIC SITE 1977 EXCAVATIONS WELL



NORTH ELEVATION

Note: Section includes vertical corner posts. Artifacts shown indicate relative frequency of items per excavation unit.

Figure 28: Well, Structural Remains.

REFUSE AREAS AND PATTERNS

Although artifacts were found almost everywhere throughout the excavated areas, refuse or discarded garbage was concentrated in only a few places. These included:

1. The area between the north wing and the east and west wings of the bunkhouse as well as to the east and west of the dining room.
2. The cellar of the manager's residence beneath the kitchen floor.
3. The well fill.

Of these areas, the well and the large cellar of the manager's residence were intentionally refilled within a relatively short length of time. The cellar was back-filled shortly after the fire with many items damaged by the fire.

The well is more problematical but as some evidence for the collapse of the well cribbing was present it is possible that the well was filled in because it was unsafe. An alternative hypothesis is that a new well was drilled for pump installation and the old well fell out of use. It seems that the well was filled quickly although artifacts were located throughout. The well was filled between 1905 and 1910 based on the artifacts found. For both the well and the large cellar, artifacts were recovered intact or with most of their pieces present.

Around the bunkhouse the areas outside the building were used for surface dumps. Here considerable bone and domestic refuse was accumulated into small refuse piles approximately a half meter in height. The number of complete or partially complete artifacts here is relatively low.

THE CULTURAL SYSTEM AT COCHRANE RANCHE

As Cochrane Ranche is the first major historic ranching site to be excavated in Alberta, it provided an indication of life on a ranching site. Analysis of material culture can give an understanding of what goods were available, what was preferred and what was actually used. By comparing the two major areas of the ranch, the bunkhouse and the manager's residence, an understanding of the cultural system was developed.

HYPOTHESES

Based on the fact that there were two residential buildings and given the historic information above, the following hypotheses could be formulated.

1. There were behavioural and economic differences, if not social distinctions, between the inhabitants of the two residential buildings which would have a material culture manifestation. This would be represented by variations in the type, frequency and distribution of goods and, therefore, should be archaeologically recognizable. This formulation was based on historic records which indicated that the managers were well-connected with middle and upper class families in Eastern Canada. These individuals were also probably well paid. On the other hand cowboys and ranchhands would generally be from lower-class backgrounds and would be paid less for their work on the ranch. These social and economic differences should appear in materials recovered from the ranch.
2. There was an ethnic difference between the two groups which should also be apparent in the materials recovered. This hypothesis, again, was based on documentation which indicated that the managers had an Eastern Canadian background while many of the cowboys were from the western United States. It was anticipated that this difference might be manifested in buyer preferences for goods manufactured in a particular area or country and, consequently, be archaeologically determinable.

Testing the Validity of Assumptions Based on Artifact Distributions

Glassware

Bottle distributions are presented in Table 9. There were interesting differences in the bottle distribution from the bunkhouse and the manager's residence.

Nearly one-half of all bottles found in the manager's residence originally contained liquors or wine. In the bunk-

house, only 11.5% of the bottles found were of liquor/wine type. In contrast, one quarter (24.5%) of the bottles found in the bunkhouse had pop or beer bottle type attributes. Only 7% of this type of bottle were found in the manager's residence.

Several interpretations could be forwarded to account for this distribution:

1. There was a difference in the activities carried out in the two buildings with considerably more entertaining carried out in the manager's residence.
2. There was an economic difference between residents of the two buildings. As wines and spirits would be more expensive, they were more extensively used in the manager's residence.
3. Cowboys, residents of the bunkhouse, would perhaps be more inclined to go to "town" for their drinks than would be the "family" men chosen as managers of the ranch.
4. This difference could be due to the variance in occupation and abandonment of the two buildings - the bunkhouse continued to be lived in after 1906 whereas the manager's residence was destroyed by fire in that year.

A further examination of Appendix 1 revealed two other items of interest. First, the well fill contained a larger number of medicine bottles than either the manager's residence or the bunkhouse. There appeared to be little reason for this anomaly except, perhaps, that at the time of filling the well, a medicine cabinet was cleaned out and all the old medicine bottles were thrown away.

Another interesting aspect with regard to bottle distributions was the considerably higher percentages of screw-topped bottles in the bunkhouse. As screw-topped bottles became increasingly popular in the early 20th century, it was a clear reflection that this structure was occupied for a greater length of time.

How valid are the interpretations based on bottle distribution? It was decided to use a χ^2 (Chi Square) test to determine if the differences in the bottle distributions were due to chance alone. The formula used was that given in Hammond and McCullagh (1974:152). For the purposes of this test, the null hypothesis (H_0) stated that the distribution of bottle types did not differ significantly between the manager's residence and the bunkhouse. The alternative hypothesis (H_1) stated that differences in the distribution of bottle types was not likely to be due to chance. The rejec-

tion level for H_0 was decided at the $\alpha = 0.05$ level. Manipulating the figures in Table 9, χ^2 was found to have a value equal to 51.99, which exceeded the critical value of 7.92. Consequently, the null hypothesis was rejected. This result was considered to give support to the proposition that behavioural differences did exist between the inhabitants of the two structures and that the variances would be manifested in the distribution of material culture. This test was also applied to two other artifact classes, Ceramics and Shotgun Shells, which also appeared to show some variations in distribution.

TABLE 9: MAJOR BOTTLE TYPES DISTRIBUTION

Bottle Type	Manager's Residence		Bunkhouse		Total	
	N	%	N	%	N	%
Short (mostly pharmaceuticals)	52	40	17	28.0	28	36.0
Tall (liquor and wine)	61	47	7	11.5	68	35.5
Pop	9	7	15	24.5	24	12.5
Screw-Top	8	6	22	36.0	30	16.0
	130	100	61	100.0	191	100.0

CERAMICS

A list of identified and/or dated ceramic types from the Cochrane Ranche site shows that the site was occupied mainly from 1881 to the early twentieth century. All three areas, the manager's residence, the bunkhouse and the well have ceramics that date to the same time period.

A minimum number of eighty-five vessels was recovered from the site. Of these, 70.5% are considered to be tablewares (Group 1) whereas the remainder are decorative, kitchen or storage vessels. Plates are the most common vessel form (31%), followed by saucers (18.5%), cups (15.5%), bowls (.3%) and others.

There appeared to be some difference in the numbers of decorated wares from the three areas. Of all blue-on-white wares, 77.5% were recovered from the manager's residence with the remainder being found in the bunk-

house area. None were found in the well. On the other hand, 75.0% of brown-on-white wares derive from the bunkhouse, the other 25% coming from the manager's residence. Plain white wares, however, are more evenly distributed over the site with 33.5% from the manager's residence, 16.5% from the bunkhouse and 50% from the well (Figures 31, 32). Because of the apparent differences, it was decided to subject the frequency occurrence of the various patterns from the two habitation areas to the same χ^2 test to determine if the differences were statistically significant (Table 10).

TABLE 10: FREQUENCIES OF VARIOUS CERAMIC DECORATIVE TECHNIQUES FROM TWO DWELLINGS AT COCHRANE RANCHE

Decorative Technique*	Manager's Residence	Bunkhouse	Total
Blue-on-White	17	5	22
Gold-on-White	11	0	11
Brown-on-White	2	6	8
Embossed White Ware	3	2	5
Plain White Ware	4	2	6
Decorative Objects	2	2	4
Kitchenware	1	1	2
Brown Glazed Ware	2	1	3
Special Ware	0	1	1
Storage Ware	<u>4</u>	<u>0</u>	<u>4</u>
	46	20	66

* See Appendix 1 for further description.

Again, the H_0 stated that the two samples were part of the same population, while H_1 stated that the two samples were significantly different. The same rejection level for H_0 was used, i.e., $\alpha = 0.05$ level. In this test, χ^2 had a value of 18.39, and the null was rejected. From this result it was inferred that the distribution of decorative ceramic techniques was due to a significant cultural difference. This anomaly could have been an expression of distinct aesthetic values and economic differences which, in turn, might have been derived from the inhabitants' respective heritage.

In possible further support of this assertion was the fact that "sets" of ceramics only appeared to occur in the manager's residence (Appendix 1, Patterns B5 and G1).

ARMS

The arms group also showed some differences between the two areas (Table 10). This was especially so because the number of shotgun shells in the bunkhouse was larger than that of the manager's residence. There was also a difference in the sources of the shotgun shells. The samples recovered from the two habitation areas were likewise subjected to the χ^2 test, because there seemed to be some indication of preferential differences with regard to the country of manufacture. The rejection condition was the same as that used in the previous tests. The data which were employed in the calculations are given in Table 11.

The results of the test ended with $\chi^2 = 8.77$, and again, the H_0 was rejected. Here, then, was further supporting evidence for a behavioural difference between the inhabitants of the two houses. Clearly, the occupants of the manager's residence favoured Canadian-made shotgun shells to American ones, while the reverse was true for the bunkhouse cowboys. Both populations, however, appeared to have an equal regard for British-made shells.

TABLE 11: FREQUENCIES OF SHOTGUN SHELLS, BY COUNTRY OF MANUFACTURE, FROM TWO DWELLINGS AT COCHRANE RANCHE

Country	Manager's Residence	Bunkhouse	Total
British	7	17	24
Canadian	4	1	5
American	<u>1</u>	<u>11</u>	<u>12</u>
	12	29	41

CONCLUSIONS

Analysis of three classes of artifacts including bottles, ceramics and shotgun shells, has shown that significant variations existed in the distribution of these items between the areas of two habitation structures. To this fact we must ascribe a cultural interpretation; first, because they are material culture items, and, second, because their use and ultimate disposition was due to human activity. These objects were clearly associated with two separate dwelling structures, but the character of the artifacts, in certain respects, was significantly different between the two areas. We can only infer that this situation is the material manifestation of real behavioural differences between the people living in the two houses. The life styles and values of the ranch managers, and their families, was not the same as that of the cowboys. The specific implications are that the behaviour patterns varied with regard to beverage consumption, dining (both of which may pertain to entertaining) and hunting activities. From this interpretation we further conclude that the underlying cause for the different behaviour patterns was due to actual social, economic and ethnic differences between the two main population groups of Cochrane Ranche.

The recovery of thousands of artifacts from Cochrane Ranche posed serious problems for cataloguing, consistent description and analysis in the face of limited resources. Much of the data that was recorded is presented in appendices. Some of the information, obviously, was compiled for specific analytical purposes. This approach, based on the prior formulation of a set of research questions, provided a rationale and organizational framework for much of the descriptive data. The main questions that dealt with the material culture aspects of the project included forming an assessment of the relative frequencies and total range of artifacts associated with the early ranching period, and an interpretation regarding the possible existence of cultural differences between the two main habitation areas. These problems might not have been answered if a quantifiable and synthesizing approach had not been taken. The use of these methods, in combination with statistical techniques, has been important for stating the conclusions with a fineness that otherwise would not have been possible.

CONCLUSIONS AND RESULTS

Cochrane Ranch is an important historic site in Western Canada. As the first attempt at a large-scale ranching operation, the ranch may have provided only modest returns for its investors; but for Western Canada the experimentation and developments encouraged more ranching that was to provide a foundation for the future.

The archaeological investigations in 1977 have contributed significantly to the history of settlement at the site and provided a basis for understanding life on a 19th century ranch in the "territories". This report provides data on the size and construction of the buildings and the social and economic conditions on large, early ranches.

In excavating the two major ranch buildings: the manager's residence and the bunkhouse, and their associated well, considerable constructional data has been recovered. Both buildings were originally built in the 1880's. Initially they were small log houses but modifications and additions were added later. Although the interior arrangement of rooms in the bunkhouse was known prior to excavation, this was not the case for the manager's residence. Here the room configuration could only be interpreted from the archaeological results.

The excavations also provided considerable evidence as to the living conditions on the ranch. With the large financial backing and capital of the ranch, it could be assumed that money for improvements to the ranch was made available. As a result very few things were actually made on the ranch. Instead, there seems to have been a good supply of manufactured goods available. Nails and other hardware were almost always bought rather than made on the site.

Not surprisingly, there were almost no items that could be called heirlooms. This suggests that the ranch was outfitted with generally new materials. This even extends to the arms group where there were no indications of the use of percussion weapons: no gun flints or percussion caps were found. All the weapons were either centre fire or rim fire. There was, however, one notable heirloom - the 1864 British two-shilling piece.

The division between the managers of the ranch and the cowboys who occupied the bunkhouse was clear. This division was reflected in many classes

of artifacts at the site. In the manager's residence, blue-on-white ceramics were preferred; whereas, in the bunkhouse, brown-on-white and plain ceramics were the norm. The managers also had a clear preference for wines and liquors which results in significant distribution differences of bottles in the two areas. The cowboys had a preference for American-made shotgun shells, while the managers preferred British and Canadian makes.

Trade items such as beads and clay pipes that are common on other frontier sites, were quite rare at Cochrane Ranche. This is probably due in part to the nature of the site, but because these items were not present, it could be assumed that there was very little trading done with the Indians. For the same reason it is also unlikely that Indians were employed on the ranch, or if they did work on the ranch, they were paid either in money or cattle.

The excavations at Cochrane Ranche have uncovered an important body of information. They provide a base for defining ranching sites of the late 19th century in Western Canada. However, these excavations were confined to the two main residential buildings on the site. A ranch is much more than residential buildings. Stables, barns, the blacksmith shop, as well as corrals and small herders' cabins, should all be studied to integrate and understand Cochrane Ranche as an important historic component in Western Canadian history.

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APPENDIX 1 KITCHEN GOODS

Items generally found in a kitchen or dining room are included in this group. Such items include the general range of ceramics, cutlery glass and storage vessels. Window glass is, of course, a notable exception here and is included under architectural wares. Cookstoves are found under the furniture group.

GLASSWARE

A wide variety of glass wares was excavated at Cochrane Ranche. Most common on the site were enormous quantities of glass bottles but other glass items did occur in smaller numbers. These include stemmed tumblers, serving trays, lids, small glass vials, a decanter and a graduated cylinder.

Stemmed Tumblers (Figure 1.1)

Fragments of three clear glass tumblers were recovered. One (Figure 1.1:a) comes from the kitchen cellar of the manager's residence. The most complete fluted vessel was found in a midden area outside the dining room of the bunkhouse while the third fluted stem fragment was recovered from the well (Figure 1.1:b, c).

Serving Dishes

Fragments of three serving dishes or possibly ashtrays were found at Cochrane Ranche (Figure 1.2:a, b, c). All of these are too fragmentary to reconstruct. Figure 1.2:a and b have the impression applied to the upper interior surface whereas Figure 1.2:c has the impression on the lower exterior surface.

Glass lids

Three glass lids were recovered during the excavations (Figure 1.2:d, e, f). The most complete piece (Figure 1.2:f) was recovered from the well. It is undecorated and appears to be a cooking pot lid. The other two lids were recovered from the bunkhouse. Figure 1.2:d may possibly be a coffee pot lid. The last (Figure 1.2:e) is too fragmentary to reconstruct.

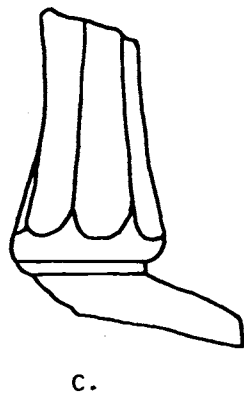
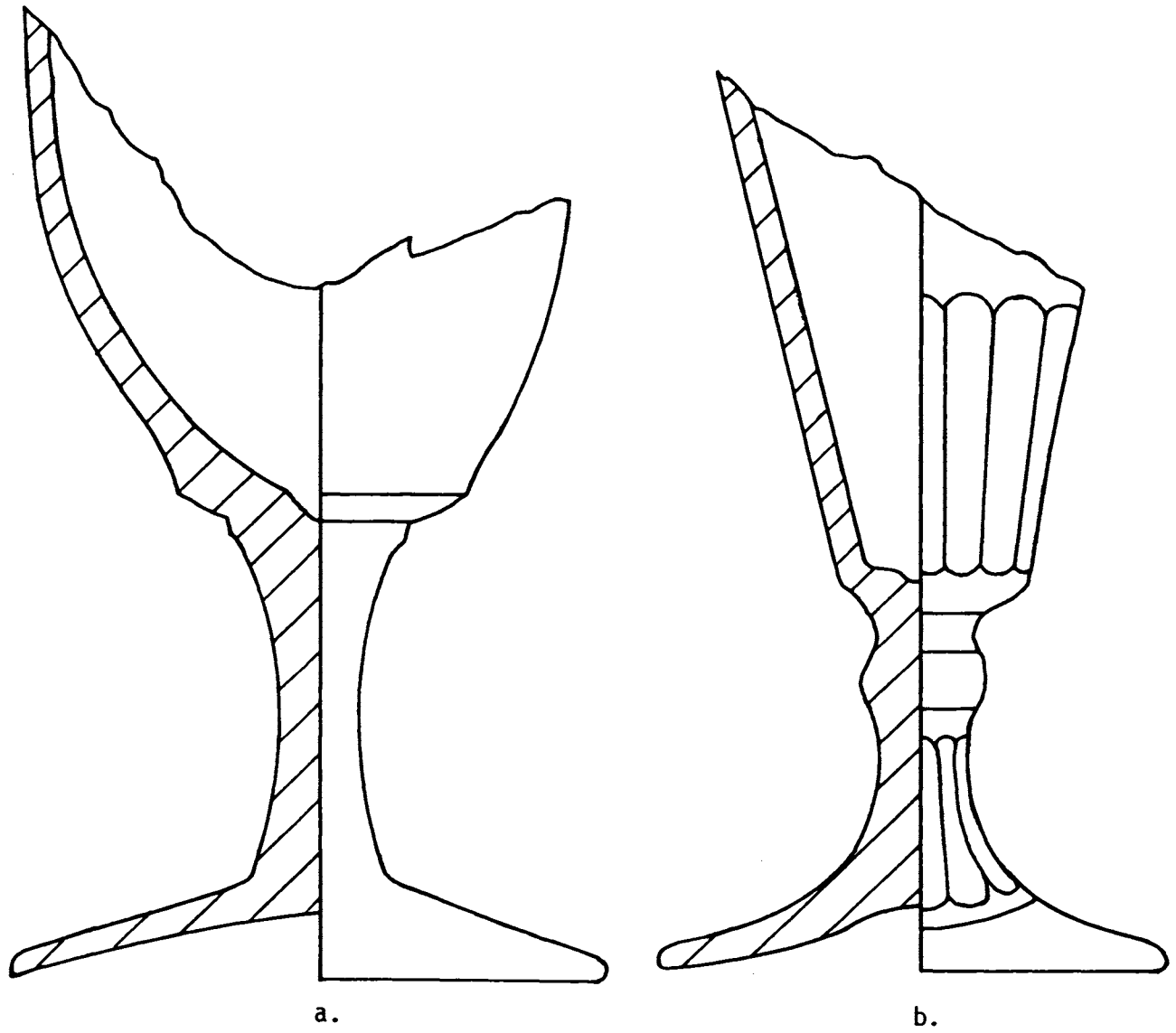


Figure 1.1: Stemmed Glasses, Scale - 1:1.

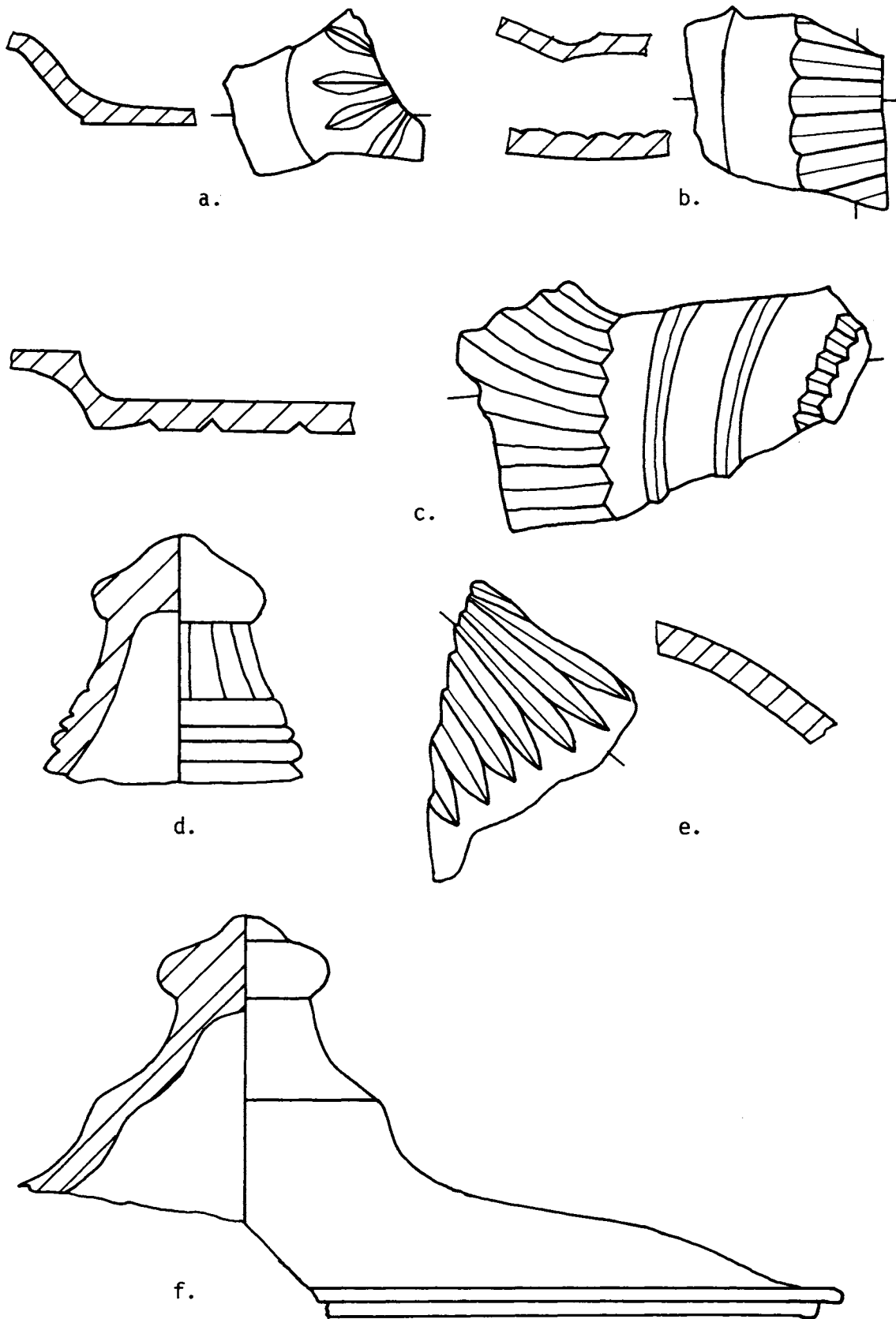


Figure 1.2: Glass Dishes a-c, Glass Lids d-f. Scale - 1:1.

Graduated Cylinder (Figure 1.3:a)

The lower part of one graduated cylinder was recovered from the well. The frosted glass is graduated at intervals and marked "1" and "2" with the aid of a hand engraving tool.

Vials (Figure 1.3:c, d)

Three glass vials were recovered. Two are as illustrated in Figure 1.3:c. Both are of clear glass. The third vial is handblown, roughly rectangular in shape. The central core appears to be made by the insertion of a wire. The first two vials may have been used as containers for food colouring. The function of the third vial is unknown.

Special Bottles (Figure 1.3:b, Figure 1.4)

These are bottles of unique design and features. Both were found in the well.

R7C81C-90 (Figure 1.3:b)

This bottle is made of clear glass. Embossed on the side is a picture of a monk with a cross. Around him is embossed VERITABLE EAU DES CARMES DU R.P. MARTIAL. "True water of Carmes of R.P. Marial". Below the monk is DEPOSE/ARBEZ/BORDEAUX. This bottle probably contained Holy Water.

R7C81-166 (Figure 1.4)

This clear glass bottle has a wide mouth and is quite short. It was probably used as a decanter, perhaps for brandy. Diameter of the lip is 6.4 cm; height of the neck, 4.7 cm; total height, 13.5 cm; basal length, 8.7 cm; basal width, 6.7 cm.

TABLE 1.1 DATA SHEET - GLASSWARE

Stemmed Tumblers

Figure 1.1:a	R7C2K7B-191	Manager's Residence, Kitchen cellar
1.1:b	R7C73B-1	Bunkhouse, midden
1.1:c	R7C81-214	Well

TABLE 1.1 (Continued)

Serving Dishes

Figure 1.2:a	R7C2K3-166	clear	Manager's Residence
1.2:b	R7C2G6A-16	purple	Manager's Residence
1.2:c	R7C70B-6	pink	Bunkhouse

Glass Vessel Lids

Figure 1.2:e	R7C74A-20	clear	Bunkhouse
1.2:d	R7C78A-20	clear	Bunkhouse
1.2:f	R7C81-4	clear	Well

Graduated Cylinder

Figure 1.3a	R7C81D-40		Well
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Small Vials

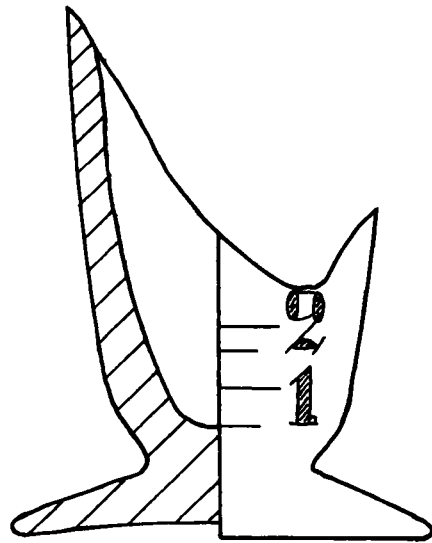
Figure 1.3:d	R7C2L8A-11	pale green	Manager's Residence
1.3:c	R7C2K7A-337	clear	Manager's Residence
1.3:c	R7C81-2	clear	Well

Special Bottles

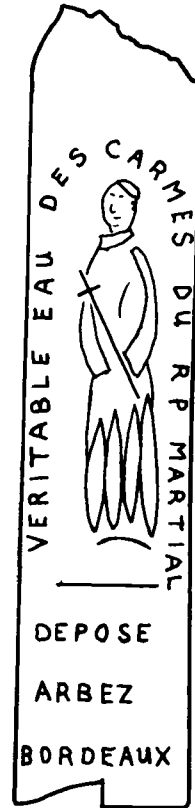
Figure 1.4	R7C81-166		Well
1.3:b	R7C81C-90		Well

BOTTLES

Bottles from Cochrane Ranch have been described and analysed here through the use of a lip type/method of manufacture categorization similar to that used at Fort Victoria, Alberta (Losey 1977b:165). Lip types were chosen as being most characteristic of bottle types because generally the greatest variation in bottle shape occurs there. Such lip variations are often functional as in the case where a lip is designed for a cork, a glass stopper, a crown top or a screw top; but lip variation can also be aesthetic as when additional curves and ridges are applied to the exterior of the lip (see Figures 1.5, 1.6, 1.7, 1.8). These lip data are presented in Table 1.2 and where the bottles are complete, the method of manufacture has generally been determined. In cases where only the lip and neck segments of the bottle were preserved it was generally impossible to determine how the bottle was made.



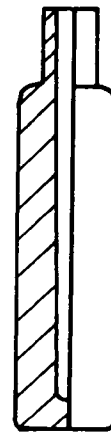
a.



b.



c.



d.

Figure 1.3: Glass Containers, Scale - 1:1.

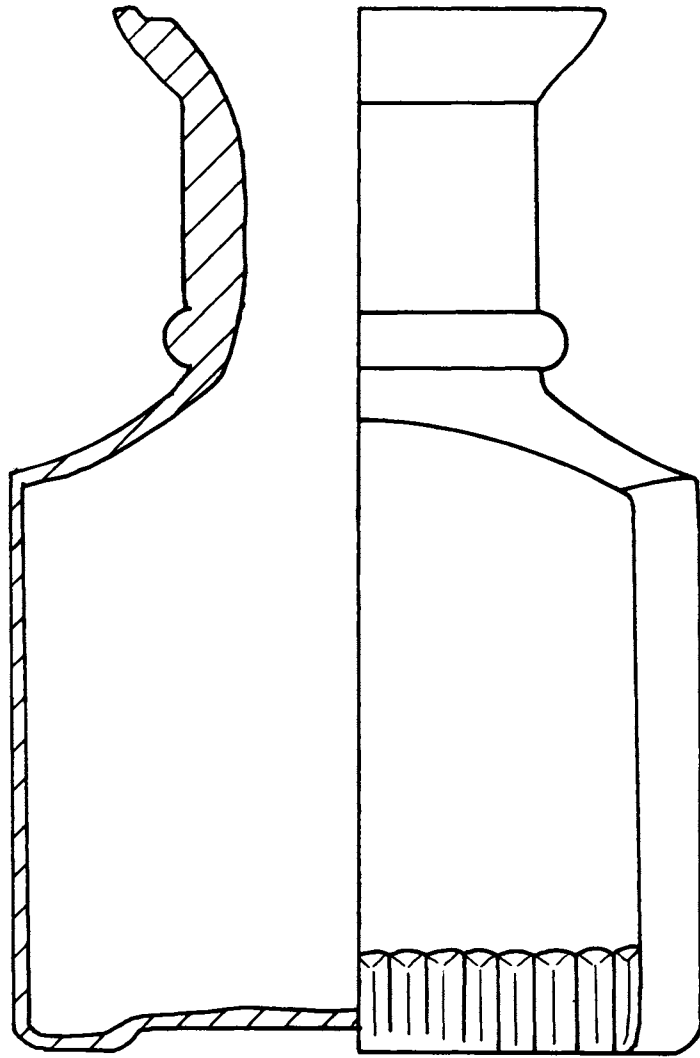


Figure 1.4: Glass Decanter, Scale - 1:1.

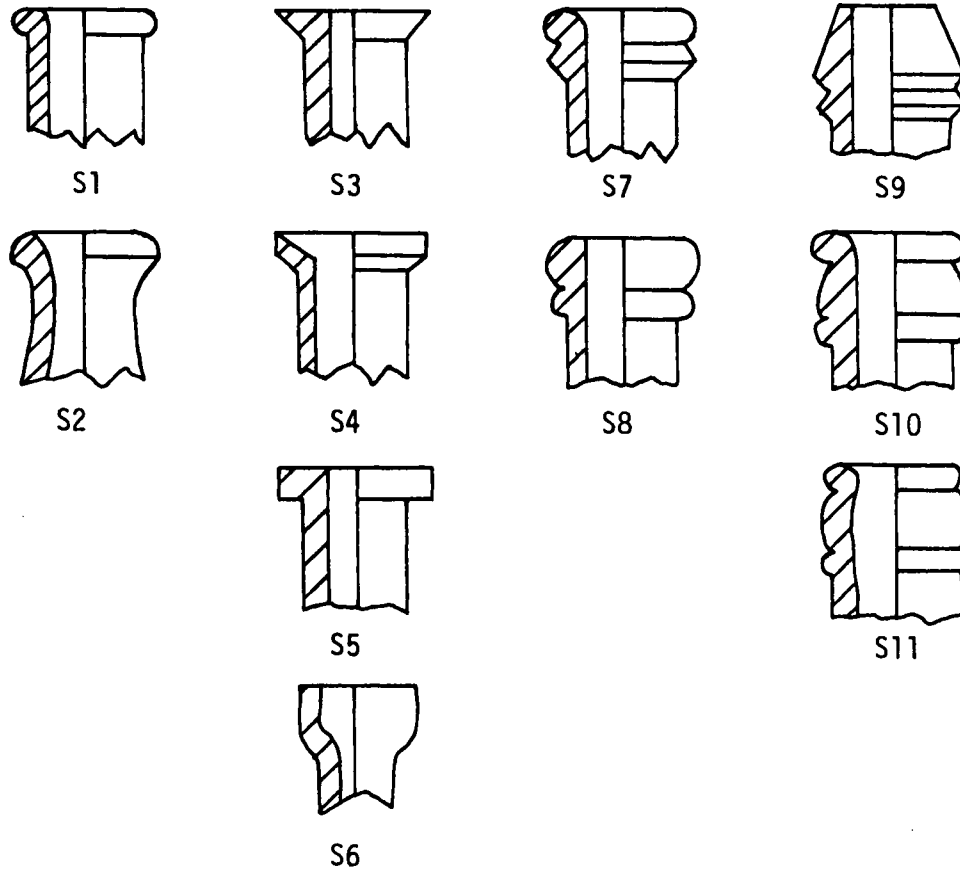


Figure 1.5: Lip Types, Short Bottles, Sketch.

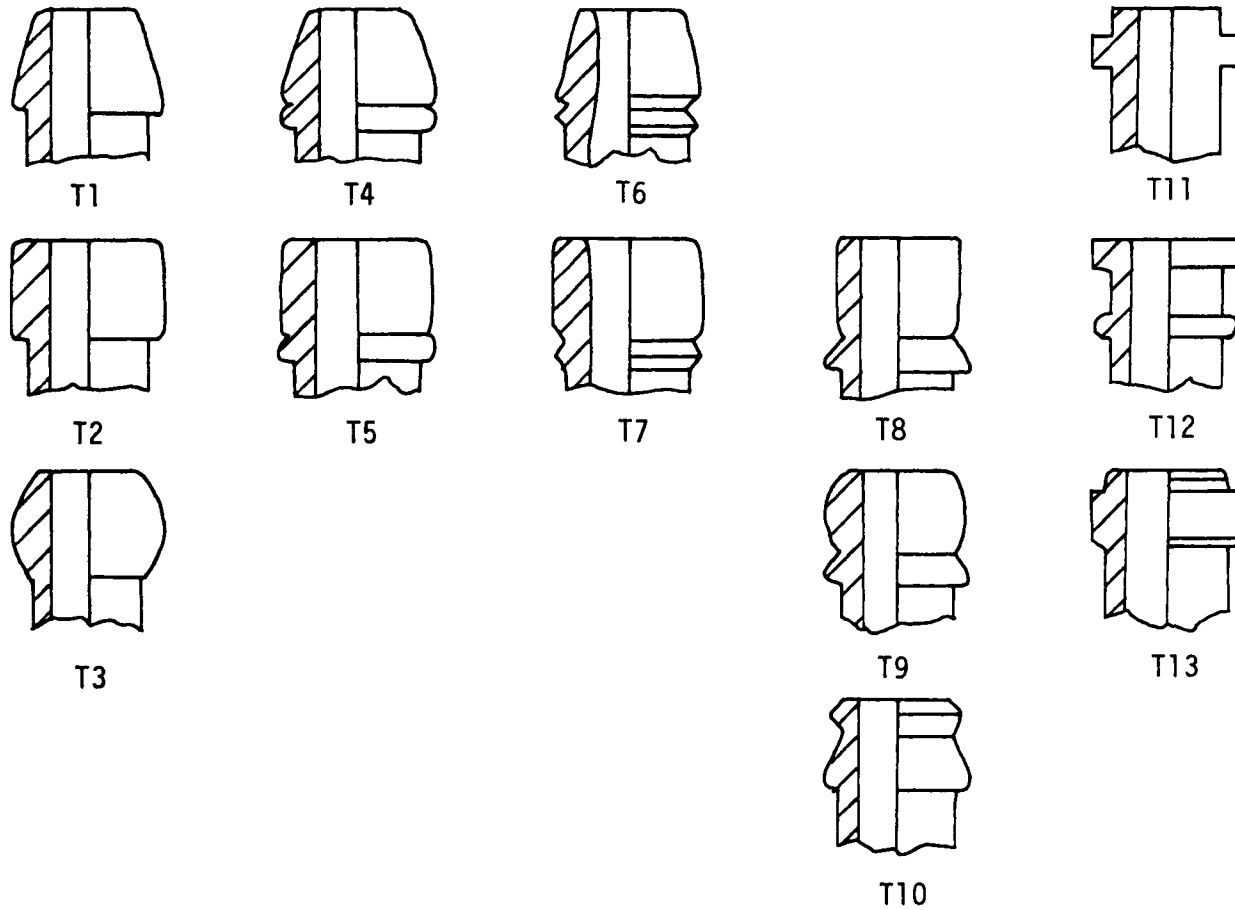


Figure 1.6: Lip Types, Tall Bottles, Sketch.

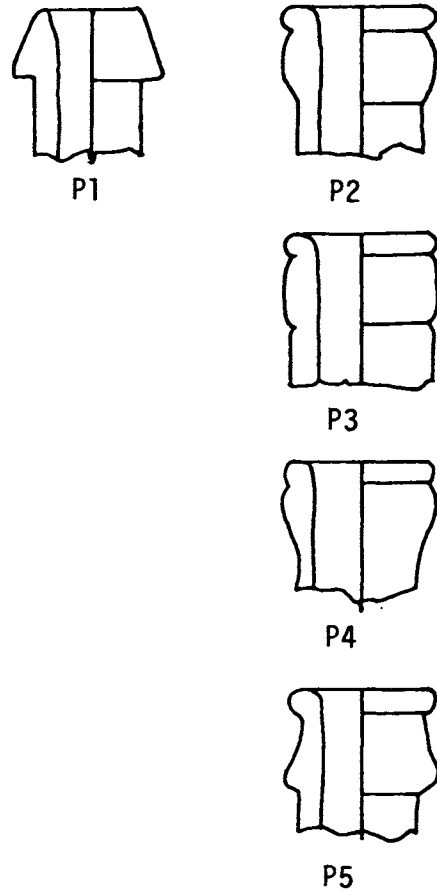


Figure 1.7: Lip Types, Pop or Beer Bottles, Sketch.

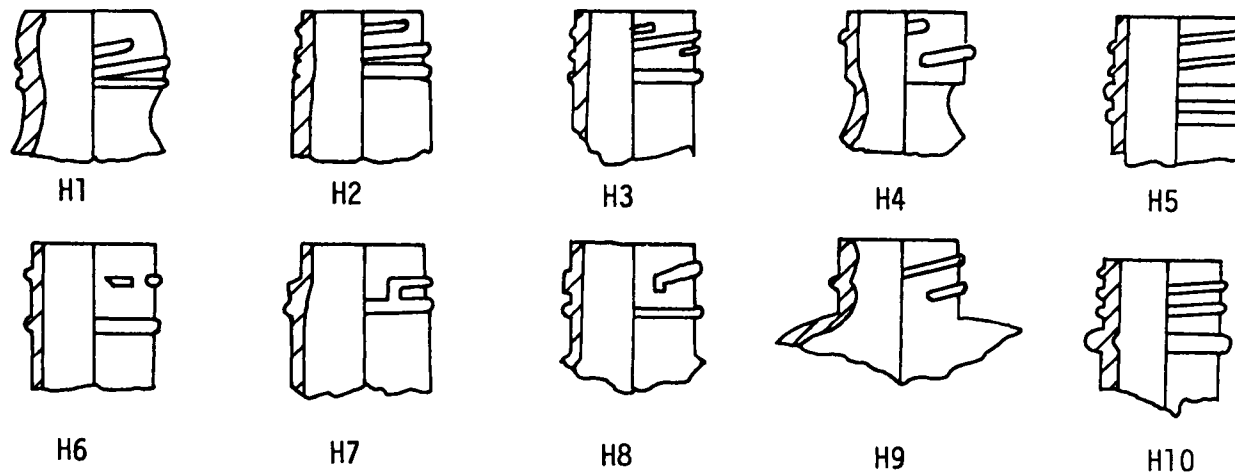


Figure 1.8: Lip Types, Screw Top Bottles, Sketch.

TABLE 1.2 DATA SHEET - SHORT BOTTLES

Lip Type	Catalogue Number	Glass Colour	Rim Dia.	Neck Height	Total Height	Base D/A	Base Length	Base Width	Provenience	Method of Manufacture
S 1	R7C 2H7A-7	clear	3.0						Mgr.'s Res.	
	2K7B-3	clear	2.5	3.9					Mgr.'s Res.	
	2L6A-24	purple	2.6	1.9					Mgr.'s Res.	
	2L7B-402	clear	2.7	2.2	10.1				Mgr.'s Res.	Cup bottom mold
	67A-6	clear	2.3	2.1	1.2		4.2	2.5	Bunkhouse	Cup bottom mold
	67A-8	clear	2.4	2.8	11.4		4.6	3.0	Bunkhouse	Machine
	80-32	clear	2.4	3.0					Bunkhouse	
	81C-80	pale blue	4.2	2.4	11.2	4.7			Well	Post bottom mold
	81C-149	dark blue	2.0	4.5					Well	
81C-179	clear	4.4	2.2					Well	Molded	
S 2	R7C 2H7A-9	brown	2.4						Mgr.'s Res.	Molded
	2K4-108	clear	2.7						Mgr.'s Res.	Molded
	2K7A-360	clear	2.4	2.7					Mgr.'s Res.	
	81C-78	dark green	2.8	2.8	14.8		3.7	3.7	Well	Post bottom mold
S 3	R7C 2K7B-1	pale green	2.8	3.1	15.6	5.7			Mgr.'s Res.	Post bottom mold
S 4	R7C 2J3A-68	clear	2.9	2.9	13.6		5.2	3.1	Mgr.'s Res.	Post bottom mold

TABLE 1.2 (Continued)

Lip Type	Catalogue Number	Glass Colour	Rim Dia.	Neck Height	Total Height	Base D/A	Base Length	Base Width	Provenience	Method of Manufacture
S 4	R7C 2K3-158	clear	2.2	2.3	9.9		3.6	3.6	Mgr.'s Res.	Machine
	2K7A-336	purple	3.2	3.2	6.8		6.6	4.0	Mgr.'s Res.	Cup bottom mold
	2K7A-358	purple	2.7	2.6					Mgr.'s Res.	
	2K7A-361	clear	2.4	2.5					Mgr.'s Res.	
	2K7B-5	clear	3.0	3.4					Mgr.'s Res.	
	2K7B-6	clear	2.8	2.8					Mgr.'s Res.	
	2K7B-34	clear	3.5	3.9					Mgr.'s Res.	
	2K7B-167	clear	3.7	3.2					Mgr.'s Res.	
	2K7B-226	purple	3.0						Mgr.'s Res.	
	2K7B-227	clear	3.1	3.1					Mgr.'s Res.	
	2L7A-51	clear	3.1	3.7					Mgr.'s Res.	
	2L7B-403	clear	2.5	3.1	12.2	4.3			Mgr.'s Res.	Post bottom mold
	2L7B-404	clear	2.8	3.0	13.3	5.5			Mgr.'s Res.	Post bottom mold
	2L7B-456	purple	2.5						Mgr.'s Res.	
	2L7C-173	clear	2.9	3.0					Mgr.'s Res.	
	2L8A-13	purple	4.0	3.5					Mgr.'s Res.	
	2L8A-15	purple						5.9	5.9	Mgr.'s Res.
63B-30	clear	2.9	2.5						Bunkhouse	

TABLE 1.2 (Continued)

Lip Type	Catalogue Number	Glass Colour	Rim Dia.	Neck Height	Total Height	Base D/A	Base Length	Base Width	Provenience	Method of Manufacture
S 4	R7C 63B-31	clear	2.8	2.4					Bunkhouse	
	67A-51	pale blue	2.9	3.1					Bunkhouse	
	76A-19	pale purple	2.5	2.4					Bunkhouse	
	81-55	clear	2.4	2.4					Well	
	81-70	clear	2.4	2.8	10.4		3.5	3.5	Well	Cup bottom mold
	81-73	clear	2.6	2.6	13.7		5.5	3.1	Well	Cup bottom mold
	81-74	clear	2.8	3.2	13.0		4.2	4.2	Well	Cup bottom mold
	81-76	clear	2.7	2.7	12.3		4.3	4.2	Well	Cup bottom mold
	81-78	clear	2.2	2.3			3.5	2.2	Well	Cup Bottom mold
	81-79	clear	2.7	2.6	13.6		5.5	3.1	Well	Cup bottom mold
	81-80	clear	2.5	2.4	11.2		4.4	2.5	Well	Cup bottom mold
	81-81	clear	2.5	2.5	11.1		4.4	2.5	Well	Cup bottom mold
	81-82	clear	2.5	2.5	11.1		4.4	2.5	Well	Cup bottom mold
	81-153	clear	2.7	3.1	12.6		5.0	2.8	Well	Cup bottom mold

TABLE 1.2 (Continued)

Lip Type	Catalogue Number	Glass Colour	Rim Dia.	Neck Height	Total Height	Base D/A	Base Length	Base Width	Provenience	Method of Manufacture	
S 4	R7C 81-154	clear	2.6	2.6	13.2		5.5	3.1	Well	Cup bottom mold	
	81-56	clear	2.3	2.5					Well		
	81-157	clear	3.1	4.2					Well		
	81-158	pale green	2.6	2.6							
	81-165	pale blue	2.7	2.7					Well		
	81C-70	clear	2.4	2.7	10.4		3.7	3.6	Well	Cup bottom mold	
	81C-72	clear	2.6	2.8	14.0		5.3	3.1	Well	Cup bottom mold	
	81C-73	clear	3.7	3.0	17.0		6.5	3.7	Well	Cup bottom mold	
	81C-74	clear	3.2	3.0	17.0		6.5	3.7	Well	Cup bottom mold	
	81C-75	clear	3.2	3.9	20.0		7.4	7.4	Well	Cup bottom mold	
	81C-77	pale green	2.8	3.1	15.8	5.7				Well	Cup bottom mold
	81C-79	pale blue	2.7	2.7	12.2	4.8				Well	Cup bottom mold
	81C-180	clear	2.4	3.4						Well	
	81C-181	clear	2.7	3.2							
81C-17	clear	2.9	3.4	16.2		5.0	5.0	Well	Cup bottom mold		

TABLE 1.2 (Continued)

Lip Type	Catalogue Number	Glass Colour	Rim Dia.	Neck Height	Total Height	Base D/A	Base Length	Base Width	Provenience	Method of Manufacture
S 4	R7C 81C-19	clear	3.0	3.3	15.8		6.0	3.4	Well	Cup bottom mold
	81C-25	clear	2.1							
	81C-26	clear	2.7	2.6						
S 5	R7C 72-1	clear	3.8	3.7	17.0		6.4	3.5	Bunkhouse	Cup bottom mold
	73B-50	clear	5.8						Bunkhouse	
	74A-8	clear	2.4	3.0					Bunkhouse	
	81-69	clear	2.5	3.2	12.9		4.5	2.7	Well	Cup bottom mold
	81-77	clear	3.1	3.3	16.7		5.1	5.1	Well	Cup bottom mold
	81-141	pale blue	2.8	3.5	10.3		3.7	3.7	Well	Cup bottom mold
	81-142	clear	2.7	3.9	10.4		3.8	3.7	Well	Cup bottom mold
	81A-9	clear	2.2	3.3	11.8		4.5	2.3	Well	Cup bottom mold
	81C-6	pale blue	3.3	2.5	18.5	8.5			Well	Post bottom mold
	81C-72	clear	2.5	3.4	16.2		6.1	3.8	Well	Cup bottom mold
	81C-184	clear	2.2	2.9					Well	

TABLE 1.2 (Continued)

Lip Type	Catalogue Number	Glass Colour	Rim Dia.	Neck Height	Total Height	Base D/A	Base Length	Base Width	Provenience	Method of Manufacture
S 5	R7C 81C-185	clear	2.5	3.8					Well	
S 6	R7C 81C-182	pale green	3.9	3.2						
	81D-20	clear	1.6	4.1	16.4		5.4	3.0	Well	Cup bottom mold
	81D-23	clear	2.4							
S 7	R7C 2H3-1	clear	2.2						Mgr.'s Res.	
	2H5-81	clear	2.0						Mgr.'s Res.	
	2x7-2	clear	2.1						Mgr.'s Res.	
	64A-213	clear	3.1	4.9	21.7		7.6	4.2	Bunkhouse	Machine
S8	R7C 2L6A-1	pale green	2.0	4.6			5.0	2.6	Mgr.'s Res.	Cup bottom mold
	67A-7	pale blue	2.1	3.6					Bunkhouse	
	74A-16	pale blue	2.2	4.0	14.0				Bunkhouse	
	81-71	pale blue	2.1	4.2	14.7		5.0	2.6	Well	Cup bottom mold
	81C-71	clear	2.2	2.8	12.4		4.3	3.0	Well	Cup bottom mold
	81D-18	pale blue	2.3	3.8	14.0		5.1	2.6	Well	Post bottom mold
S9	R7C 2K7A-354	pale blue	2.3	4.7					Mgr.'s Res.	

TABLE 1.2 (Continued)

Lip Type	Catalogue Number	Glass Colour	Rim Dia.	Neck Height	Total Height	Base D/A	Base Length	Base Width	Provenience	Method of Manufacture
S 10	R7C 2H7A-15	clear	2.7						Mgr.'s Res.	Machine
	2K6A-93	pale green	2.4						Mgr.'s Res.	Molded
S 11	R7C 63E-70	clear	2.6	7.4		6.5			Bunkhouse	

Lip Types

The lip types have been subdivided into the following groups:

1. Short Bottles - These include a wide range of non-liquor bottles including pharmaceutical, perfume, bitters and condiment bottles. Most of these would have a cork or glass stopper.
2. Tall Bottles - These include the general range of liquor and wine bottles. Most of these would have a cork or glass stopper.
3. Pop or Beer Bottles - The modern range of pop and beer bottles are included in this group plus the easily identifiable soda bottles of the late nineteenth century. Generally pop and beer bottles have crown tops. Beer bottles are usually brown in colour while pop bottles are generally clear or green although they can also be brown as in the case of ginger beer or root beer.

Beer bottles of the nineteenth century are more difficult to distinguish from liquor bottles, especially if they had cork stoppers (Jones 1970:29). It is possible, therefore, that some of the bottles discussed under liquor bottles are actually beer bottles.

4. Screw-topped Bottles - These are generally a late (post-1904) development. It is after 1904 that machine-made bottles began to be used widely.
5. Food Storage Jars - This group includes a range of food preservation glass containers. These have either plain or screw type rims. Screw type food storage jars became popular after 1892 (Jones 1970:29).

Methods of Bottle Manufacture

Bottles listed in Table 1.2 are identified where possible as to method of manufacture. Late nineteenth century bottles were in general manufactured by a variety of molded techniques. These are sometimes termed "semi-automatic" because the general shape of the bottle was mass produced in a mold whereas the lip had to be finished by a hand technique after the bottle was removed from the mold.

A variety of different mold designs were used which yielded different seam line patterns. In all these cases the seam line does not extend onto

the lip but rather the seam line is generally obliterated by applying a tool to produce a uniform lip. A cup bottom mold generally yields a seam line near the base on the side of the vessel and two seam lines running vertically towards the neck. A post bottom mold generally yields a seam line on the base itself with seam lines running vertically up the sides towards the neck. These semi-automatic techniques were generally used from 1880-1913 (Newman 1970:72). A three part mold generally has a horizontal seam just below the shoulder of the vessel and seam lines running vertically from this line towards the neck. Three piece molds were used 1810-1890 (Newman 1970:72). A turn mold involves spinning the bottle while inside the mold to remove all traces of seams. The result is a series of horizontal smoothing lines around the body of the vessel. This method was common in the late nineteenth century and early twentieth century (1880-1920) (Newman 1970:72).

After 1903, the fully automated glass machine became widespread in use. These are easily identifiable by the presence of vertical seams which extend onto the lip of the vessel.

A correlation exists between types of bottles and method of manufacture. Short bottles have generally been made by the cup bottom mold method, although some were also made by the post bottom method and by a fully automatic machine method (Table 1.2). Tall bottles were rarely made by the cup bottom or post bottom method. Far more common are tall bottles made using a turn mold. A three part mold was used to produce two of the tall bottles for which method of manufacture could be determined. In only one case was evidence of a pontil determined which indicates that this bottle (R7C81C-86) was free blown (not made in a mold) (Table 1.3).

Pop bottles used at Cochrane Ranch were only manufactured in two ways - most were made by machine but a small number were made using a two part mold. These later were heavy, round bottomed clear glass bottles which were probably sealed with a cork and wire rather than crown caps (Table 1.4). All screw topped bottles had been made by full automatic machine methods (Table 1.5).

EMBOSSED LABELS

Embossed marks on bottles are of two types. On the sides of bottles
(continued page 94).

TABLE 1.3 DATA SHEET - TALL BOTTLES

Lip Type	Catalogue Number	Glass Colour	Rim Dia.	Neck Height	Total Height	Base D/A	Base Length	Base Width	Provenience	Method of Manufacture
T 1	R7C 2K3-154	pale green	1.9	9.8					Mgr.'s Res.	Post bottom mold
	2K3-156	pale green	2.6	6.5					Mgr.'s Res.	Molded
	2K6A-80	dark green	2.5	3.3					Mgr.'s Res.	Molded
	2K7A-347	dark green	2.5	3.3					Mgr.'s Res.	Molded
	2K7B-89	dark green	2.6	3.3					Mgr.'s Res.	Molded
	2K7B-328	dark green	3.0			8.0			Mgr.'s Res.	Post bottom mold
	2L7A-20	dark green	2.6	3.5					Mgr.'s Res.	Molded
	2L7B-401	dark green	2.5		24.2		6	5.7	Mgr.'s Res.	Molded
	2L7B-405	pale green	2.1	8.3	21.5				Mgr.'s Res.	Turn mold
	2L7B-674	dark brown	2.5	10.3	28.7	7.8			Mgr.'s Res.	Turn mold
	81C-81	brown	2.6	10.0	29.1	7.7			Well	Turn mold
	81C-82	brown	2.9	10.0	28.8	7.6			Well	Cup bottom mold
T2	R7C 2K4-99	pale blue	3.0						Mgr.'s Res.	Molded
	2K7A-356	pale green	2.8						Mgr.'s Res.	
	2K7B-190	clear	2.8						Mgr.'s Res.	
	2K7B-289	pale green	2.7						Mgr.'s Res.	
	2K7B-406	clear	2.8						Mgr.'s Res.	
	2L4A-58	pale green	2.8						Mgr.'s Res.	

TABLE 1.3 (Continued)

Lip Type	Catalogue Number	Glass Colour	Rim Dia.	Neck Height	Total Height	Base D/A	Base Length	Base Width	Provenience	Method of Manufacture
T 2	R7C 2L7A-11	dark green	2.9						Mgr.'s Res.	Molded
	2L7C-1	pale blue	2.7						Mgr.'s Res.	Turn mold
	2M7-66	pale green	2.9						Mgr.'s Res.	
	2M7-67	pale green	2.6						Mgr.'s Res.	
	81-143	pale green	3.1	5.2	28.2		10.7	9.0	Well	Turn Mold
	81B-32	dark green	2.8						Well	
T 3	R7C 2x3-102	dark green	2.9						Mgr.'s Res.	Turn mold
	2J4-37	green	2.7						Mgr.'s Res.	Turn mold
	2L7A-16	pale green	3.6	3.3					Mgr.'s Res.	
	2L7A-352	dark green	2.8						Mgr.'s Res.	
	2L7B-570	dark green	2.6	4.1					Mgr.'s Res.	
	2L7C-185	dark green	2.7		24.3	6.7			Mgr.'s Res.	Turn mold
	2L7C-186	dark green	2.7		24.3	6.7			Mgr.'s Res.	Turn mold
	63C-104	pale green	4.0						Bunkhouse	
	70B-5	pale green	3.2						Bunkhouse	Molded
	81C-87	dark green	2.8	8.6	30.1	8.1			Well	Turn mold
T 4	R7C 2L6A-2	dark brown	2.8	10.7	29.4	8.1			Mgr.'s Res.	Turn mold
	2L7B-419	pale blue	2.7	7.8					Mgr.'s Res.	Molded
	73B-6	brown	2.7	10.6	29.3	7.9			Bunkhouse	Turn mold
	76A-18	pale blue	1.7		short				Bunkhouse	

TABLE 1.3 (Continued)

Lip Type	Catalogue Number	Glass Colour	Rim Dia.	Neck Height	Total Height	Base D/A	Base Length	Base Width	Provenience	Method of Manufacture
T 4	R7C 81C-83	brown	2.7	10.7	29.9	8.0			Well	Turn mold
	-84	brown	2.7	10.7	29.9	8.0			Well	Turn mold
T 5	R7C 2H8-64	brown	2.5							Mold
	2X8-20	brown	3.0							
	2J3A-35	pale blue	2.6							
	2K3-156	dark brown	2.7							
	2K7A-355	pale green	2.6	7.5						
	2K7B-198	clear	2.8	11.4						
	2L4A-41	brown	2.8	4.5						
	2L5-1	brown	2.8	4.5						
	2L7B-427	clear	2.8	10.8						
	2L7B-682	brown	2.7	10.9					Mgr.'s Res.	Turn mold
	2L7B-683	brown	2.7						Mgr.'s Res.	
	2L7B-684	brown	2.8						Mgr.'s Res.	
	2L7B-739	brown	2.8	4.0					Mgr.'s Res.	Cup bottom mold
	81-164	pale blue	2.6						Well	
	81-259	clear	2.6						Well	
81B-23	pale blue	2.7	8.3					Well		
81B-16	brown	2.9	4.3	17.7		9.5	3.5	Well	Cup bottom mold	

TABLE 1.3 (Continued)

Lip Type	Catalogue Number	Glass Colour	Rim Dia.	Neck Height	Total Height	Base D/A	Base Length	Base Width	Provenience	Method of Manufacture
T 6	R7C 2K7B-7	dark brown	2.7	10.0					Mgr.'s Res.	
T 7	R7C 2K4-61	pale green	2.9						Mgr.'s Res.	Three part mold
T 8	R7C 2F4-7	brown	2.8						Mgr.'s Res.	
	2L7B-407	pale green	2.8	9.3	30.0	7.2			Mgr.'s Res.	Three part mold
	2L8A-67	dark green	2.7						Mgr.'s Res.	
	5L8B-2	brown	2.8	10.2	29.1	7.8			Mgr.'s Res.	Turn mold
T 9	R7C 2K6-172	pale green	2.4	4.2					Mgr.'s Res.	Molded
	2L6A-18	pale green	2.8	9.7					Mgr.'s Res.	Turn mold
	2L7C-2	pale green	2.9						Mgr.'s Res.	Turn mold
	81C-85	pale green	2.7	10.1	30.1	7.2			Well	Three part mold
	81C-172	dark green	2.7	9.0		7.6			Well	Turn mold
	81C-183	pale green	3.0						Well	
T 10	R7C 2K5-15	pale blue	3.9						Mgr.'s Res.	Molded
T 11	R7C 2G8-78	pale green	2.6						Mgr.'s Res.	
	2H8-3	pale green	2.5						Mgr.'s Res.	
	2K4-55	dark green	2.5			7.5			Mgr.'s Res.	
	2K7A-353	dark green	2.6						Mgr.'s Res.	

TABLE 1.3 (Continued)

Lip Type	Catalogue Number	Glass Colour	Rim Dia.	Neck Height	Total Height	Base D/A	Base Length	Base Width	Provenience	Method of Manufacture
T 11	R7C 2L8A-66	dark green	2.6						Mgr.'s Res.	Machine
	78A-70	med.green	2.5						Bunkhouse	
	81C-205	grey/blue	3.8	4.4		12.0			Well	Post bottom mold
T 12	R7C 2L7A-64	pale purple	4.5	5.5			6.6	5.4	Mgr.'s Res.	Cup bottom mold
	73B-2	clear	2.1	3.3	11.8		4.5	2.3	Bunkhouse	Cup bottom mold
	73B-3	clear	2.1	3.3	11.8		4.5	2.3	Bunkhouse	Cup bottom mold
T 13	R7C 2L6-17	dark green	2.6	6.5		7.5			Mgr.'s Res.	Molded
	2L7A-59	dark green	3.0						Mgr.'s Res.	
	2L8B-1	dark green	2.8	7.0	29.4	7.0			Mgr.'s Res.	Turn mold
T 14	R7C 81C-86	pale green	2.8	7.2	30.0	7.5			Well	Free blown

TABLE 1.4 DATA SHEET - POP OR BEER BOTTLES

Lip Type	Catalogue Number	Glass Colour	Rim Dia.	Neck Height	Total Height	Base D.A	Base Length	Base Width	Provenience	Method of Manufacture
P 1	R7C 2L6A-22	dark green	2.8	4.9					Mgr.'s Res.	Two piece mold
	81-160	pale green	3.0						Well	Two piece mold
	81B-24	pale green	2.7	6.0					Well	Two piece mold
	81B-31	pale green	3.0	5.9	24.3	5.9			Well	Two piece mold
P 2	R7C 21+5-80	clear	2.8						Mgr.'s Res.	Machine
	2 X3-35	pale green	2.5						Mgr.'s Res.	Machine
	2J4-49	brown	2.5						Mgr.'s Res.	Machine
	2K3-158	med. green	2.6						Mgr.'s Res.	Machine
	61B-59	green	2.6		24.6	6.6			Bunkhouse	Machine
	64A-215	med. green	2.6						Bunkhouse	
	81C-170	dark green	2.7						Well	
P 3	R7C 2H8-1	pale green	2.7						Mgr.'s Res.	Machine
	2K7-57	green	2.5						Mgr.'s Res.	
P 4	R7C 2L7B-758	dark green	2.6						Mgr.'s Res.	Machine
	72A-105	dark green	2.6						Bunkhouse	Machine
	72A-301	pale green	2.6						Bunkhouse	Machine
	72A-304	clear	NP						Bunkhouse	Machine

TABLE 1.4 (Continued)

Lip Type	Catalogue Number	Glass Colour	Rim Dia.	Neck Height	Total Height	Base D/A	Base Length	Base Width	Provenience	Method of Manufacture
P 5	R7C 2H9-9	brown	2.6	9.1	23.2	6.7			Mgr.'s Res.	Machine
	61B-5	green	2.7		20.0	5.8			Bunkhouse	Machine
	61B-17	brown	2.6						Bunkhouse	Machine
	63B-37	med.green	2.7		20.0	5.7			Bunkhouse	Machine
	63E-15	med.green	2.7		20.0	5.7			Bunkhouse	Machine
	63E-16	med.green	2.7		20.0	5.7			Bunkhouse	Machine
	63E-17	med.green	2.7		20.0	5.7			Bunkhouse	Machine
	63E-18	med.green	2.7		20.0	5.7			Bunkhouse	Machine
	64A-18	brown	2.6						Bunkhouse	Machine
	74A-13	clear	2.6		19.7	5.7			Bunkhouse	Machine
	74A-21	clear	3.0		19.8	5.7			Bunkhouse	Machine

TABLE 1.5 DATA SHEET - SCREW TOP BOTTLES

Lip Type	Catalogue Number	Glass Colour	Rim Dia.	Neck Height	Total Height	Base D/A	Base Length	Base Width	Provenience	Method of Manufacture
H 1	R7C 2Fd-73	yellow							Mgr.'s Res.	Machine
	74A-1	clear	2.4		14.7		6.7	3.2	Bunkhouse	Machine
H 2	R7C 2L8-21	clear					4.9	2.6	Mgr.'s Res.	Machine
	73A-4	clear	2.8						Bunkhouse	Machine
	74A-4	clear	1.9	3.2	12.4		4.6	4.5	Bunkhouse	Machine
	74A-5	clear	1.9	3.2	12.4		4.6	4.5	Bunkhouse	Machine
	74A-6	clear	1.9	3.2	12.4		4.6	4.5	Bunkhouse	Machine
H 3	R7C 2G5-86	clear	2.8	2.0	9.9		4.3	2.9	Mgr.'s Res.	Machine
	2K3-157	clear	1.7						Mgr.'s Res.	Machine
	2K7-54	clear	2.0		11.6		5.0	3.1	Mgr.'s Res.	Machine
	74A-7	clear	1.1		6.0	3.7			Bunkhouse	Machine
	74A-17	clear	3.0	4.7					Bunkhouse	Machine
	77A-8	clear	1.7		8.1		5.2	3.1	Bunkhouse	Machine
	78A-15	clear	1.5		5.0		3.2	1.4	Bunkhouse	Machine
	80-33	clear	1.1						Bunkhouse	Machine
H 4	R7C 2X6-4	clear	2.4						Mgr.'s Res.	Machine
	63B-29	clear	2.5						Bunkhouse	Machine
H 5	R7C 2K3-159	clear							Mgr.'s Res.	Machine
	2K3A-49	clear	2.4						Mgr.'s Res.	Machine

TABLE 1.5 (Continued)

Lip Type	Catalogue Number	Glass Colour	Rim Dia.	Neck Height	Total Height	Base D/A	Base Length	Base Width	Provenience	Method of Manufacture
H 5	R7C 74A-14	clear	1.9		13.2		6.2	3.4	Bunkhouse	Machine
H 6	R7C 75A1-2	clear	1.8	2.7	10.6		3.6	3.5	Bunkhouse	Machine
H 7	R7C 63B-37	clear	2.4	5.8	20.7		6.8	3.4	Bunkhouse	Machine
	74A-1	clear	2.5	5.8	20.7		6.8	3.4	Bunkhouse	Machine
	74A-2	clear	2.5	5.8	20.7		6.8	3.4	Bunkhouse	Machine
	74A-3	clear	2.5	5.8	20.7		6.8	3.4	Bunkhouse	Machine
	74A-12	clear	3.5	3.5	17.7		7.2	4.0	Bunkhouse	Machine
H 8	R7C 63B-9	clear	2.4		28.0		7.4	5.8	Bunkhouse	Machine
	63B-10	clear	2.4		28.0		7.4	5.8	Bunkhouse	Machine
	63B-11	clear	2.4		28.0		7.4	5.8	Bunkhouse	Machine
	64A-213	clear	2.1						Bunkhouse	Machine
H 9	R7C 81D-21	pale blue	3.1						Well	Machine
H 10	R7C 81-6	clear	2.6	4.0					Well	Machine

are frequently labels that refer to the contents of the bottles. On the base of bottles are usually the marks of the makers of the bottles.

SHORT BOTTLES - CONTENTS LABELS (Table 1.6)

From the list below it can be observed that most short bottles were used for patent medicines, which were extremely popular in the late nineteenth century. Many of these were very high in alcohol content, such as Perry Davis' Vegetable Pain Killer which had over 50% alcohol and Paine's Celery Compound (21% alcohol). This latter was mainly recommended for "nervous" disorders whereas Davis' Pain Killer has a general all-round application (Holbrook 1959).

Other common medicines found at Cochrane Ranche include Pitcher's Castoria, Dr. A. Fowler's Extract (of wild strawberry), Eno's Fruit Salts and Bromo Seltzer.

Less familiar medicines include Slocum's Colt Foot Expectorant, Syrup of Figs made by the California Fig Syrup Co., Dr. S. N. Thomas' Eclectic Oil made in Toronto and Dr. Chase's Syrup Linseed and Turpentine.

Also found at Cochrane Ranche were medicine bottles displaying local (Calgary) druggists' names. These are Templeton's Pharmacy and W. Maclean Chemist, Calgary N.W.T.

In addition to medicine some short bottles had other uses. The next most common was that for a glue called Major's Rubber Cement made in New York.

TALL BOTTLES (Table 1.6)

Very few tall bottles had embossed labels. Two of these were clearly for whiskey; Imperial Quart and Dewars Perth Whiskey. Several bottles were labeled Saxlehner Bitterquelle Hunyadi Janos which contained a Hungarian mineral water (Toulouse 1971:257).

POP BOTTLES (Table 1.6)

A number of pop bottles had labels. Nationally known products included Canada Dry and Orange Crush. Locally produced pops included Calgary Brewing and Malting Company "Buffalo" brand and Calgary Polar brand.

TABLE 1.6 DATA SHEET EMBOSSED LABELS

Lip Type	Catalogue Number	Bottle Cross Section	Colour	Embossed Label
S 1	R7C 2K7B-3	rectangular	clear	"Seelys" (in script)
	2L7B-402	circular	dark blue	BROMO SELTZER EMERSON DRUG CO. BALTIMORE, M.D.
	67A-6	rectangular	clear	Graduated in 10 cc units (right); ounce (left) right: 20, 40 left: 1, 3
	2K3-167	rectangular	clear	Graduated and embossed 10, 20
	67A-8	rectangular	clear	front: FROSTILLA left: FRAGRANT LOTION right: ELMIRA, N.Y. U.S.A.
	81D-24	rectangular	clear	front: HOLMES FRAGRANT/ TRADE/FROSTILLA/MARK/ ELMIRA N.Y. left: ...CHAPPED HANDS right: ...SALT RHEUM ETC.
	63B-33	rectangular	clear	...OSTILLA
	2X6-16	rectangular	clear	FR.../ELMIRA N.Y.
	78A-73	rectangular	clear	...TILLA...
S 4	R7C 81-70	square	clear	TEMPLETONS PHARMACY CALGARY
	81-76	square	clear	TEMPLETONS PHARMACY CALGARY
	2K7A-369	square	clear	...NS PHARMACY ...GARY
	81C-72	rectangular	clear	W. MACLEAN/CHEMIST/ (WM monogram)/CALGARY/ N.W.T.
	2K7A-332	rectangular	clear	W. MACLEAN/CHEMIST/ (WM monogram)/CALGARY/ N.W.T.
S 5	R7C 2L7A-143	rectangular	pale purple	DR CHASE'S/SYRUP LINSEED & TURPENTINE/ EDMANSON BATES & CO.
	61A-1	rectangular	pale green	DR CHASE'S/SYRUP LINSEED & TURPENTINE/ EDMANSON BATES & CO.

TABLE 1.6 (Continued)

Lip Type	Catalogue Number	Bottle Cross Section	Colour	Embossed Label
S 5	R7C 2L6A-3	rectangular	pale blue	DR CHASE'S/...RUP LINSEED & TURPENTINE/ ...DMANSON BATES & CO.
	2L4A-61	rectangular	pale blue	...HASE.../...SEED & TU.../...N BATES...
	2F5-20	rectangular	pale purple	...TINE
	81-141	square	clear	MAJOR'S/RUBBER/ CEMENT/NEW YORK
	81-142	square	clear	THIS IS MAJOR'S/ RUBBER CEMENT/MAJOR'S CEMENT CO./NEW YORK USA
	2L7B-475	square	clear	THIS IS MA.../ NEW...US.../ ...RS CE...NT CO.
	2M7-40	square	clear	...ENT/...JOR
S 7	R7C 64A-213	rectangular	clear	"Rawleigh's" (in script)
S 8	R7C 81D-18	rectangular	pale green	front: DR S.N. THOMAS/ ELECTRIC OIL right: EXTERNAL back: NORTHROP & LYMAN CO/ TORONTO, ONT. left: INTERNAL
	81C-71	rectangular	pale blue	left: DR. A. FOWLER'S right: EXTRACT
	2L7A-56	rectangular	pale blue	..LER'S
	81-71	rectangular	pale green	right: DR. S. PITCHER'S left: CASTORIA
	2L6A-1	rectangular	pale green	right: DR. S. PITCHER'S left: CASTORIA
	73A-18	rectangular	pale green	DR. S. P...
	74A-16	rectangular	pale green	right: HENRY R. GRAY left: MONTREAL
Unknown-Short Bottles				
	R7C 81D-22	rectangular	clear	front: DAVIS left: VEGETABLE right: PAIN KILLER
	2L7B-420	rectangular	pale blue	PAIN...

TABLE 1.6 (Continued)

Lip Type	Catalogue Number	Bottle Cross Section	Colour	Embossed Label
Unknown-Short Bottles				
	R7C 73A-12		clear	...BLE
	81C-190		clear	ENO'S... FRUIT SALT
	2L7B-459		pale green	...NO'S...T...
	2L6A-28		clear	...NO...TS...
	2L6A-29		clear	...NO'S...T SA...
	217B-282	square	pale green	PAINE'S CELERY COMPOUND
	217B-416	square	pale blue	...COMPOUND
	81-196		pale green	...PAINE...
	2K7B-220	rectangular	clear	CALIFORNIA FIG SYRUP CO SAN FRANCISCO CA...
	2L4A-5		clear	...FIG S...
	2L7C-176	rectangular	clear	...RUP OF
	2L4A-122	circular	clear	HORLICKS/...LTED MIL(K)
	76A-1	circular	clear	...OUGH/NEW YORK
	80-37	rectangular	clear	...PAL...
	2X3	rectangular	pale blue	...ME &...
	2X7-140		brown	...ONE/...CO
	2J4D-41	rectangular	pale blue	...TIS?...SION
	2K3A-80	rectangular	pale green	...R.R.../...WAY.../ ...EWY...
	2H4-51	circular	pale yellow	...LIST. RING...
	2H8-85	rectangular	pale green	...TURE/...TON/...A.
	2N8-87	rectangular	pale green	...INARD'S/...MIN...
	2N8-63	rectangular	brown	...GC/...HARMACISTS
	2F6A-48	rectangular	pale blue	...ME &
	2F4A-408			...ORONTO C...
	2H6B-21	rectangular	clear	...THROP/...CO
	72A-30		clear	...ARK...
	2K7A-340	oval	clear	SLOCUMS COLTS FOOT EXPECTORANT
	2K8-149		clear	..."nex" (in script)

TABLE 1.6 (Continued)

Lip Type	Catalogue Number	Bottle Cross Section	Colour	Embossed Label
Unknown-Short Bottles				
	R7C 2F6-113	rectangular	pale purple	DR.../SYRUP... ...F...
	2K3-166		brown	...ORK
H 1	R7C 74A-11	circular	clear	RAWLEIGHS base 1906
	2F7-33	circular	pale yellow	LISTERINE/LAMBERT/ PHARMACAL COMPANY/ CANADA/LIMITED
H 2	R7C 74A-4	rectangular	clear	CONTENTS 4 FL OZ
H 3	R7C 2K7-54	rectangular	clear	DK monogram in a circle
	84A-5	circular	clear	PD & CO
H 5	R7C 74A-14	rectangular	clear	S HINDS OF CANADA LIMITED, TORONTO
H 9	R7C 81D-21	rectangular	clear	KDC in a circle FOR DYSPEPSIA
T 2	R7C 81-143	oval	clear	IMPERIAL/Quart
Unknown-Tall Bottles				
	R7C 81C-156	circular	dark green	DEWARS PERTH WHISKY
	2K7B-339	circular	dark green	...LEHNERS/HUNYADI JANOS/BITTERQUELLE
	2K7B-19	circular	dark green	...AX LEHNERS/ HUNYADI JANOS/...ELLE
P 1	R7C 2L7B-423	circular	clear	BUFFALO/CALGARY BREWING AND MALTING/COMPANY LTD.
P 2	R7C 61B-40	circular	green	CANA...DR...
P 5	R7C 74A-21	circular	clear	CALGARY POLAR BRAND/ TRADE MARK REGISTERED ...AIN CONT. 6½ FL OZ ...OPERTY OF POLAR AERATED WAT...
	74A-13	circular	clear	TM.RG/AUG 22 1921/ ORANGE/CRUSH/BOTTLE/ 6 FL OZ.

TABLE 1.6 (Continued)

Lip Type	Catalogue Number	Bottle Cross Section	Colour	Embossed Label
Unknown-Pop	Bottle R7C 2L5A	circular	clear	part of a white horseshoe ...T/...UCT/... MALTING CO. LTD./10 FL OZ.

SHORT JARS (Table 1.7)

A few short jars were also found to have embossed labels. These were either for vaseline or cold cream. A number of short, black, bakelite cylinders were also found with a label for Fruitatives. Of interest is that this Canadian (Hull) made product lists Strychnine among its ingredients.

DISCUSSION

From the labels it can be observed that medicines available could be either produced in the United States, Eastern Canada or locally in Calgary. Alcohol bottles suggest that these were mainly imported either from the east or from abroad. Pop seems to have been available in Calgary at a relatively early period (late 19th century?).

BOTTLE MANUFACTURERS' MARKS (Table 1.8)

Bottle manufacturers' marks reflect the sources of the materials contained in the bottles themselves. Most common of the marks are the diamond "D" of the Dominion Glass Company probably manufactured in glass houses in eastern Canada although the company also opened a plant in Redcliffe, Alberta in 1913 (Jones 1970:76). A number of glass manufacturers in the United States are also represented in the sample.

Two bottles from Cochrane Ranch have interesting similarities to some bottles from Writing-On-Stone N.W.M.P. Post. One of these concerns the makers of a tall bottle base embossed R. & Co. which Toulouse (1971: ascribed to Roth and Company, San Francisco (1879-1888). Forsman and Minni (1971:296) doubt that the bottle from Writing-On-Stone with this mark was manufactured by Roth & Co. based on a "beer bottle shape" and a 24 ounce size. The bottle from Cochrane Ranch is similar.

The other bottle has A C B Co. on the base and LEA & PER... running vertically along the side. Elsewhere Lea and Perrin bottles have A G B Co. on the base made by Albion Glass Bottle Co., England. Forsman and Minni (1977:296) suggest the first "C" is an improperly made "G". If so the occurrence of this anomaly at Cochrane Ranch suggests this was either a common error or these two bottles were distributed and made at roughly the same time.

CASE BOTTLES (Figure 1.9)

Case bottles are tall rectangular cross-sectioned bottles. They are usually made of dark green glass. The bases of these case bottles are illustrated in Figure 1.9. None of these marks are currently identifiable but these are included with the hope that they may be in the future.

PAPER LABELS

Only a few paper labels were identifiable from the Cochrane Ranche. These include:

- R7C 76A-3 - A tin foil label for BAY RUM/HIGHEST DISTILLATION ...OR EVERY DAY OF THE YEAR.
- R7C 66B-12 - A lead top label with a band around the edge reading - BEATSON'S OLD KIRKALDY WHISKEY.
- R7C 2L7A-6 - A fragment of a flat bottle side with a plant design on the edge with a brown on white word FLORENT...
- R7C 2K7A-368 - A paper label on a fragment of curved glass reading - ...ITEED.
- R7C 81C-6 - A paper label on a fragment of curved glass reading - ...T SON CO.

FOOD STORAGE JARS (Figure 1.10, Table 1.9)

Food storage jars were found on all three areas of the site excavated. Twelve were recovered from the manager's residence, seven from the bunkhouse and two from the well. Mason jars began to be widely used after 1892-98. Two companies are represented at the site. On one jar is "Ball" PERFECT MASON while another jar has "Gem" on the side (Table 1.9). Four short wide-mouthed jars have patent dates 1903 (Table 1.9). The Ball jar was made by Ball Brothers Company, Muncie, Indiana, probably around 1915 (Toulouse 1969). The Gem jar was made in Wallaceburg, Ontario by the Sydenham Glass Company around 1908 (Toulouse 1969).

There is considerable variation in lip types on jars recovered. Jars 1 to 6 are various threaded vessels. Jar 5 is interesting because it has reverse threads. Jars 7 to 12 are designed for other kinds of tops, either wire snap-down or simple pressure-fit lids.

TABLE 1.7 DATA SHEET - SHORT JARS - LABELS

Cold Cream Jars

R7C 2H6B-22	white	PON...
R7C 2H9-46	white	...NDS
R7C 2J3A-64	white	base: CHESEBOROUGH MFG CO. N.Y. lid: CHESE...OU...MANUFACTURING COMPANY (CONSOLIDATED) VASELINE/ ...OR THE SK.../...YORK
R7C 78A-69	white	POND'S/REG'D 1935/ MADE IN CANADA
R7C 74A-18	white	WOODBURY

Fruitative Jars

These are all black bakelite cylinders with yellow caps. (R7C 62C-101, 102; R7C 73A-61).

Label: FRUITATIVES

...THE

...TABLET

...OUND

No. 1588...
The Proprietary or
Patent

...ice effect
...ontains 1/6
grain Extract
Hyposcyamus
1/200 grain
Strychnine

For...
and Nerves. Re..
Dose 1 to 3 ...
at bedtime wi...
empty with...
Dose 1 a 3 table
ire 2) avec...
coucher quar...
...est vide

...skin...

FRUITATIVE
HULL, CAN...

TABLE 1.8 DATA SHEET - BASE MARKS


















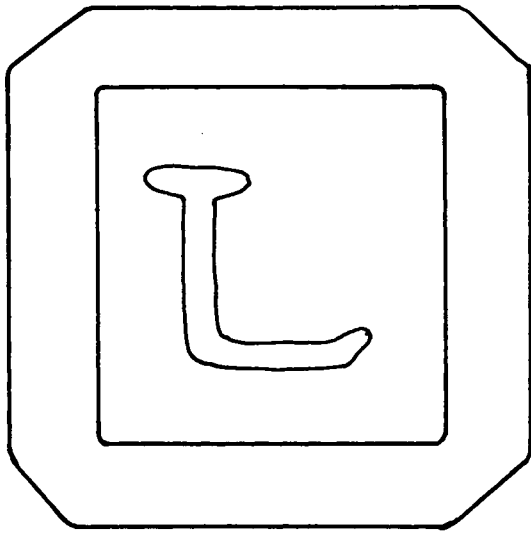
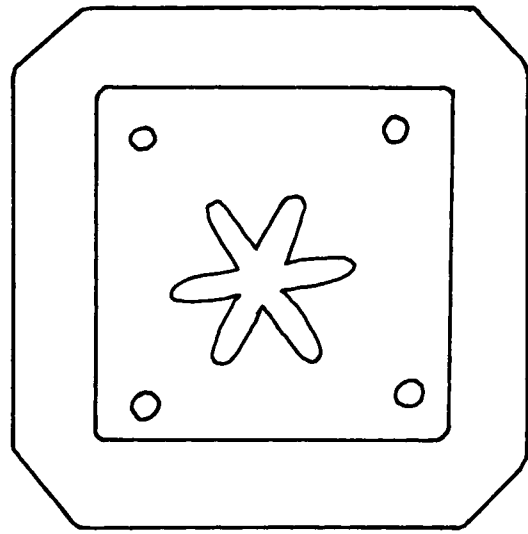
Catalogue Number	Mark	Manufacturer (After Toulouse 1971)	Dates
Short Bottles			
R7C 2F4-31	70		
2G4A-40	WR & Co		
2H3-20	5		
2H7A-15	611		
2H8-65		Illinois Glass Co. Alton, Ill.	1919-1929
2H8-87	3 vi		
2X3-83		Hazel-Atlas Glass Co. Wheeling, W. Va.	1920-1964
2X7-153		Dominion Glass Co.	
2X8-16			
2J4-20		Dominion Glass Co.	
	Made in Canada		
2K3A-25			
2K3A-70		Brockway Machine Bottle Co. Brockway, Pa.	1925 +
2K3A-71	C 3		
2K3A-84	JWK 1448	John Kilner & Sons Wakefield, Yorks	1844-1925(?)
72-1			
81C-71	765 1/2		
81C-72	W T & Co. H USA	Whitall-Tatum & Co. Millarville N.J.	
	Patent Jan.5,1892		
81C-78	C & B	Cross & Blackwell (?)	
81C-79	4 4		
81C-156	ACBC ^o	Albion Glass Bottle Co. England (Forsman & Minni 1977:295)	1880-1900

TABLE 1.8 (Continued)

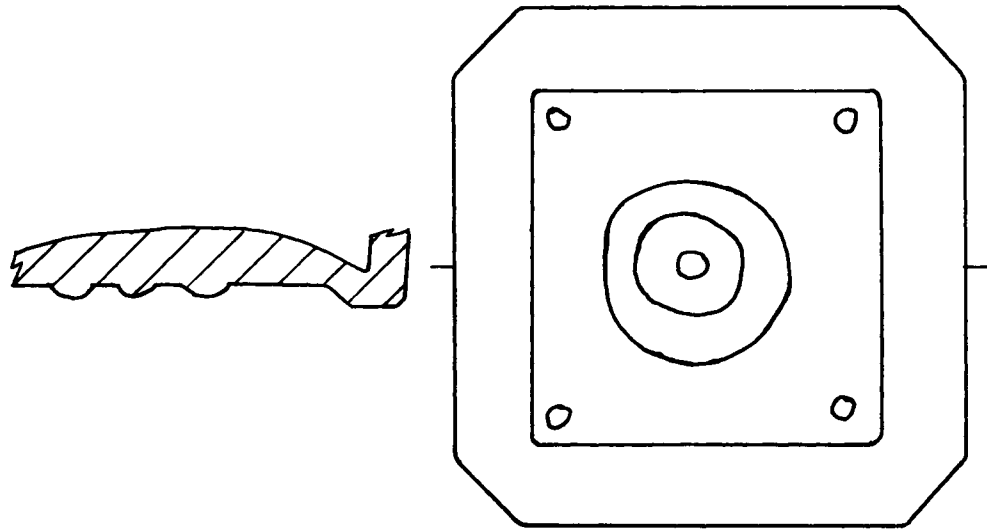
Catalogue Number	Mark	Manufacturer (After Toulouse 1971)	Dates
Screw Top Bottles			
R7C 2K7-54	 RD 1934		
2L8-21	 7 4		
70B-1	 F 3/4	Fairmont Glass Work Inc. Indianapolis, Ind.	1945-60
74A-4	B  4	Dominion Glass Co.	
74A-5	F  7 717-v	Dominion Glass Co.	
74A=6	A  6	Dominion Glass Co.	
74A-11	New Design Package Adopted 1906 		
Tall Bottles			
R7C 76A-183	Property RD 1930  CDCA Limited		
76A-192	Made in Canada F  7822X	Dominion Glass Co.	
81C-82	R & Co.	Roth & Co. (?) San Francisco, Cal. (but see Forsman & Minni 1977:296)	1879-1888
81C-154	J K & S W 1911	John Kilner & Sons Wakefield, Yorks	1844-1925 (?)



a.



b.



c.

Figure 1. 9: Case Bottle Base Marks, Scale - 1:1.

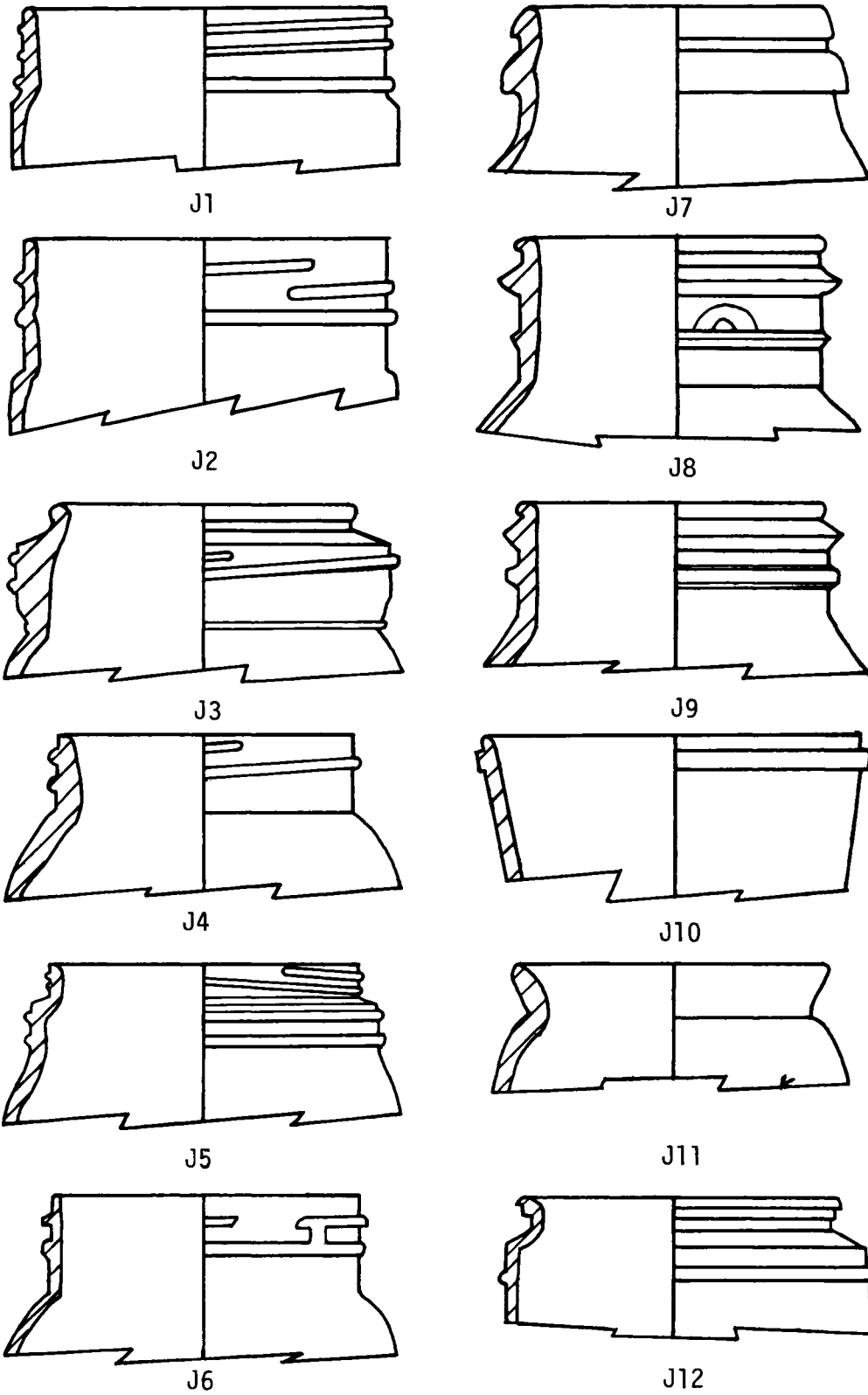


Figure 1.10: Lip Types, Food Storage Jars, Sketch.

TABLE 1.9 DATA SHEET- FOOD STORAGE JARS

Rim Type	Catalogue Number	Colour	Lip Dia.	Height	Marks	Method of Manufacture	Provenience
J 1	R7C 2H8-31	clear	6 cm				Manager's Res.
	2H9-17	clear	-				Manager's Res.
J2	R7C 2F7-72	clear	-		"Ball" PERFECT MASON		Manager's Res.
	2x4-4	pale blue	-				Manager's Res.
J3	R7C 2k4-136	pale purple	6.4 cm				Manager's Res.
	2k5-17	pale green	6.0 cm				Manager's Res.
	2k6-170	clear	7.0 cm				Manager's Res.
	2L5A-19	clear	-				Manager's Res.
J4	R7C 72-306	clear	7.3 cm				Bunkhouse
J5	R7C 2k7A-366	clear	6.1 cm		GEM	Machine	Manager's Res.
J6	R7C 2F7-71	clear	6.2 cm		CANADA 24 fl. oz. size . D 7	Machine	Manager's Res.
J7	R7C 2k6A-66	clear	-			Molded	Manager's Res.
	2k7A-365	clear	5.8 cm				Manager's Res.
J8	R7C 74A-49	pale blue	7.0 cm		WIRE/SIDE		Bunkhouse
J9	R7C 64A-220	clear	7.1 cm				Bunkhouse
J10	R7C 72A-53	clear	8.8 cm	5.7 cm	PATENTED/164/JUN.9.03	JUNE 23.03	Bunkhouse
	73B-4	clear	8.8 cm	5.7 cm	"	"	Bunkhouse
	72A-286	clear	8.8 cm	5.7 cm	"	"	Bunkhouse

TABLE 1.9 (Continued)

Rim Type	Catalogue Number	Colour	Lip Dia.	Height	Marks	Methods of Manufacture	Provenience
J10	R7C 6Ha-236	clear	8.8 cm	5.7 cm	PATENTED/164/JUN 9.03	JUNE 23.03	Bunkhouse
J11	R7C 81C-186	clear	6.5 cm				Well
J12	R7C 81-189	pale blue	6.3 cm				Well

FOOD STORAGE JAR LIDS (Figure 1.11, 1.12, Table 1.10)

Lids for jars can be either glass or metal. Glass lids were generally held on the food storage jar by a metal twist-on ring or a metal snap-on wire. Metal lids can be held in place with a metal ring. Eight rubber rings were also found. These provided a good seal for the jars.

BOTTLE TOPS

Bottle tops can be of a number of different types: glass stoppers, crown tops, screw-on tops and composite tops (Table 1.11). All types were found in each of the site areas.

Glass stoppers can be used for either short or tall bottles. Figure 1.13 shows the variation in glass stopper shapes. Almost all of the glass stoppers would have a cork liner similar to that shown in Figure 1.13c.

Screw-on lids and crown tops are generally self-explanatory. Crown tops were invented in 1892. Of the 68 crown tops found in the site, only three have identifying marks (Table 1.11). Two of these are from local carbonated beverage manufacturers.

COMPOSITE TOPS

A number of tops made from a number of different materials were found. One (R7C 2H8-90) has a glass core with a cork outer liner and a lead covered upper surface embossed NATIONAL DRUG AND SURGICAL CO. OF CANADA LTD. A number of screw-down metal and cork tops embossed BANKER'S PATENT MAY 4, 1886 (Figure 1.12a) were also found (R7C 73A-63, R7C 73B-88, 89). Another composite top (R7C 63B-3) is embossed R. SCHRADER'S SON INC. N.Y./SEPT 11, 1900 (Figure 1.12b).

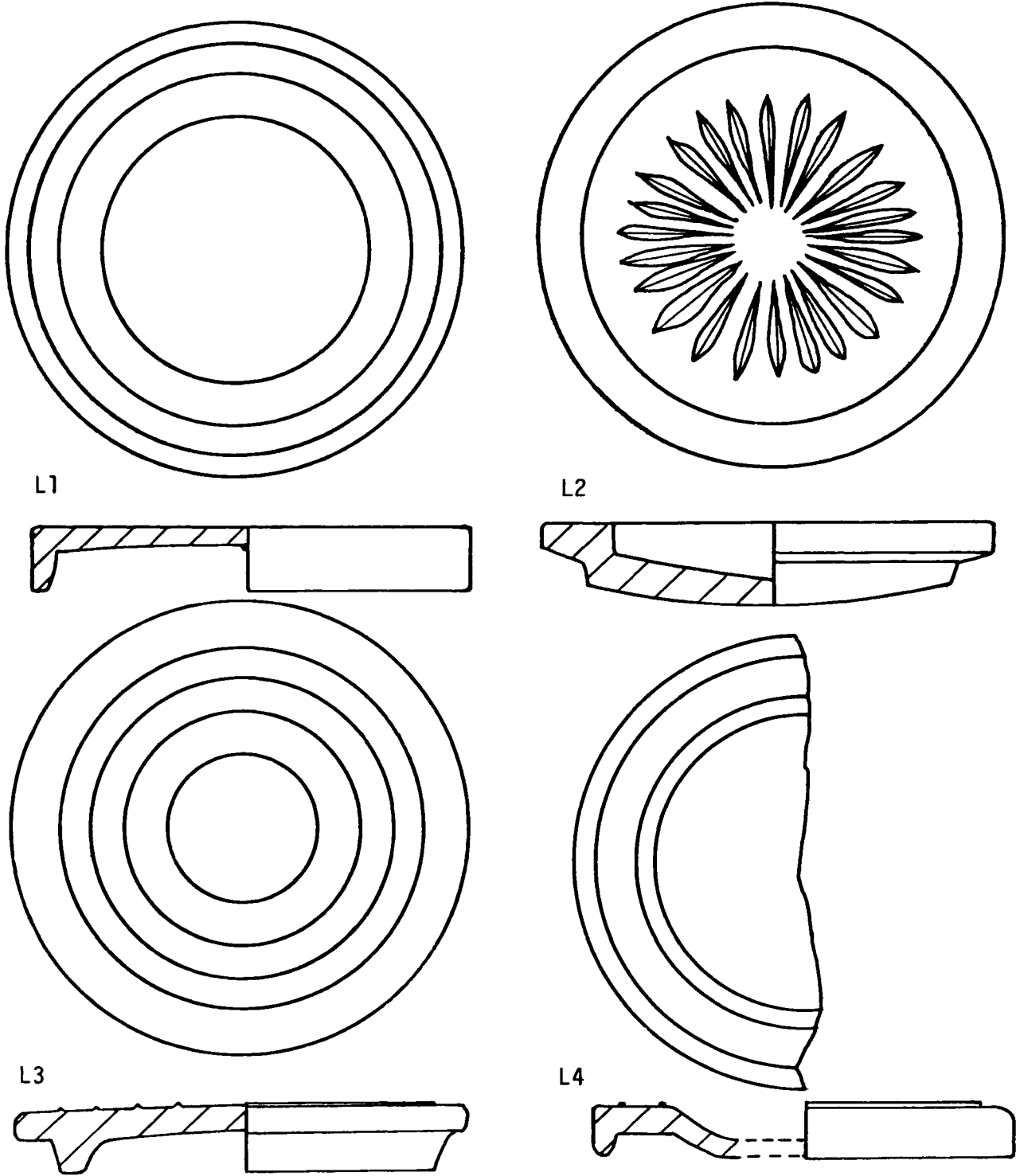


Figure 1.11: Food Storage Jar Lids, Sketch.

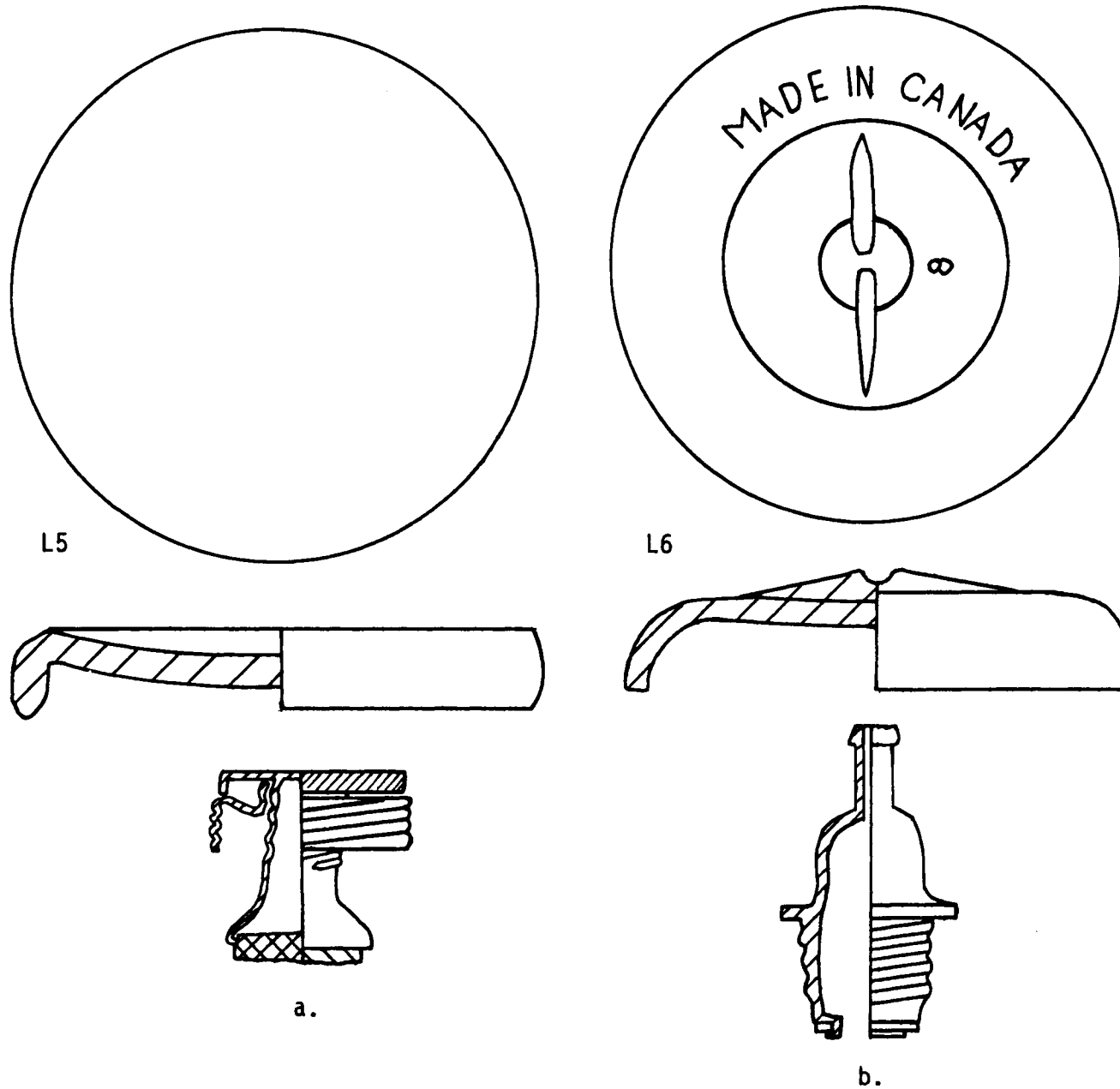


Figure 1.12: Food Storage Jar Lids L5, L6; Bottle Closures a,b, Scale - 1:1.

TABLE 1.10 DATA SHEET - FOOD STORAGE JAR LIDS

Glass Lids

Type	Catalogue Number	Diameter	Colour	Provenience
L1	R7C 2L8B-8	7.5	clear	Manager's Res.
	72A-307	7.7	clear	Bunkhouse
L2	R7C 66B-9	-	pale purple	Bunkhouse
	73B-5	7.8	clear	Bunkhouse
L3	R7C 73A-7	7.7	clear	Bunkhouse
L4	R7C 2F6-115	7.6	clear	Manager's Res.
L5	R7C 2H8-93	8.3	clear	Manager's Res.
	61B-37	8.3	clear	Bunkhouse
L6	R7C 63B-107	7.9	clear	Bunkhouse

White Glass Liners

R7C 2X3-60			Manager's Res.
2X4-56			Manager's Res.
73A-106	BOYD'S GENUINE PORCELAIN LINED CAP		Bunkhouse

TABLE 1.11 DATA SHEET - BOTTLE TOPS

Glass Stoppers

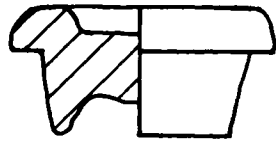
Figure	Catalogue Number
1.14a	R7C 2L7A-19
1.14b	R7C 2K5-14
1.14c	R7C 2L4A-3
1.14c	R7C 2L7B-740
1.14d	R7C 2L7A-8
1.14e	R7C 2L7B-421
1.14e	R7C 2H9-14
1.14f	R7C 72A-22
1.14g	R7C 73A-2
1.14h	R7C 80-48

Screw-On Lids

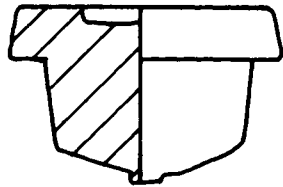
Catalogue Number	Material	Color	Diameter	Label
R7C 2G4-3	plastic	blue		
R7C 2K4-230	metal		3.2	
R7C 2L8-19	plastic	blue		
R7C 63B-49	metal		3.0	PURE VINEGAR GUARANTEED
R7C 63C-92	metal		3.0	
R7C 63C-97 - 99	plastic	red	2.7	
R7C 64A-198	metal			"SHAKE WELL"
R7C 72A-377	metal		3.7	
R7C 73A-73	metal		2.8	
R7C 78A-35	metal		3.5	

Crown Tops With Labels (Total Crown Tops = 68)

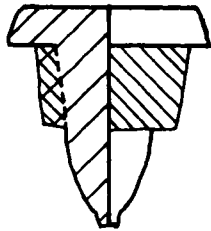
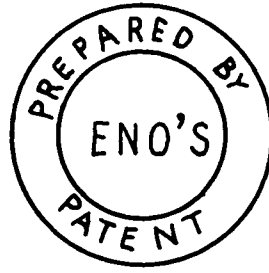
Catalogue Number	Label
R7C 63C-49	MIN CONT/6 FL OZ/LEMON SOUR/COLORED/CALG...
R7C 63C-50	7 UP
R7C 63C-51	ADANAC DRY/6½ OZ/GINGER ALE/...MONTON



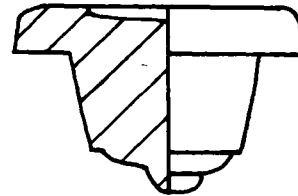
a.



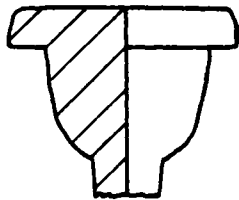
b.



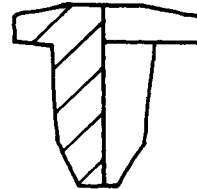
c.



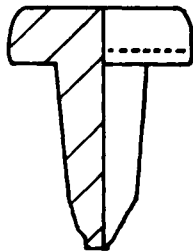
f.



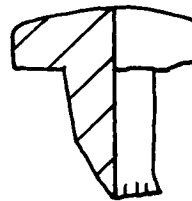
d.



g.



e.



h.

Figure 1.13: Glass Bottle Stoppers, Scale - 1:1.

CERAMICS

Ceramics form the group of artifacts at Cochrane Ranch Historic Site that are most time-diagnostic. They also have considerable potential to indicate social differences on the site.

The varieties of ceramics found in the site are described below in the following groupings modified after Sussman (1972).

Tableware

Decorative tableware and objects

Kitchenware - food preparation vessels, pitchers, bowls
and common teapots.

Storage vessels.

The groups are further subdivided into decoration groups by alphanumeric code.

Tablewares

B1 to B9 Blue on white wares

G1 Gold on white ware

C1 to C4 Brown (red) on white wares

E1 to E5 Embossed white wares

P1 to P12 Plain white wares

Decorative tablewares and objects

D1 to D8

Kitchenwares

K1 to K3 Kitchenwares

R1 to R3 Brown glazed wares

F1 to F3 Special functional wares

Storage wares

S1 to S4

Tablewares (Table 1.12)

Tablewares are described by decorative patterns such as blue on white, gold on white, brown/red on white, embossed white and plain white or undecorated. Tablewares include cups, saucers, plates and serving vessels. The significance of these is discussed in the text.

TABLE 1.12 (Continued)

Provenience	Forms	Group II, Patterns								Group III Patterns			
		D1	D2	D3	D4	D5	D6	D7	D8	K1	K2	K3	R1
Bunkhouse	Cups	-	-	-	-	-	-	-	-	-	-	-	-
	Saucers	-	-	-	-	-	-	-	-	-	-	-	-
	Plates	-	-	-	-	-	-	-	-	-	-	-	1
	Bowls	-	-	-	-	-	1	1	-	-	-	-	-
	Others	-	-	-	-	-	-	-	-	-	-	-	-
Manager's Residence	Cups	1	-	-	-	-	-	-	-	-	-	-	-
	Saucers	-	-	-	-	-	-	-	-	-	-	-	-
	Plates	-	-	-	-	-	-	-	-	-	-	-	1
	Bowls	-	1	-	-	-	-	-	-	1	-	1	-
	Others	-	-	-	-	-	-	-	-	-	-	-	-
Well	Cups	-	-	-	-	1	-	-	-	-	-	-	-
	Saucers	-	-	-	-	1	-	-	-	-	-	-	-
	Plates	-	-	-	1	-	-	-	-	-	-	-	-
	Bowls	-	-	-	-	-	-	-	-	-	-	-	-
	Others	-	-	1	-	-	-	-	1	-	1	-	-

TABLE 1.12 (Continued)

Provenience	Forms	Group III, Patterns					Group IV Patterns			
		R2	R3	F1	F2	F3	S1	S2	S3	S4
Bunkhouse	Cups	-	-	-	-	-	-	-	-	-
	Saucers	-	-	-	-	-	-	-	-	-
	Plates	-	-	-	-	-	-	-	-	-
	Bowls	-	-	-	-	-	-	-	-	-
	Others	-	-	-	-	1	-	-	-	-
Manager's Residence	Cups	-	-	-	-	-	-	-	-	-
	Saucers	-	-	-	-	-	-	-	-	-
	Plates	-	-	-	-	-	-	-	-	-
	Bowls	-	-	-	-	-	-	-	-	-
	Others	1	-	-	-	-	1	1	1	1
Well	Cups	-	-	-	-	-	-	-	-	-
	Saucers	-	-	-	-	-	-	-	-	-
	Plates	-	-	-	-	-	-	-	-	-
	Bowls	-	-	-	-	-	-	-	-	-
	Others	-	1	1	1	-	-	-	2	-

Pattern B1 (Figure 1.14)

Decoration Description: Light blue print banding consisting of zigzag lines and floral clusters. Faint embossed swirls below the rim. Hand painted gold outlines applied over glaze to emphasize the floral decoration.

Material and Objects: Earthenware; 2 cups and 1 saucer.

Distinctive Features: Cups with a ring base with spaced indentations.

Measurements: Cup 1 - diameter rim 8.9; height 6.6; diameter base 5.7 . Saucer - diameter rim ca. 8.2 cm.

Catalogue Numbers: Cup 1 - R7C2L7B-2

Cup 2 - R7C2L7B-6

Saucer - R7C2L4A-198/R7C2K4-4

Fragments - R7C2F5-7; 2H3-3,4; 2L7-15,2L7A-230.

(All manager's residence).

Location of Decoration: Cup - The banding is located below the exterior rim, separate flower clusters in blue are below the banding on the centre of the cup's side. On the interior below the rim are small flower clusters.

Saucer - Banding located on the interior along the rim with separate floral clusters towards the centre.

Trade Marks: On the base of the saucer "22".

Manufacturer, Dates: Unknown.

Pattern B2

Decoration Description: Underglazed printed blue willow pattern on a white background. This pattern is common in most nineteenth century sites.

Material and Objects: Earthenware

Manager's residence - 1 cup and 1 saucer minimum

Bunkhouse - 1 cup and 1 saucer minimum.

Distinctive Features: The bases of the cups are flat with no ring base.



Figure 1.14: Cup, Pattern B1.

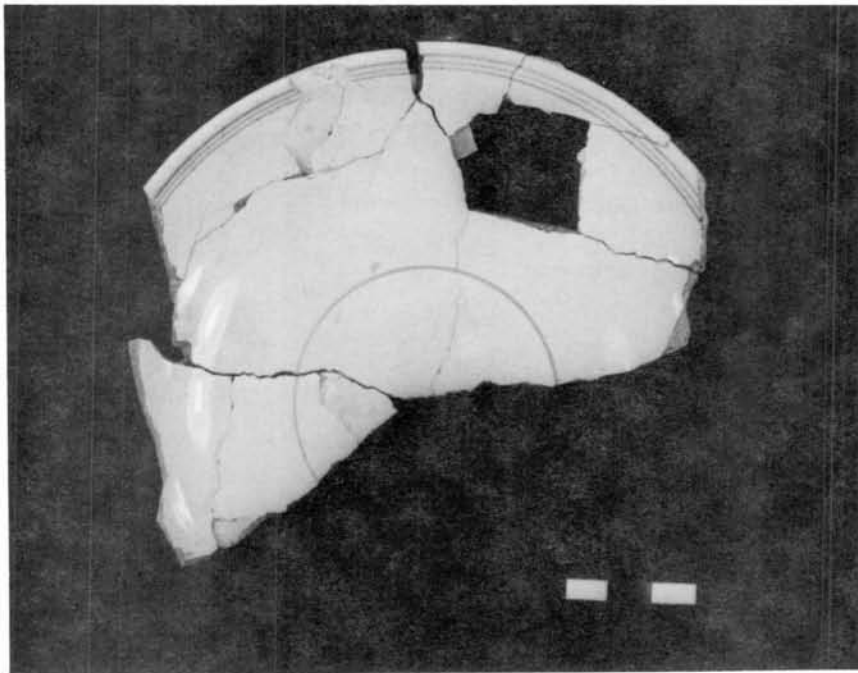


Figure 1.15: Saucer, Pattern B3.

Measurements: Diameter of saucer (bunkhouse) 14.1 cm
Saucer (manager's residence) rim diameter 15.0 cm
base diameter 9.2 cm.

Catalogue Numbers: Manager's Residence -

R7C 2X3-61	2J3-34-36	2K3-113-119
2X3A-29,30	2J3A-78	2K3A-29-30
2X7-145-148	2J4A-5	2K4-20-21
2X8-1-8		

Bunkhouse: R7C74A-1,15; 78A-84.

Location of Decoration: Saucer - banding along interior rim - story picture at centre. Cup - exterior only.

Trade Marks and Manufacturer: R7C74-15. Mark - STAFFORDSHIRE on a ribbon band, above: WARRANTED - below: WA... & SONS ENGLAND.

The maker of this mark is unknown.

Dates: After 1891 as "ENGLAND" became mandatory on export goods.

Pattern Name: Blue Willow (This pattern is pictured by Sussman 1972:139, Plate 78).

Pattern B3 (Figure 1.15)

Decoration Description: A banding consisting of three parallel fine blue lines along the interior rim and a single fine line along the interior base.

Material and Objects: Soft earthenware; one saucer.

Measurements: Diameter - ca. 15 cm, base diameter 7.2, height 2.8.

Catalogue Numbers: R7C2F7-48 to 54, 2X3-151,152 (manager's residence)

Location of Decoration: The band of three lines is located just interior of the rim. A single line surrounds the interior centre.

Trade Marks and Manufacturer: Unknown.

Dates: Unknown.

Pattern Name: Unknown.

Pattern B4 (Figure 1.16)

Decoration Description: Blue on white underglaze floral banding.

This design consists of a continuous outer banding of flowers and swirls, a middle continuous line band with spaced five-petalled flowers, and an inner band of discontinuous five-petalled flowers.

Material and Objects: Ironstone; large tureen lid and a minimum of two plates.

Distinctive Features: The tureen lid has embossed ridges radiating out from the centre of the highest part of the vessel. There was a small inverted-U handle on the tureen top.

Catalogue Numbers: Tureen-R7C2L8B-20 to 23- manager's residence.

Plate fragments: Manager's residence.

R7C 2H3-5	2J4-56 to 61
2H9-39	2K3-122 to 133
2X3-51 to 54	2K3A-31 to 36
2J3-42 to 46	2K4-22 to 31
2J3A-73, 74	

Bunkhouse - R7C61A-2; 73A-40,46; 74A-58; 78B-5.

Location of Decoration: Pattern located along the top of the rim of the tureen lid. On the plates the decoration is located on the interior of the rim.

Trade Marks and Manufacturer: Marked:...J.E. LEIGH/...LEM/...EL/...AND/...RCELAIN.

These vessels were made by E. Bourne & J.E. Leigh, Burslem, England.

Dates: 1892-1941 (Godden 1964:90).

Pattern Name: ...EL(?).

Pattern B5 (Figure 1.17)

Decoration Description: Blue on white underglaze floral and bird pattern, some pieces slightly flown. An outer serpentine band has a row of central beading. Along the interior banding are leaves with occasional large flower clusters.

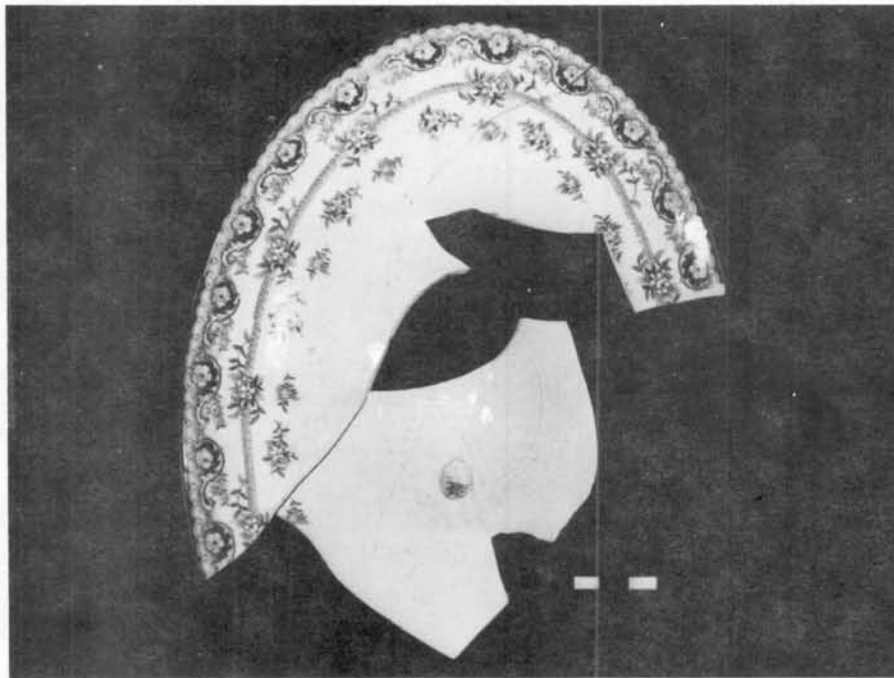


Figure 1.16: Tureen Lid, Pattern B4.



Figure 1.17: Small Plate, Pattern B5, Asiatic Pheasant.

In the centre interior is a large cluster of flowers, a pheasant and a small separate butterfly.

Material and Objects: Ironstone, plates and 1 tureen. Minimum number of vessels - large (2), medium (3) and small (3).

Distinctive Features: The tureen is rectangular with flat lugs on the rim. The handle has embossed swirls on the base of the upturned-U handle. The largest of the plates has two pheasants in the centre interior.

Measurements: Plate (large) 24.2 cm. Plate (medium) 23.4 cm.
Plate (small) 19.8 cm.

Catalogue Numbers: Tureen - R7C 2K6-408 to 424
2K6A-123, 124
2K7A-5,6,25 to 28
2L6B-32 to 52
2L7B-38 to 46

Plates: Large - R7C 2K7A-52 to 56
Medium- R7C 2K6B-56 to 64
2K7A-49, 56 to 59
Small - R7C 2K7A-49
2K6A-126

(All manager's residence).

Location of Decoration: Upper surface of all plates. Interior and exterior of tureen.

Trade Marks and Manufacturer: Marked J T and WARRANTED with a mark similar to mark 4062 (Godden 1964:656) but has J T where mark 4062 has WEDGEWOOD & CO. Below this mark is ASIATIC PHEASANT. The JT may stand for John Tams (Ltd.), Longton, Staffordshire Potteries ca. 1875-90. Godden notes that the name of individual patterns is often included on works by John Tams.

The J T may also stand for John Tomson and Sons, Annfield Pottery, Glasgow ca. 1866-84.

It would seem that John Tams is the more likely of the two. It is interesting however that this mark and pattern was used at a later date by Wedgwood & Co.

Dates: Probably 1875-1890.

Pattern Name: Asiatic Pheasant.

Pattern B6 (Figure 1.18).

Decoration Description: Blue on white floral, zig-zag and check design. Band on the outside rim and around the base are formed of zig-zag lines and fleur-de-lis. The field between is a complicated design of checks, flowers and leaves.

Material and Objects: Earthenware - rectangular vessel - probably a sugar container.

Measurements: Length 7.2; width 5.7

Catalogue Numbers: R7C2F4-9 to 11; 2F5-81 to 94; 2F6A-22 to 26; 2F8-23; 2L7A-47 to 50 (manager's residence).

Location of Decoration: Bands on the interior and exterior of the rim and exterior of the base. Leaf, flower and checkered design along exterior sides.

Trade Marks and Manufacturer: Diamond trade mark on base plus "13".

Dates: Design registered 17 January 1883.

Pattern Name: Unknown.

Pattern B7 (Figure 1.19).

Decoration Description: This dark blue on white underglazed floral design consists of a single band of dots inside circles (beaded) along outer edge. Wide floral band with an inner band of diamond swirls.

Material and Objects: Earthenware; 1 plate.

Catalogue Numbers: R7C73A-1; 74A-54, 55, 63 (bunkhouse).

Location of Decoration: On upper rim and shoulder only.

Trade Marks and Manufacturer: Marked with a kneeling female potter on a box marked 1790. Above this figure is COLWY. Below this figure is K & C^O B/LATE MAYER. This plate was manufactured by Keeling and Co. (Ltd.), Dale Hall

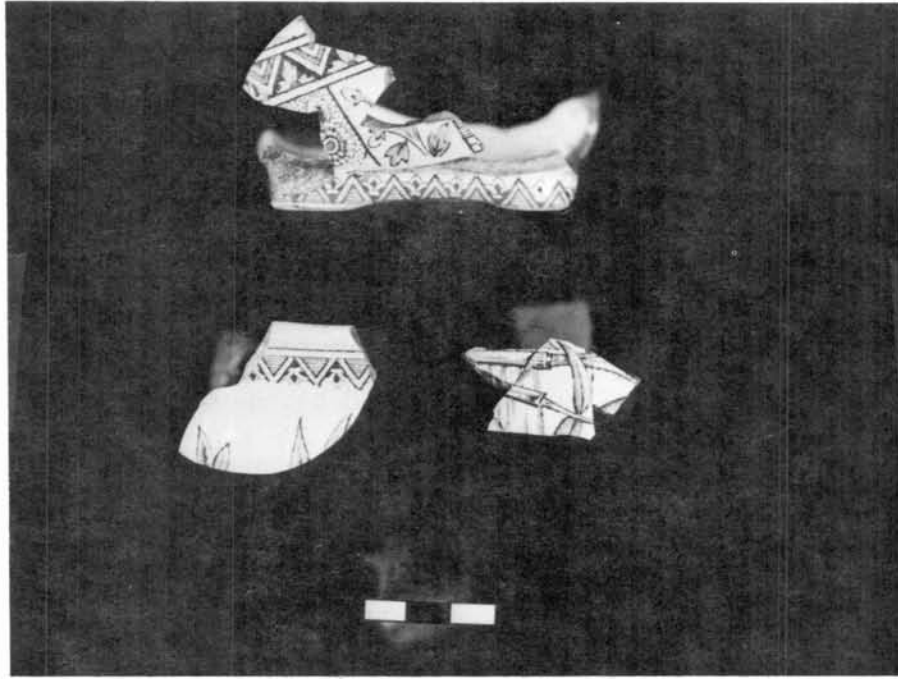


Figure 1.18: Sugar Bowl, Pattern B6



Figure 1.19: Plate, Pattern B7, Colwy.

works (from 1887), Burslem, England 1886-1936. The word "England" is not present and should have been applied if the plate was manufactured after 1891 (Godden 1964:367).

Dates: 1886-1891 or 1936.

Pattern Name: Colwy.

Pattern B8 (Figure 1.20).

Decoration and Description: Blue on white underglaze design. The centre of the band consists of a ribbon-like band with spaced flowers. This band is bordered in and out by a stepped line plus two fine blue lines. On the outer rim side is an additional blue band with "bow tie" features.

Material and Objects: Earthenware; one plate.

Catalogue Numbers: R7C2G6A-10, 2K3A-76 to 79, R7C2K4-32 to 38, 2L4A-27 to 29 (manager's residence).

Location of Decoration: On the interior of the rim.

Trade Marks, Manufacturer and Dates: Unknown.

Pattern Name: Unknown.

Pattern B9 (Figure 1.21).

Decoration Description: Royal blue band underglaze bordered in and out by a post-firing applied gold line. Highly translucent glaze.

Material and Objects: 1 stoneware bowl or deep plate.

Distinctive Features: Highly translucent glaze.

Measurements: Rim diameter 21.0 cm.

Catalogue Numbers: R7C74A-71, 72 (bunkhouse).

Location of Decoration: Exterior edge of upper rim.

Trade Marks, Manufacturer and Dates: Unknown.

Pattern Name: Unknown.

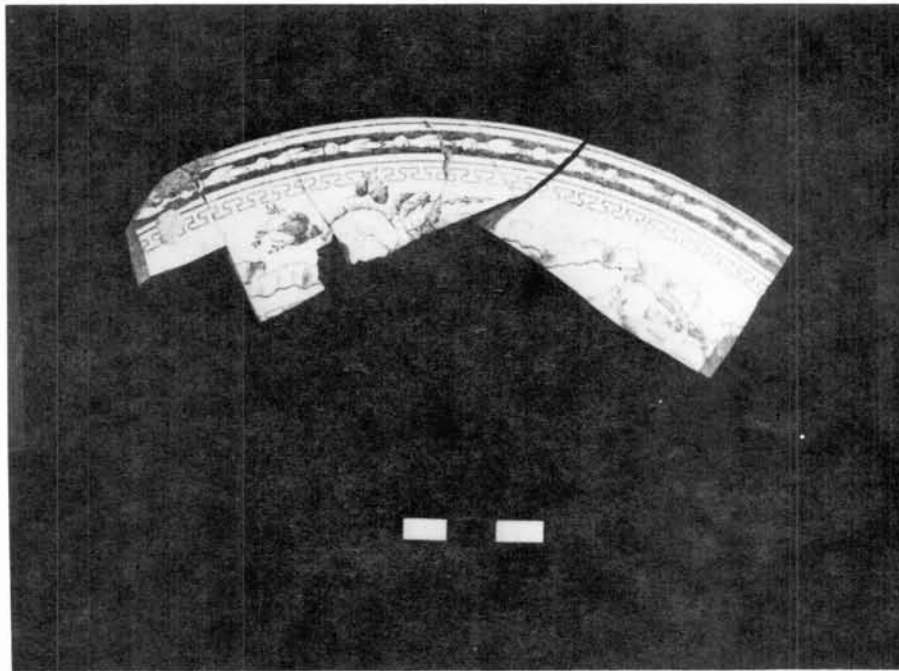


Figure 1.20: Plate Rim, Pattern B8.

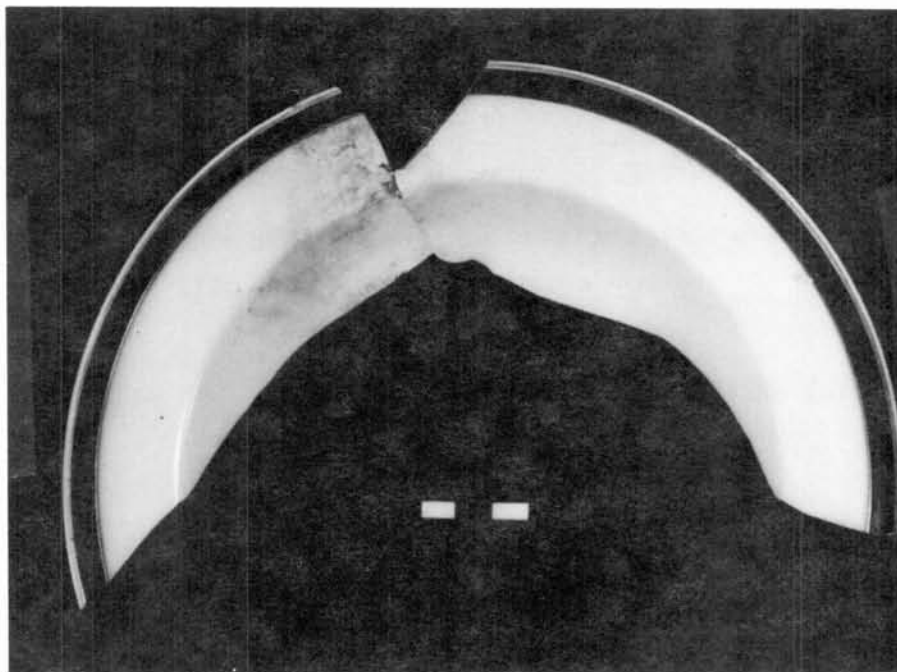


Figure 1.21: Bowl - Soup Plate, Pattern B9.

Pattern G1 (Figure 1.22).

Decoration Description: This decoration consists of small gold hand painted flowers and stems over the glaze. The design consists of a single 4-petaled flower with branches and fine gold leaves. A single gold line encircles the rim and around the interior base of saucers.

Material and Objects: Thin white porcelain. Objects include 5 cups and 6 saucers.

Distinctive Features: A ring base on both cups and saucers.

Measurements: Cup - rim diameter 7.8 cm, base diameter 4.2 cm, height 7.0 cm. Saucer - rim diameter 14.0 cm, base diameter 14.0 cm, height 2.6 cm.

Catalogue Numbers: Manager's Residence.

R7C2H4-16; 2J3A-76; 2K6-217,253; 2K6A-117-122; 2K6a-18-24; 2K7B-4; 2L6A-78-80; 2L6B-103-140; 2L7-17-18; 2L7a-67; 2L7A-227-228; 2L7B-30.

Trade Marks, Manufacturer and Dates: Unknown.

Pattern C1 (Figure 1.23).

Decoration Description: Brown leaf and floral print underglaze pattern. The design consists of large leaves and small fine-petaled flowers. The prints are discontinuous.

Material and Objects: Earthenware; Coffee mug.

Distinctive Features: Straight-sided cup.

Measurements: Diameter at rim 9.2 cm, base diameter 6.4 cm, height 7.5 cm.

Catalogue Number: R7C2L7B-1 (manager's residence).

Location of Decoration: The design is found along the middle of the outside of the cup. Small clusters of leaves are also present on the interior just below the rim.

Trade Mark, Manufacturer and Dates: Unknown.

Pattern C2 (Figure 1.24).

Decoration Description: Brown on white transfer print design. The

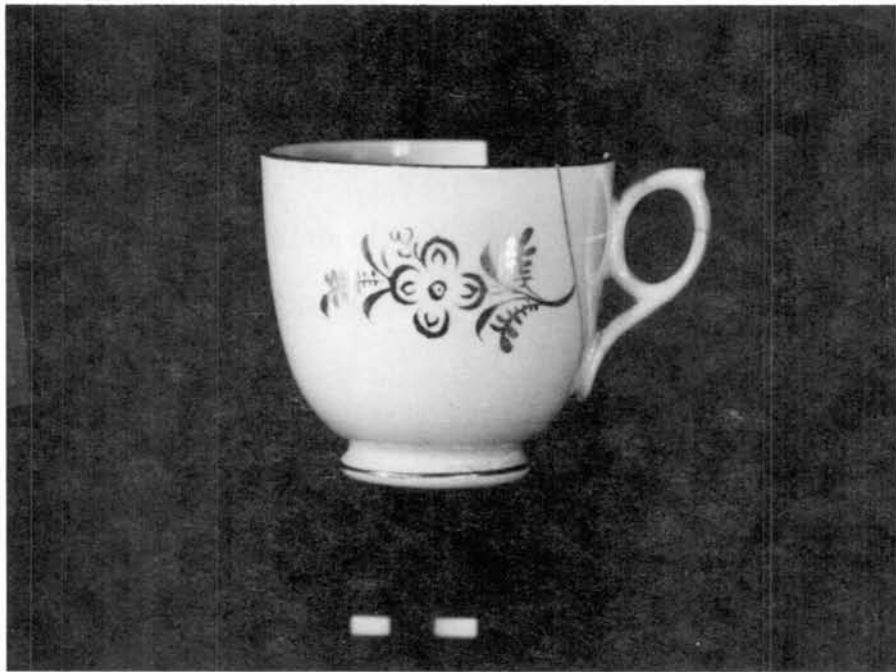


Figure 1.22: Cup, Pattern G1.



Figure 1.23: Cup, Pattern C1.

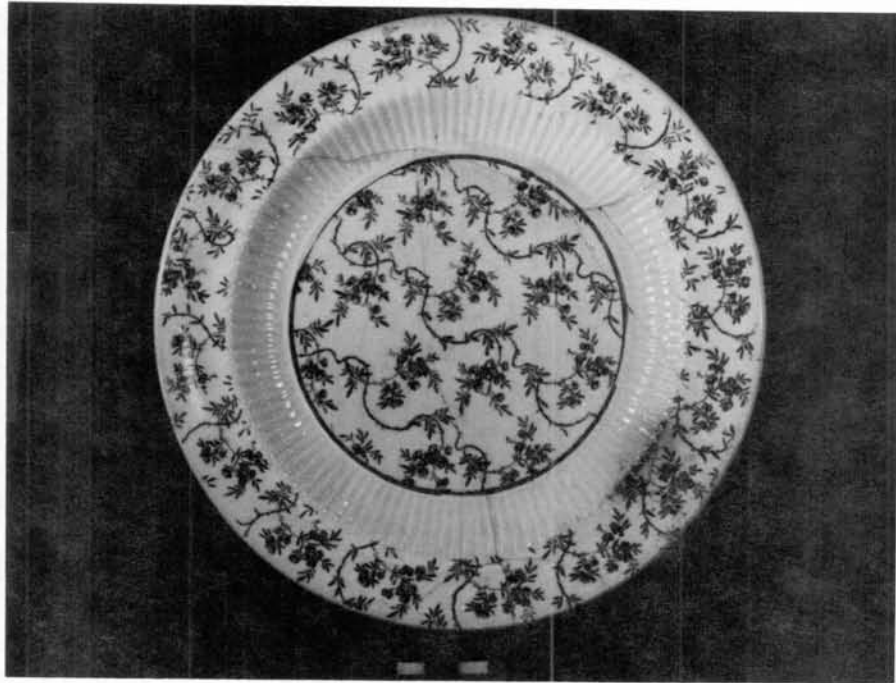


Figure 1.24: Small Plate, Pattern C2, Clarence.

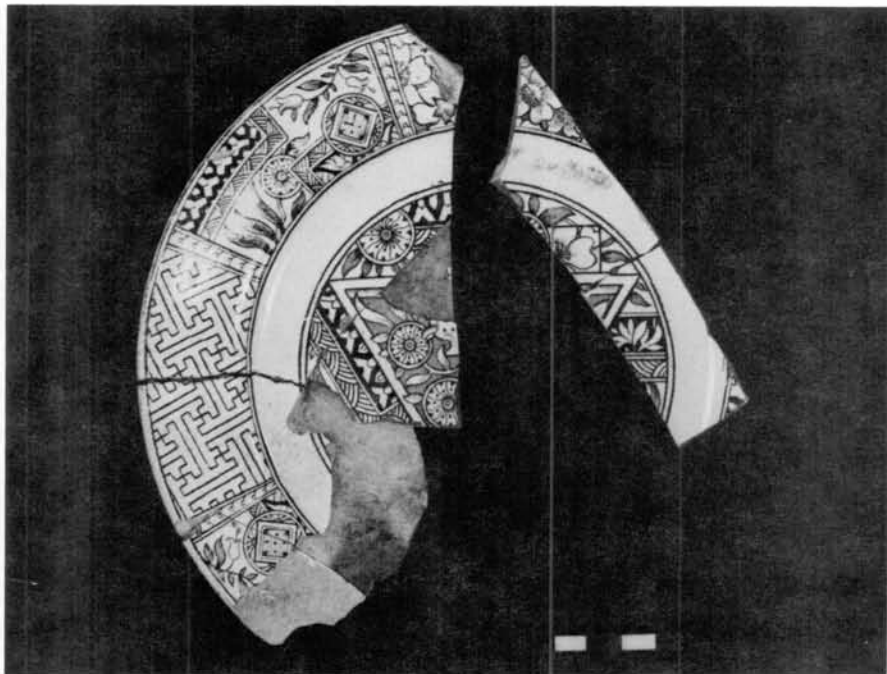


Figure 1.25: Small Plate, Pattern C3.

pattern consists of sinuous-type vines with flowers and leaves. Embossed ridges fill the field between the rim border and the plate bottom.

Material and Objects: Earthenware. 1 small plate, 2 saucers, 1 hexagonal (?) luncheon plate.

Distinctive Features: Small groove on the top of the luncheon plate rim.

Measurements: Small plate - diameter 19.3 cm, base 10.4 cm. Saucer diameter 14.6 cm, base 7.9 cm.

Catalogue Numbers: Bunkhouse - R7C73B-4; 76A-60.

Manager's residence - R7C2L6A-81, 82; 2L7A-229; 2L7B-401.
Well - R7C81C-34 to 39, 94 to 96.

Location of Decoration: On upper surface of rims and the flat interior surface of all vessels surrounded by a circular brown line. The space between the rim and the flat interior is covered by numerous raised ridges.

Trade Mark and Manufacturer: Bow and quiver. On the quiver is RIDGWAYS, above is CLARENCE, below ENGLAND. Ridgways operated in Hanley, Staffordshire 1879-1920. This trade mark was registered 1880. ENGLAND would have been added after 1891.

Dates: 1891-1920.

Pattern Name: Clarence.

Pattern C3 (Figure 1.25).

Decoration Description: Zoned brown on white patterned transfer print. Various zones include squares, circles, flowers and geometric design.

Material and Objects: Earthenware; 1 plate.

Catalogue Numbers: Bunkhouse - R7C64A-206; 64B-1; 72A-272 to 281; 73B-73.

Well - R7C81-109; 81A-8.

Location of Decoration: On the rim and on the flat interior of the saucer.

Trade Marks and Manufacturer: Fragment of a circle. Below this is
PER... . Elsewhere on bottom stamped "L".

Pattern C4 (Figure 1.26).

Decoration Description: Red on white floral and leaf design.

Material and Objects: Earthenware; small bowl.

Distinctive Features: Ring base.

Measurements: Rim diameter 12.9 cm, base diameter 7.0 cm, height
3.9 cm.

Catalogue Number: Bunkhouse - R7C74A-83 to 96.

Location of Decoration: Exterior sides.

Trade Marks, Manufacturer and Dates: Unknown.

Pattern E1 (Figure 1.27).

Decoration Description: Embossed sunflower and butterfly design.

Sunflowers and butterflies placed alternately along the
upper surface of a ledge rim. This band is bordered by
raised bands on the inside and outside of the ledge rim.

Material and Objects: Ironstone; bowl.

Measurements: Diameter ca. 24 cm.

Catalogue Numbers: R7C2L7B-7 to 10 (manager's residence), R7C81-97
(well).

Trade Marks, Manufacturer and Dates: Unknown.

Pattern Name: Unknown.

Pattern E2

Decoration Description: Decoration consists of an embossed wheat
sheaf design on a white background, raised along the
rim.

Material and Objects: Earthenware. Minimum of 1 plate and 1 saucer.

Distinctive Features: Ledge rim with raised sheafs along the interior.

Measurements: Plate diameter ca. 26 cm. Saucer diameter c. 16 cm.

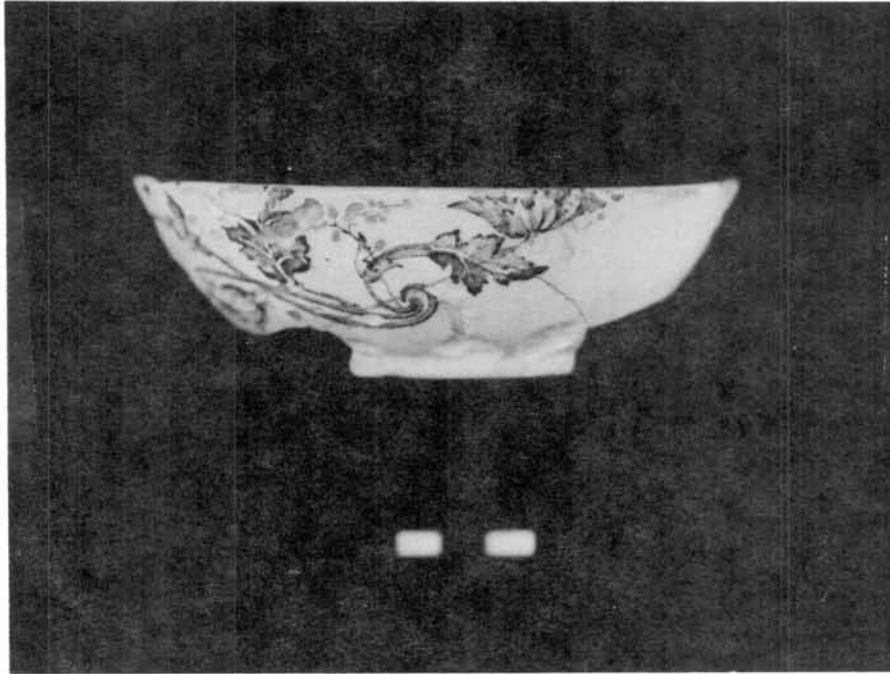


Figure 1.26: Small Bowl, Pattern C4.

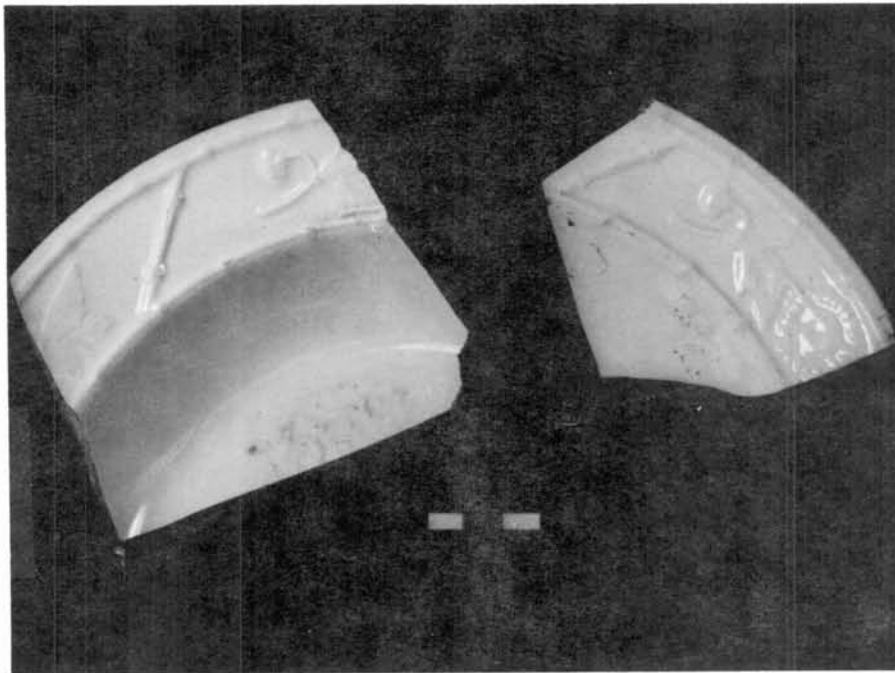


Figure 1.27: Bowl-Soup Plate, Pattern E1.

Catalogue Numbers: Manager's Residence	Bunkhouse
R7C2H7A-67 to 88	R7C72A-64,65
2H8-67 to 72, 166	73A-39
2K3-108, 109	80 - 9
2L8B-24	
Well - R7C81C-14.	

Location of Decoration: Interior edge of rim.

Trade Marks and Manufacturer: There are no marks on the plate but a mark on the saucer has a royal crest with ...CHINA above and ...COCHRAN & CO. ...LOX, GLASGOW below. This mark was used by R. Cochran & Co. Rollox, Glasgow, 1878-91 (Sussman 1972:10-13). Sussman notes that other makers of this pattern are known.

Date: That of Cochran (1878-91)

Pattern Name: "Ceres" or "Wheat".

Pattern E3

Decoration Description: Embossed underglaze design consists of a series of ridges at right angles to the lip. Completely white.

Material and Objects: Ironstone; 1 bowl.

Catalogue Numbers: R7C2G6-85, R7C2G6A-13 (manager's residence).

Location of Decoration: Interior of rim.

Trade Marks, Manufacturer and Dates: Unknown.

Pattern Name: Unknown.

Pattern E4

Decoration Description: Embossed flutings along the outer rim. Vine shaped inverted-U handle ending in leaf-shaped attachment area. Glazed white.

Material and Objects: Ironstone; lid, perhaps from a large sugar bowl or tureen.

Measurements: Diameter 13 cm; length 4.6 cm.

Catalogue Number: R7C81C-5, 100 (well).

Trade Marks, Manufacturer and Dates: Unknown.

Pattern Name: Unknown.

Pattern E5

Decoration Description: Embossed floral design surrounding inverted-U handle, ridged design along sides. White glazed.

Material and Objects: Ironstone; lid - possibly from a sugar bowl or coffee pot.

Measurements: Diameter 8.2 cm, height 5.5 cm.

Catalogue Number: R7C81C-4 (well).

Pattern P1

Decoration Description: Plain white glaze.

Material and Objects: Earthenware; large serving platter, one plate.

Distinctive Features: Platter is oval.

Measurements: Platter - width 22.2 cm.

Catalogue Numbers: R7C2K4-15 (plate) (manager's residence),
R7C81C-17 (platter) (well).

Trade Mark and Manufacturer: On the platter and plate stamped in black is the royal crest, above: ROYAL IRONSTONE CHINA, below: ALFRED MEAKIN/ENGLAND. This manufacturer has operated since 1875 in Tunstall, England. As "England" was added after 1891 and "LTD" was added to the maker's marks after 1897 these vessels were made between those two dates (Godden 1964:425).

Dates: 1891-1897.

Pattern P2

Decoration Description: Plain white glaze.

Material and Objects: Earthenware; 1 saucer.

Measurements: Saucer diameter 15.0 cm, base diameter 7.6 cm.

Catalogue Number: R7C81C-15 (well).

Trade Marks and Manufacturer: Stamped on the base in green the crest of Great Britain, below: MELLOR, TAYLOR & CO./ENGLAND. This company operated at Burslem, Staffordshire (1884-1904) (Godden 1964:432). As "England" was probably added after 1891 the most probable dates are 1891-1904.

Dates: 1891-1904.

Pattern P3

Decoration Description: Plain white glaze.

Material and Objects: Earthenware; 1 small plate.

Distinctive Features: Multiple potter's-wheel traces on base.

Measurements: Diameter 22.5, base diameter 15.0 cm.

Catalogue Numbers: R7C81C-19,20,21 (well).

Trade Marks and Manufacturer: Stamped in green on the base is the royal crest, above: IRONSTONE CHINA, below: THO^S HUGHES & SON/ENGLAND. This company operated at Burslem from 1895 to 1957. LTD was added about 1910 (Godden 1964: 339).

Dates: 1895-1910.

Pattern P4

Decoration Description: Plain white glaze.

Material and Objects: Earthenware; 1 saucer.

Measurements: Saucer diameter 15.7 cm, base diameter 7.8 cm.

Catalogue Number: R7C81C-18 (well).

Trade Marks and Manufacturer: Stamped in black on the base is the royal crest, above: STONE CHINAWARE CO.; below: ST. JOHNS, P.Q. The St. Johns Stone Chinaware Co. was founded in 1873 and continued production until 1898 (Collard 1967:281).

Dates: 1873-1898.

Pattern P5

Decoration Description: Plain white glaze.

Material and Objects: Earthenware; 1 large, deep plate.

Measurements: Diameter c. 25 cm.

Catalogue Numbers: R7C2L7B-13 to 15 (manager's residence).

Trade Marks and Manufacturer: Stamped in black with the crest of Great Britain; below IRONSTONE CHINA/W & E CORN/ BURSLEM. This mark was used 1864-1891 (Godden 1964: 175).

Dates: 1864-1891.

Pattern P6

Decoration Description: Plain white glaze.

Material and Objects: Earthenware; 1 cup.

Measurements: Diameter 8.8 cm, height 7.2 cm.

Catalogue Number: R7C81C-3 (well).

Trade Marks, Manufacturer and Dates: Unknown.

Pattern P7

Decoration Description: Plain white glaze.

Material and Objects: Earthenware; 1 plate.

Catalogue Number: R7C2K7A-1 (manager's residence).

Trade Marks and Manufacturer: Stamped in black on the base with the royal crest, above is ROYAL IRONSTONE CHINA; below is H.GRI...CO. The manufacturer and dates of this plate are unknown.

Pattern P8

Decoration Description: Plain white glaze.

Material and Objects: Earthenware; 1 plate.

Catalogue Number: R7C2F6A-30 (manager's residence).

Trade Mark and Manufacturer: Stamped in green on the base is the

crest of Great Britain and JOHNSON.../ENGL... This was probably manufactured by Johnson Brothers of Hanley 1883-1913 (Godden 1964:355). As "England" is added this work was probably produced after 1891.

Dates: 1891-1913.

Pattern P9

Decoration Description: Plain white glaze.

Material and Objects: Earthenware; 1 plate.

Catalogue Number: R7C2J3A-80 (manager's residence).

Trade Mark and Manufacturer: Marked in green: JOHNS.../EN... This work was probably produced by Johnson Brothers, Hanley after 1913 (Godden 1964:356).

Dates: 1913+

Pattern P10

Decoration Description: Plain white glaze.

Material and Objects: Earthenware; 1 plate.

Catalogue Number: R7C81B-39 (well).

Trade Mark and Manufacturer: Stamped on base in black with royal crest, above is ROYAL/WARRANTED BEST IRONSTONE CHINA, below is ...ALCOCK & CO. This mark is probably for H. Alcock & Co. (1880-1900) (Godden 1964:26).

Dates: 1880-1900.

Pattern P11

Decoration Description: Plain white glaze.

Material and Objects: Earthenware; 1 plate.

Catalogue Number: R7C73B-10 (bunkhouse).

Trade Mark and Manufacturer: Marked in green with the royal crest. Above is IRONSTONE...: below is ... & CO. MEAKIN/HANLEY, ENGLAND. This mark was used after 1890 (Godden 1964: 427).

Dates: 1890+

Pattern P12

Decoration Description: Plain white glaze.

Material and Objects: Earthenware; 1 bowl.

Catalogue Numbers: R7C66B-8, 73B-7, 73B-11,12 (bunkhouse).

Trade Marks and Manufacturer: The mark consists of a black stamp with the royal crest below which is a rectangle marked: T. FURNIVAL & SONS. This company operated in Hanley, Staffordshire from 1871 to 1890 (Godden 1964:263).

Dates: 1871-1890.

Decorative Tableware and Objects

Decorative tablewares and objects are rare from Cochrane Ranche. These are represented by a fragment of a porcelain cup, a German-made bowl, a small porcelain plate, a porcelain cup and saucer set, a Japanese or Chinese hand-painted bowl, a stoneware bowl and a white glazed earthenware teapot. All of these are one-of-a-kind items of relatively elaborate manufacture.

Pattern D1

Decoration Description: Embossed swirls underglaze, very fine thin lines.

Material and Objects: Porcelain; cup (?).

Distinctive Features: Small vessel.

Catalogue Numbers: R7C2F6A-37; 2G6-80; 2G8-43,44 (manager's residence).

Location of Decoration: Just below the rim on the exterior of the vessel.

Trade Marks, Manufacturer and Dates: Unknown.

Pattern Name: Unknown.

Pattern D2 (Figure 1.28).

Decoration Description: Hand painted floral design underglaze with a bright green background. The central floral design consists of white flowers and dark green

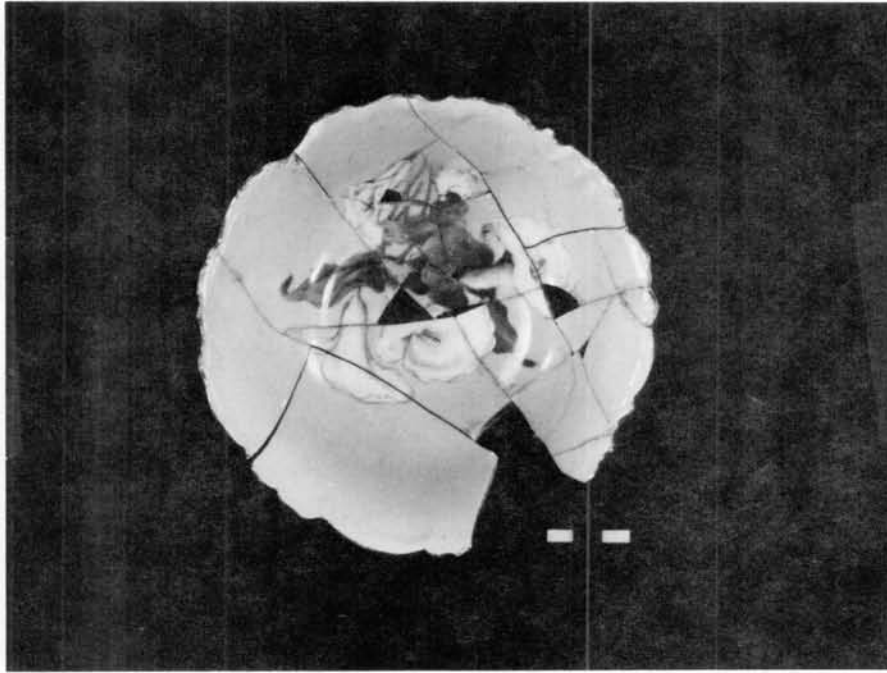


Figure 1.28: Bowl, Pattern D2.



Figure 1.29: Small Pitcher, Pattern D3.

leaves and vines. The top of the rim is convoluted and lined with a gold band. Embossed swirls are located below the rim.

Material and Objects: Porcelain; bowl.

Measurements: Diameter at rim about 15.0 cm, height 4.7 cm.

Catalogue Numbers: R7C2K7B-402, R7C2L7B-19 to 22 (manager's residence).

Location of Decoration: The painted floral decoration is on the interior centre of the bowl.

Trade Marks and Manufacturer: On the base is a green crest and below this is P.T. GERMANY.

Dates: Unknown.

Pattern Name: Unknown.

Pattern D3 (Figure 1.29).

Decoration Description: Embossed floral design with contours emphasized with gold banding. The white body shades to a pale blue towards the bottom.

Material and Objects: Porcelain; jug for cream (?).

Measurements: Height 11.3 cm.

Catalogue Numbers: R7C81C-6 to 8 (well).

Location of Decoration: Embossed just below the rim and in a wide swirl from lip to base.

Trade Marks, Manufacturer and Dates: Unknown.

Pattern D4 (Figure 1.30).

Decoration Description: Fine gold line floral design spaced along the rim and shoulder. The rim is zig-zagged in shape and corrugated in S-shaped ripples. The body is white shading to pale blue on the rim.

Material and Objects: Porcelain; small plate.

Distinctive Features: Zig-zag rim.

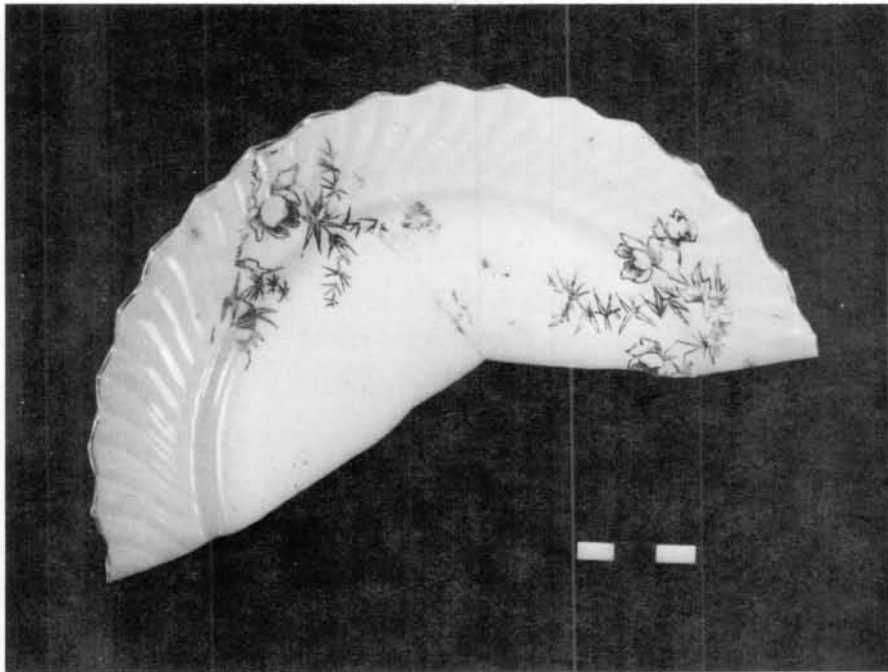


Figure 1.30: Small Plate, Pattern D4.

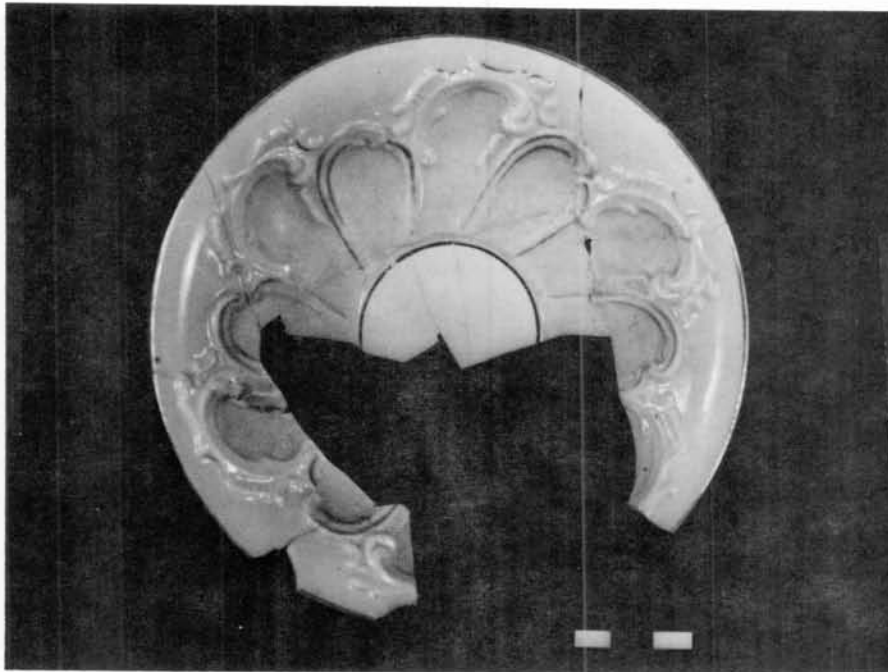


Figure 1.31: Saucer, Pattern D5.

Measurements: Diameter 17.8 cm, diameter of base 10.6 cm.

Catalogue Number: R7C81-82 (well).

Location of Decoration: On small area of the rim and part of interior.

Trade Marks, Manufacturer and Dates: Unknown.

Pattern D5 (Figure 1.31).

Decoration Description: Embossed floral design composed of alternating petals of pale blue and pink on a yellow-cream background. Highlights are emphasized with gold lines. A gold line also occurs on the rim and on the edge of the interior base.

Material and Objects: Porcelain; 1 saucer and matching cup.

Measurements: Diameter 14.2 cm, base diameter 7.8 cm.

Catalogue Numbers: R7C81-83; 81A-11; 81C-11 to 13 (well).

Location of Decoration: Upper surface of saucer. Outer surface of cup.

Trade Marks, Manufacturer and Dates: Unknown.

Pattern D6 (Figure 1.32).

Decoration Description: Polychrome applied print band with a yellow and blue band near the rim. In the centre of the band are flowers in pink and red with green leaves. This decoration is on a cream background bordered in black lines.

Material and Objects: Ironstone; bowl.

Distinctive Features: Sinuous rim.

Catalogue Numbers: R7C70B-13; 74A-19 (bunkhouse).

Location of Decoration: Interior rim.

Trade Mark and Manufacturer: Unicorn stamped on base in black with WEDGEWOOD.../ENG..., below. The vessel was made by Wedgwood & Co. Tunstall. This mark was used after 1908 (Godden 1964:656).

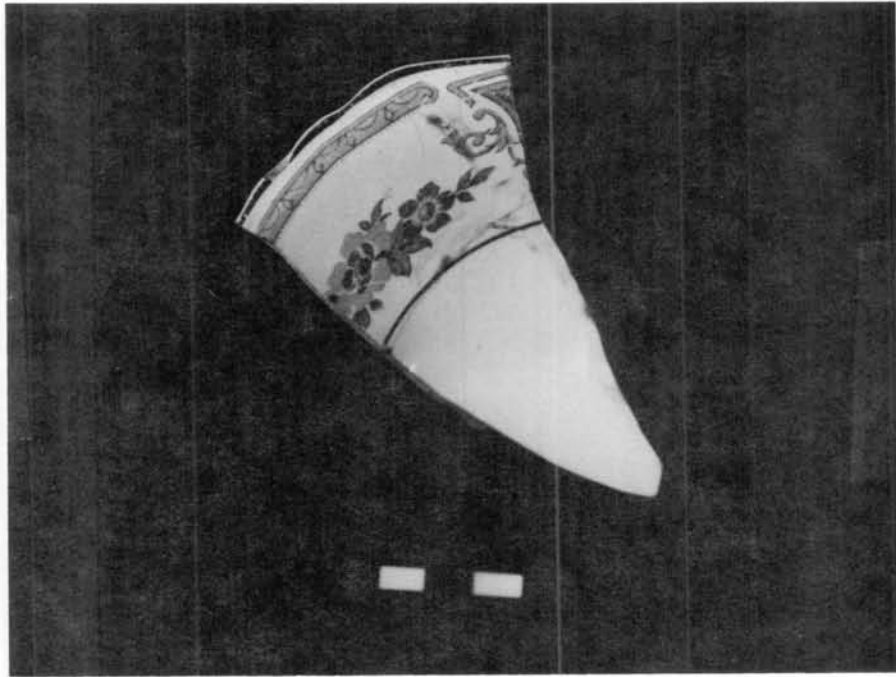


Figure 1.32: Small Bowl, Pattern D6.



Figure 1.33: Teapot, Pattern D8.

Dates: 1908+

Pattern Name: Unknown.

Pattern D7

Decoration Description: The decoration is a hand painted polychrome design of either Japanese or Chinese design. Colours used are principally browns, yellow and green.

Material and Objects: Dark reddish-brown earthenware; bowl.

Distinctive Features: Lustrous glaze.

Catalogue Number: R7C63E-9 (bunkhouse).

Location of Decoration: Exterior sides.

Trade Mark, Manufacturer and Dates: Unknown.

Pattern D8 (Figure 1.33).

Decoration Description: White glazed teapot with purple and gold bands running parallel to the rim along the vessel sides. The single handle has a leaf-shaped area of attachment.

Material and Objects: Earthenware; teapot.

Measurements: Rim diameter 9.7 cm.

Catalogue Numbers: R7C81-84, 85; 81C-28 to 31; 81D-3 (well).

Location of Decoration: One gold line occurs on the rim, two gold lines extend around the vessel below the exterior rim, the purple band bordered in gold is near the middle of the side. Gold lines and "leaves" decorate the spout.

Trade Mark, Manufacturer and Dates: Unknown.

Kitchenware

Kitchenwares include 3 ironstone mixing bowls, a brown glazed pie plate, Rockingham teapot, an ironstone teapot, a stoneware water pitcher and washbasin and a flower pot.

Pattern K1

Decoration Description: The decoration consists of a wide blue band

below the exterior rim, with three narrower bands below. This decoration is similar to one of Sussman's (1972:241, 243).

Material and Objects: Earthenware; minimum of 1 bowl.

Catalogue Numbers: Manager's residence - R7C2H9-40; 2X3-45 to 50; 2J3A-77; 2K3-111,112; 2K4-2 to 43.

Location of Decoration: Below exterior rim.

Trade Marks, Manufacturer and Dates: Unknown.

Pattern Name: Unknown.

Pattern K2

Decoration Description: Horizontal and vertical raised ridges under a white glaze.

Material and Objects: Stoneware; one mixing bowl.

Distinctive Features: Ring base.

Measurements: Diameter of vessel - ca. 19 cm, base diameter 10.5 cm.

Catalogue Numbers: Well - R7C81-57, 58, 98, 99.

Location of Decoration: Three horizontal ridges on the exterior of the rim and below this vertical ridges run towards the base.

Trade Marks, Manufacturer and Dates: Unknown.

Pattern Name: Unknown.

Pattern K3

Decoration Description: Light brown or cream glaze, raised ridges on exterior sides.

Material and Objects: Ironstone; mixing bowl.

Measurements: Diameter approximately 16 cm.

Catalogue Number: R7C74A-69 (bunkhouse).

Location of Decoration: Ridges on the exterior sides.

Trade Marks, Manufacturer and Dates: Unknown.

Pattern R1

Decoration Description: Brown slip interior, undecorated exterior.

Material and Objects: Ironstone; pie plate or shallow tray.

Distinctive Features: Base grooved in radiating spokes from the centre.

Catalogue Numbers: R7C2K7A-94 to 103; 2K7A-8, 9 (manager's residence).

Pattern R2

Decoration Description: Dark brown glaze.

Material and Objects: Ironstone; teapot lid.

Measurements: Rim diameter 7.4 cm, height 5.2 cm.

Catalogue Number: R7C2K7A-3 (manager's residence).

Trade Marks, Manufacturer and Dates: Unknown.

Pattern Name: Unknown.

Pattern R3 (Figure 1.34).

Decoration Description: Brown glazed embossed grapevine design alternating with a leaf column design. Parallel embossed bands occur on the side near the shoulder and the base.

Material and Objects: Earthenware; Rockingham teapot.

Measurements: Total height 14.4 cm, diameter 12.9 cm.

Catalogue Numbers: R7C81D-1, 2 (well).

Location of Decoration: Exterior sides.

Trade Mark and Manufacturer: This teapot is illustrated in the T. Eaton's Catalogue (1901:167) and came in a variety of sizes from 10¢ to 22¢ each.

Dates: Unknown.

Pattern Name: Rockingham (?).

Pattern F1 (Figure 1.35).

Decoration Description: The decoration consists of embossed leaf or grape design suspended along the interior rim. At



Figure 1.34: Teapot, Pattern R3.

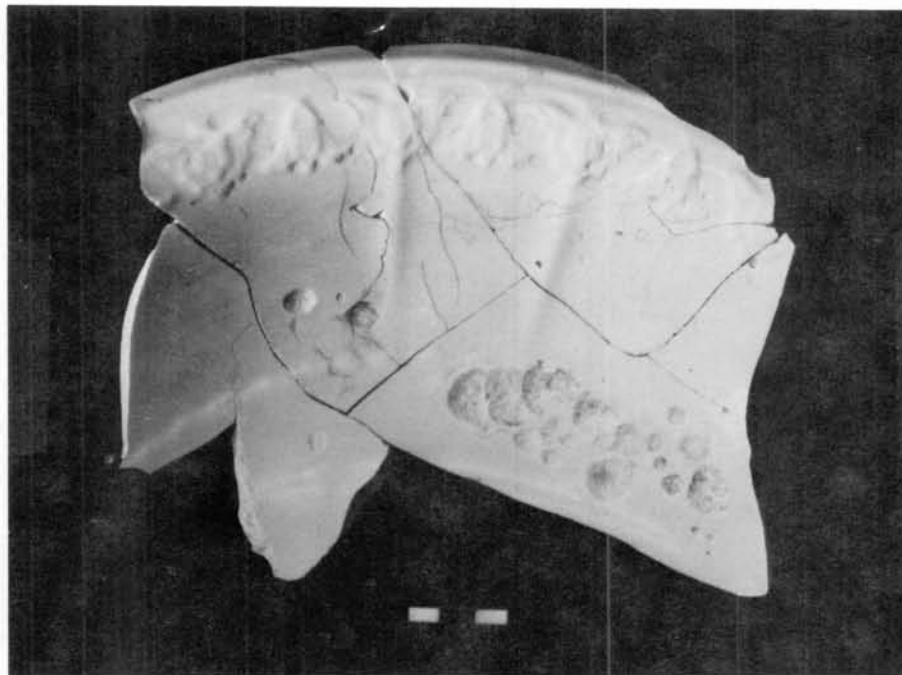


Figure 1.35: Washbasin, Pattern F1.

intervals are embossed vertical ridges which run towards a ridge near the interior bottom of the basin.

Material and Objects: Ironstone; washbasin.

Measurements: Rim diameter ca. 38.0 cm, base diameter 17.4 cm, height 11.2 cm.

Catalogue Numbers: R7C81-114 to 131 (well).

Location of Decoration: On the interior rim and the upper part of the vessel interior.

Trade Marks and Manufacturer: Stamped in black on the base is the royal crest with ROYAL IRONSTONE CHINA above and W & E CORN/ENGLAND below. This company operated in Staffordshire 1864-1904 (Godden 1964:175). As "England" was probably added only after 1891 this vessel was probably made in 1891-1904.

Dates: 1891-1904.

Pattern F2

Decoration Description: Hard plain white glaze. An embossed floral shape attachment is at the upper end of the handle.

Material and Objects: Ironstone; pitcher.

Distinctive Features: Large sloping handle, ring base.

Measurements: Height 81 cm, base diameter 11.4 cm.

Catalogue Numbers: R7C81-132 to 139 (well).

Location of Decoration: Floral shaped decoration at the upper handle attachment area.

Trade Marks and Manufacturer: Stamped in green on the base, the crest of Great Britain is surrounded by a wreath, below is WARRANTED STONE.../MELLOR, TAYLOR .../ENGLAND. The manufacturer is Mellor, Taylor & C., Staffordshire (1880-1904). As "England" would be added after 1891, this would date 1891-1904.

Pattern F3

Decoration Description: Undecorated.

Material and Objects: Earthenware; orange flower pot.

Measurements: Rim diameter 19.0 cm.

Catalogue Number: R7C64A-99 (bunkhouse).

Trade Marks, Manufacturer and Dates: Unknown.

Storage Vessels

Storage vessels from Cochrane Ranche include a brown glazed ironstone sealing jar lid, 2 brown glazed ironstone pop bottles, 3 ironstone crocks and an ironstone jug.

Pattern S1

Decoration Description: Brown glaze.

Material and Objects: Ironstone; sealing jar lid.

Distinctive Features: Cross-shaped grooves on the top. Embossed
THE WEIR-PAT MARCH 1st 92 APRIL 16, 1901.

Measurements: Diameter 10.7 cm, height 3.9 cm.

Catalogue Number: R7C2L8B-7 (manager's residence, kitchen cellar).

Trade Marks and Manufacturer: The Weir, as above.

Dates: 1901+

Pattern Name: The Weir.

Pattern S2

Decoration Description: Brown glaze.

Material and Objects: Ironstone; bottles (minimum number 2).

Measurements: Base diameter 5.5 cm.

Catalogue Numbers: R7C2K6-433,434; 2K6A-134,135; 2L6A-83
(manager's residence).

Trade Marks, Manufacturer and Dates: Unknown.

Pattern S3

Decoration Description: Salt glaze.

Material and Objects: Ironstone; 3 crocks.

Measurements: Crock 1 - diameter 26 cm.

Crock 2 - diameter 27 cm (2 gallon capacity).

Crock 3 - diameter 30 cm (4 gallon capacity).

Catalogue Numbers: Crock 1 - R7C2K7B-404, 405 (manager's residence).

Crock 2 - R7C81-239 to 246 (well).

Crock 3 - R7C81C-40 to 65 (well).

Location of Decoration: Grey or cream salt glaze exterior. Dark brown glaze interior.

Trade Marks: Crock 1 - ...RANTE...Warranted (?)

...T...Stoneware (?).

Crock 2 - BR...ORD Brantford

S... ARE Stoneware.

2

Manufacturer and Dates: Unknown.

Pattern Name: Unknown.

Pattern S4

Decoration Description: Salt glaze.

Material and Objects: Ironstone; jug with narrow mouth.

Measurements: Diameter 18.3 cm.

Catalogue Numbers: R7C2G4B-1 to 25 (manager's residence).

Location of Decoration: Dark brown salt glaze interior and on rim and shoulder exterior.

Trade Marks, Manufacturer and Dates: Unknown.

CUTLERY (Table 1.13)

Spoons

Two small spoons and one large spoon were found. The two smaller spoons came from the manager's residence. One of these (R7C2G5A-3) was 14.1 cm long and was stamped with an oval containing an anchor and METAL/FERAC. The other small spoon was stamped R W & CO/NICKELITE and was 12.9 cm in length.

TABLE 1.13 DATA SHEET - CUTLERY

MANAGER'S RESIDENCE

		Handle Length	Total Length	
R7C 2G4-36	handle	13.5		
2G5A-3	small spoon		14.1	METAL FERAC
2H4-1	handle			
2H8-93	fork		18.0	
2X3-164	fork			
2J3-1	handle	29.0		
2K5-106	small spoon	8.2	12.9	R W & CO NICKELITE
2K7-6	knife	9.5		
2K7-7	knife	8.3		
2L8-14	knife	9.8	14.7	
2G8-85	knife	6.9	17.5	
2G6A-2	knife			
2G6A-3	knife			
BUNKHOUSE				
R7C 72A-8	large spoon	14.3	22.1	
72A-3	knife	8.1		
72A-9	knife	9.5		
76A-2	fork		19.0	
64A-190	handle	9.8		
67A-36	handle			
80-51	knife	9.2		
WELL				
R7C 81C-336	fork			

Forks

Two forks were found in the manager's residence, one comes from the bunkhouse and one from the well. That found in the bunkhouse (R7C76A-2) had four tines. The remainder had three tines with bone or wood plated handles.

Knives

A total of nine knives were excavated; three from the bunkhouse and six from the manager's residence. The handles of these were either recessed (R7C2K7-6, R7C2L8-14, R7C72A-9), with rivets for bone or wood handle attachment (R7C2G8-85, R7C2G6A-3), with bone handles (R7C2K7-7, R7C80-51) or with a cream-coloured early plastic handle (R7C72A-3).

TIN CONTAINERS AND CANS

Tin containers and cans were encountered frequently at the Cochrane Ranch site. Tin containers are differentiated from tin cans by the nature of the vessel and by the use to which they were put. Tin containers are designed to allow the lid to be replaced after removing part of the contents. Tin cans are sealed cans not normally designed to have the lid replaced on the vessel.

Tin Containers

Tin containers are any items of this subgroup that are not sealed tin cans, but are made of tin and used to package or hold other items. These included medical cream tins, rectangular tins for tea, probable tobacco tins, sardine tins and metal tubes (See Table 1.14).

One of the tins in this group is a small circular herbal tin with the label:

Zam-Bu
for SORE, TIRED, ACHING FEET
ALSO
BRUISES. B...
SCALDS. SPRAINS. P...
PIMPLES. ECZEMA. LEG S...
ULCERS. RINGWORM. CHAPPED ...
(R) ASHES. SORES. INSECT BITES. CH...
CHILBLAINS. RHEUMATISM. COLD S...

TABLE 1.14 DATA SHEET - TIN CONTAINERS AND CANS

TIN CONTAINERS

CATALOGUE NUMBER	DESCRIPTION	MEASUREMENTS (CM)	LABELS
R7C 2F4-2	herbal balm tin	dia. 5.0 ht. 1.7	See text
2F4-3	herbal balm tin	dia. 5.0 ht. 1.7	
2X4-2	medicinal rectangular tin	L 5.6, w 4.3, ht. 1.0	
2X4-63	medicinal rectangular tin		
2L7C-197	tin container, screw top	dia. 6.9	
2L7C-198	tin container for pressure lid	dia. 8.3 ht.12.7	
2L8A-99	rectangular tin	L 10.0, w 9.8, ht. 13.9	See text
63B-52	rectangular tin base	L 15.8 w 12.0	
70B-51	two part flat tin	dia. 4.8 ht. 2.0	
73A-62	tin with snap down lid	dia. 13.0 ht. 12.2	EMPRESS JAM
73B-103	tin for pressure fit lid	dia. 11.0 ht. 9.5	
74A-41	rectangular flat tin	L 15.0 w 11.0 ht. 1.7	CUT... PLA...
76A-162	tin vessel with narrow neck	ht. 8.8	3 IN ON.../MANY USES/volv...and ...foo...aps/ BOYW.MIDWA
78A-13	two part flat tin	dia. 6.7 ht. 1.6	
80-5,7	metal tube		HEALS ALL.../ HARD.../THE GUMS .../...REAM

TIN CANS

R7C 2L8-15		dia. 8.8 ht. 5.2	
61B-14	sardine tin	ht. 2.2 L 10.8 w 8.0	
63B-51		dia. 10.7 ht. 12.7	
63B-53		dia. 7.5 ht. 11.2	RED TOP DOG FOOD
67A-35		dia. 9.0 ht. 11.8	

TABLE 1.14 (Continued)

CATALOGUE NUMBER	DESCRIPTION	MEASUREMENTS (CM)	LABELS
R7C 72A-507		dia. 11.0 ht. 9.6	
72A-510		dia. 11.0 ht. 11.5	
76A-166		dia. 6.6 ht. 3.1	
TIN CAN BASES			
R7C 2H3-59		dia. 8.5	
2H3-60		dia. 8.7	
2H3-61		dia. 8.7	
2X8-183		dia. 10.2	
2X8-184		dia. 10.6	
2J3-50		dia. 8.7	
2J3-51		dia. 10.8	
2K3-32		dia. 11.0	
2K3-142		dia. 6.7	
2K3-143		dia. 8.7	
2K3A-66		dia. 9.0	
2K7A-128		dia. 7.0	
2K7A-129		dia. 7.5	
2K7A-130		dia. 7.5	
2K8-152		dia. 8.7	
2K8-155		dia. 10.6	
2K8-158		l 9.3 w 6.5	

UNEQUALLED FOR SPORTS M...
CONTAINS
NO LARD & NO OTHER
ANIMAL OIL

Reverse DIRECTIONS...

Also in this subgroup is a rectangular tin (R7C2L8A-99) with the
label:

CEYLON TEA
IMPORTED...
YOUNG...
...COUVER, B.C.

Side: ...freshly/...leaves/...been boiled/
...kept boiling for/...(11 spoil
the tea) and/...ng to draw for six/
...utes serve for/...use.
IMPORTED AND PACKED BY/
YOUNG BROS./INCORPORATED?
VANCOUVER, B.C./SEATTLE, U.S.A.

Tin Cans

Tin cans are used mainly once and are usually depressurized and sealed. By using a can opener the effectiveness of the container is destroyed. These are generally used for storing and packaging perishable items. Just one of the tin cans recovered had a paper label:

RED TOP/FINEST ENGLISH FORMULA
"ITS THE LIVER"/NEW IMPROVED/Rich lean
red meat/with chlorophyllin ADDED/
NO MORE "DOGGIE" ODORS/GUARANTEED
ABSOLUTELY HARMLESS/DOG FOOD
REDTOP LIMITED/CALGARY, ALBERTA

Tin Lids

Tin lids can be of four different types (Table 1.15). These are either pressurefit, snap-down, sealed/cut, or twist-on lids. Very few of these had labels. One (R7C2L6-165) was embossed D(R) PRICES CREAM BAKING POWDER. Another pressurefit lid (R7C72A-374) is labeled:

KESTER METAL/MENDER/...N...DER

TABLE 1.15 DATA SHEET - TIN LIDS

PRESSURE FIT LIDS

CATALOGUE NUMBER	MEASUREMENTS (CM)	LABELS
R7C 2F4-1	dia. 8.8	
2G5A-4	dia. 7.0 ht. 1.2	
2G5A-5	dia. 15.0 ht. .45	
2G3-86	dia. 5.5 ht. 1.7	
2H3-57	dia. 7.5 ht. 1.1	
2H3-58	dia. 13.0 ht. 1.7	
2H6B-19	ht. 0.9 l 7.2 w 4.2	
2X5-7	dia. 3.8	
2J4A-39	dia. 7.4 ht. 0.9	
2K3-31	dia. 11.0 ht. 1.3	
2K3-144	dia. 8.4 ht. 1.8	
2K3-145	ht. 1.8 l 5.6 w 3.2	
2K7A-126	dia. 6.8 ht. 2.0	
2K7A-127	dia. 14.3 ht. 1.9	
2L5-56	dia. 11.7	
2L5-57	dia. 14.9	
2L6-24	ht. 0.6 l 10.5 w 8.3	
2L6-165	dia. 7.8 ht. 2.0	DR PRICES CREAM BAKING POWDER
63B-4	dia. 4.5 ht. 1.0	PRATTS/Directions/ 1½ OZ NET Kester Metal Mender
72A-374	dia. 6.1 ht. 0.9	
72A-375	dia. 7.3 ht. 1.5	
73B-109	dia. 7.7 ht. 2.0	
73B-110	dia. 7.8 ht. 1.8	
73B-111	dia. 7.8 ht. 2.0	
73B-112	dia. 6.8 ht. 2.0	
73B-113	dia. 2.2 ht. 1.0	

TABLE 1.15 (Continued)

SEALED/CUT LIDS

CATALOGUE NUMBER	MEASUREMENTS (CM)	LABELS
R7C 2K3-33	dia. 13.0	
2K4-230	dia. 8.0	
2K5-121	dia. 10.9	
2L5-55	dia. 8.1	
74A-42	dia. 7.6	

SNAP-DOWN LIDS

R7C 2X8-185	dia. 7.5	
2J6A-16	dia. 15.0	
2J7-6	dia. 11.5	
2J7-20	dia. 14.9	
2L4A-121	dia. 14.4	
63C-96	l 5.1 w 3.1	
72A-376	dia. 8.2	
73B-104	dia. 11.5	...BLACKW...
74A-26	dia. 8.2	

TWIST-ON LIDS

R7C 2X8-186	dia. 6.5 ht. 1.6	
2J7-18	dia. 5.4 ht. 1.6	
73A-103	dia. 11.6 ht. 1.5	
74A-30	dia. 6.5 ht. 1.1	"W"
74A-89	dia. 11.2 ht. 1.5	
74A-90	dia. 11.5 ht. 1.6	
79A-12	N.P. ht. 1.5	

FOR METAL MENDING/...THE HOUSEHOLD
...AUTOMOBILES/...GENERAL/...MENDING
...CAGO SOLDER COMPANY/CHICAGO U.S.A.
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METAL KITCHEN EQUIPMENT

A variety of items can be termed metal kitchen equipment (Table 1.16). Most of these items are self explanatory. In the manager's residence most of these items were found in the fill of the kitchen cellar. Items of this group from the bunkhouse were found in the midden areas outside the building.

MISCELLANEOUS

In this subgroup are two small groups - wooden objects and nuts and pips (Table 1.17). Once again these are self explanatory. Most of the wooden items derive from the bunkhouse where the effects of deterioration have been somewhat reduced.

TABLE 1.16 DATA SHEET - METAL KITCHEN EQUIPMENT

CATALOGUE NUMBER	DESCRIPTION	MEASUREMENTS (CM)
R7C 2F7-131	metal lid perforated with square nail - for use as a salt shaker(?)	dia. 5.7
2G4-4	metal lug or side handle of cooking pot	w 8.6
2H3-57	wire handle for sealing jar	
2X5-1,2	(2) enamel tin cups (blue on rim)	dia. 11.0 ht. 6.2
2X7-198	key for tin can	
2K6A-89	key for tin can	1 7.4
2K6A-90	sheet metal side or lid of box	1 70.2 w 24.5
2K6A-121	wire loop handle	1 7.6 w 4.1
2K7A-121	large copper lid	dia. 26
2K7A-144	lead handle	1 6.6 w 3.2
2K7A-169	spout for coffee pot	
2K7A-557	water heater	1 44.0 w 28.0
2K7B-18	pot lid	dia. 9.6
2K8A-1	top of butter churn	dia. 43.7
2K8-1	coffee pot	ht. 23.0 dia. 19.7
2K8-2	tin washbasin	dia. 32.0 ht. 8.0
2K8-156	enamel cup-speckled gray	dia. 11.2 ht. 6.1
2L6A-193	cast iron dutch oven lid	dia. 33.0
2L7B-880	turning assembly for butter churn	
2L7C-200	iron frying pan	dia. 33.2 ht. 5.0
61B-60	enamel pot	dia. 16.6 ht. 8.3
63C-129	aluminum spout of salt box	
63E-4	meat hook - S shape	1 21.0
63E-5	meat grinder NEW BRITAIN/CT USA/ UNIVERSAL/NO.1/CHOPPER/ PAT. OCT. 12, 1897	
67A-52	wire handle	
72A-505	tin pail	
72B-1	enameled tin cup (rim black)	dia. 7.9 ht. 4.9
74A-44	metal handle	1 9.0 w 5.2
74A-45	enameled lid with applied brown spots	dia. 22.5

TABLE 1.16 (Continued)

CATALOGUE NUMBER	DESCRIPTION	MEASUREMENTS (CM)
R7C 81C-337	grey enameled tin cooking pot handle	l 21.4
81C-349	coffee grinder mechanism	
81C-359	grey enameled saucer	dia. 15.5 ht. 3.2
BARREL HOOPS		
R7C 2F7-78,86		w 3.0
2K5-1		w 3.0
2K6-2		w 2.7
2K6-3		w 1.5 dia. 25.0
2K6-9/10		w 2.7
2K6-11/12		w 1.5
2K6A-19		w 2.8
2K7A-556		w 2.6
2L6A-88		w 3.8 dia. 8.3
2L7B-791,798		w 1.6
2L7C-196		w 1.6
72A-483,485		w 1.4
73B-112		w 2.2
63C-121		w 1.9
METAL STRIPS		
R7C 2G3-13	iron	w 1.5
2G6-73	tin	w 1.6
2H7A-1/2	galvanized tin	w 1.5
2H7A-3	iron	w 1.5
2H8-137,145	galvanized tin	w 1.3
2J7-13	tin	w 1.4
2K6-13	tin	w 1.4
2K7A-123	tin	w 1.5

TABLE 1.17 DATA SHEET - MISCELLANEOUS

WOODEN OBJECTS

R7C 63B-57	side of wooden box	RED ARROW CRACKERS 16 DOZ.
63B-54	side of wooden box	ROWCLIFFE'S
63B-56	side of wooden box	ROWCLIFFE SHIPPED BY/HOLLYWOOD ORCHARDS/KELOWNA B.C. LTD.
74A-61	wooden clothes pin	
81C-1	wooden bucket containing soap (?) or lard	

NUTS AND PIPS

R7C 2G6-74,75	2 apricot pips
2K8-41	fragment of coconut shell
63C-117,118	peanut shells
66B-15	cherry pip
70B-129	apricot pip
70B-130	apricot pip
70B-131	cherry pip
78A-14	peach pip
80-30	apricot pip

APPENDIX 2 ARCHITECTURAL WARES

Architectural wares form a group as large as that of kitchen items (both 46.6%). This is primarily due to the large number of nails and fragments of window glass which are counted separately. Also included in this group are such items as hinges, door knobs and electrical fixtures.

NAILS

All the nails recovered from Cochrane Ranche buildings are machine made and are of two types - cut or square and wire or round. Historically, round or wire nails became less expensive after about 1890. The presence of round nails on the site suggests that considerable rebuilding occurred after that time. From the bunkhouse 63% of all nails recovered were cut and 37% were round. Nails from the manager's house are nearly equal in terms of percentages (Table 2.1).

The lengths of the various nails are plotted on Figures 2.1 and 2.2. By far the most commonly used sizes were 65 mm (2½ inches) and 75 mm (3 inches).

FASTENERS

Other architectural fasteners occur in small numbers. These include spikes, screws and finishing nails.

BRICKS

Bricks are used in a few locations at Cochrane Ranche. In the bunkhouse, the chimney was built of bricks imported from St. Louis. Local bricks were used to build the veranda and also as supports for the north wall in the east wing area. A few bricks were scattered along the west wall of the west wing of the bunkhouse as foundation material but these are mainly fragmentary and not arranged in any particular way.

Only a few bricks were found in the manager's residence area. These were randomly scattered in the western half of the building.

Type 1

These are hard-fired reddish-orange bricks embossed: CHELTENHAM/ST. LOUIS.

TABLE 2.1 DISTRIBUTION OF NAIL TYPES

Bunkhouse	Cut	208	63%
	Round	122	37%
	TOTAL	<u>330</u>	<u>100%</u>
Manager's Residence	Cut	954	50.5%
	Round	935	49.5%
	TOTAL	<u>1889</u>	<u>100%</u>

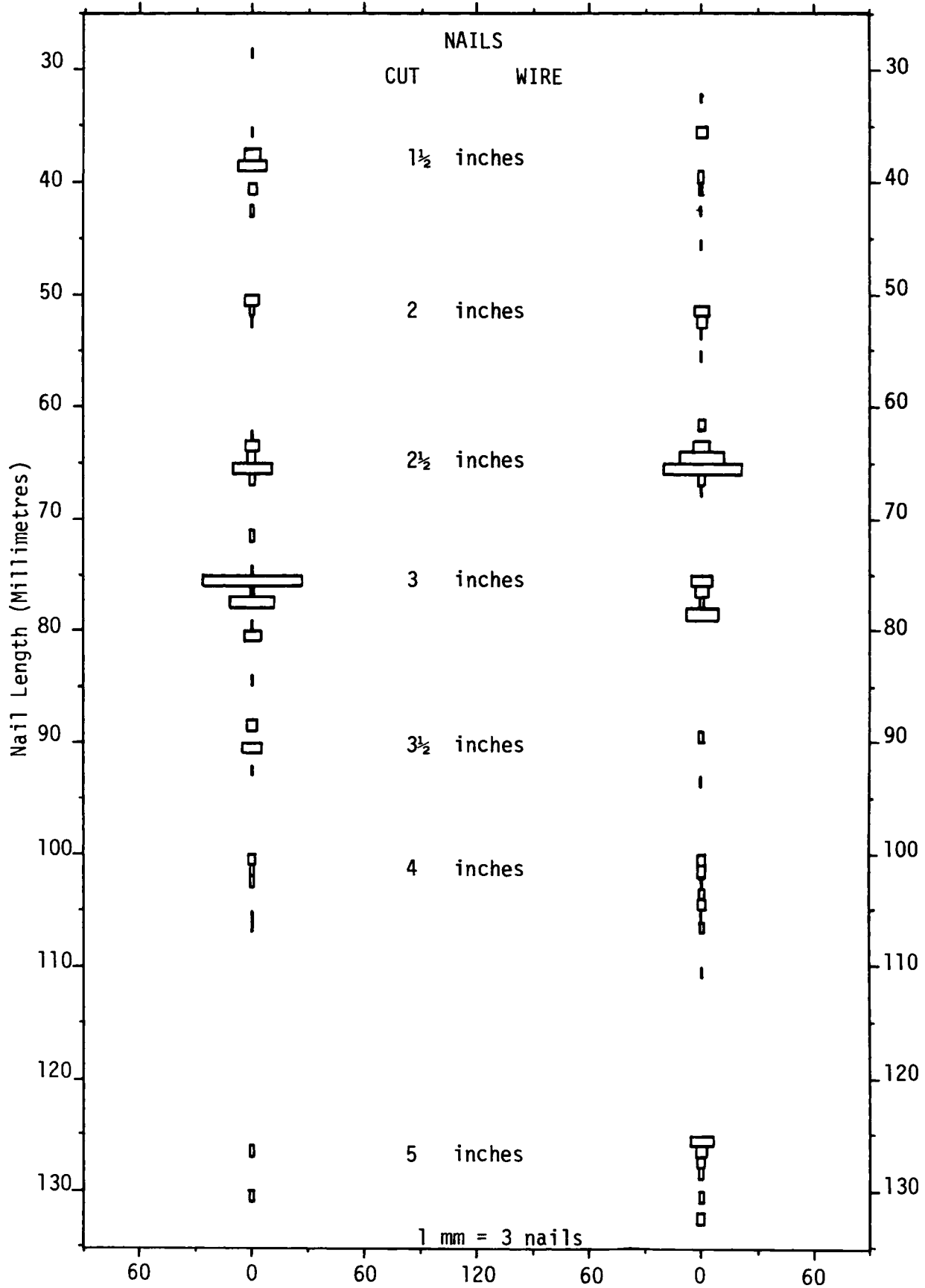


Figure 2.1: Number of Nails by Measured Lengths, Bunkhouse.

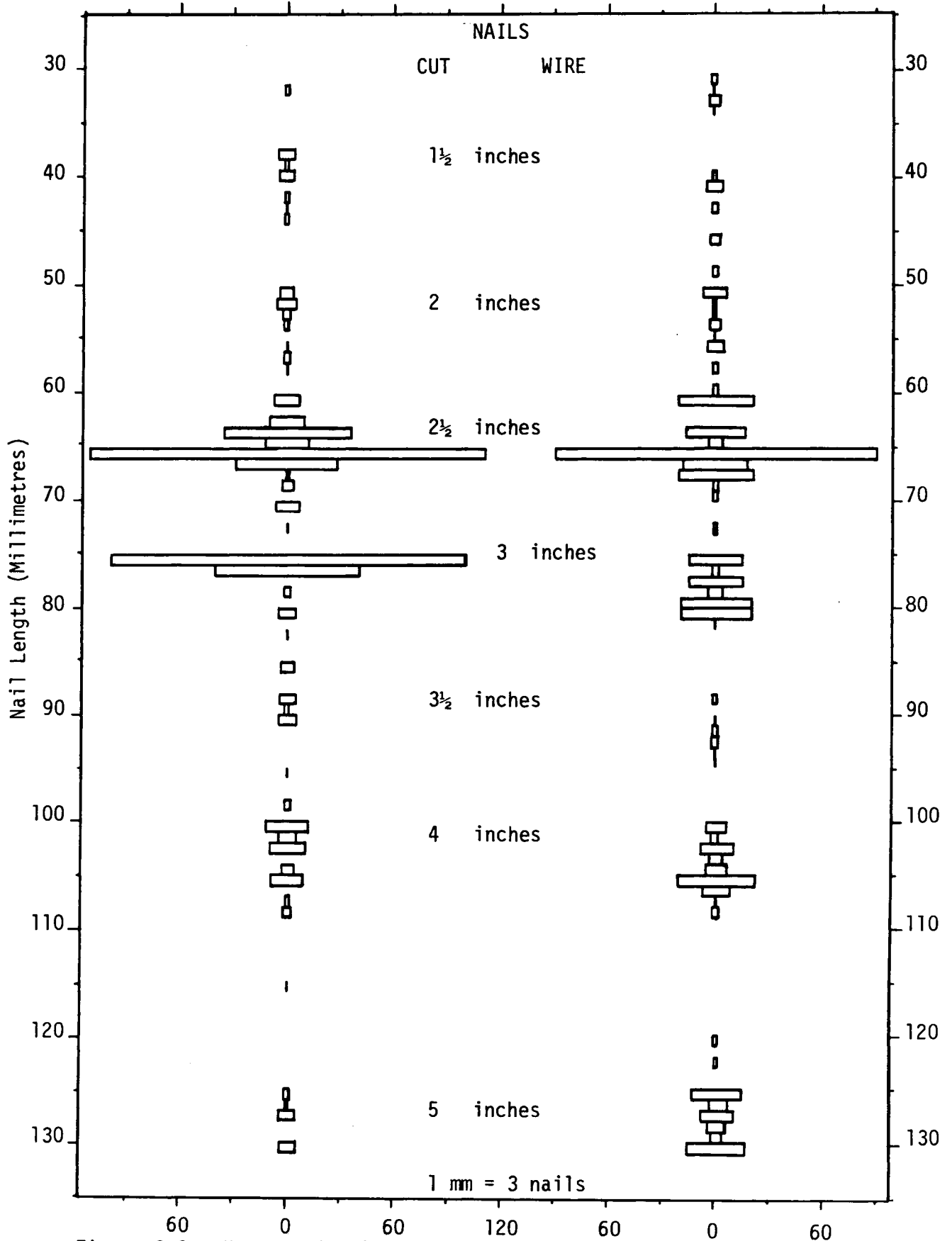


Figure 2.2: Number of Nails by Measured Length, Manager's Residence.

Dimensions: 22.0 x 11.0 cm, height 5.5 cm.

Provenience: R7C63D chimney in the dining area of the bunkhouse.

Type 2

These are soft, low-fired yellowish-orange bricks without any markings. These are probably locally made bricks.

Dimensions: 20.4 x 10.2 cm, height 5.1 cm.

Provenience: R7C61 in the fill of the root cellar of the bunkhouse.
R7C70 under the north and west walls of the east wing, bunkhouse.
R7C75 on the floor of the veranda, bunkhouse.
R7C2 in the manager's residence along the west wall.

ARCHITECTURAL HARDWARE (Figure 2.3).

Door Hinges

Sixteen door hinges were recovered in the excavations. Six of these had two rectangular leaves, six were composed of one rectangular leaf and one tongue-shaped leaf. Two of the hinges were composed of two tongue-shaped leaves. The remainder are fragmentary.

Door Hardware (Table 2.2)

Other door hardware includes 5 door catch-plates, one draw-bolt catch, one door hook, one door latch fragment, one keyhole plate and one door-knob assembly.

Other Architectural Items (Table 2.1)

Other architectural items include numerous fragments of linoleum, one pintle hinge, one section of pipe, a twisted wire clamp, a twisted wire brace, a metal hose clamp and a large washer.

Hand-Made Architectural Items

Virtually nothing architectural used on the site appears to have been made on the site. There is, however, one notable exception. This is a horse-shoe that has been reworked into a hook (R7C2L7C-187).

Door Knobs

Fourteen door knobs were recovered by the excavations. Three of these



Figure 2.3: Architectural Artifacts:

Door Knob (R7C2H6A-1), Drawer Pull (R7C2F6A-9), Hinge (R7C2L5-51),
Door Lock Cover (R7C75A2-28), Fuse (R7C2K3-35), Horseshoe Hook (R7C2L7C-187).

TABLE 2.2 DATA SHEET - ARCHITECTURAL ITEMS

DOOR KNOBS

PORCELAIN	METAL
R7C 2F5-6	R7C 74A-93 to 95
2G5-1	
2H5-85	
2H5A-1,3,4,5	
2H6A-1	
2H6B-2	
2L4A-33	
2L7B-400	
2M5-19	
81D-41	

A complete door assemblage comes from the well - R7C 81-284.

DOOR CATCH PLATES

R7C 2G5-20	manager's residence
2K6-6	manager's residence
2K7-227	manager's residence
70B-39	bunkhouse
81C-374	well

DOOR HINGES

	SHAPE
R7C 2G4A-395	tongue
2G4A-396	rectangular-rectangular
2G8-93	rectangular
2H4-18	rectangular-tongue
2J6-16	rectangular
2J7-2	rectangular-tongue
2K6-2	rectangular-tongue
2K6-4	rectangular-rectangular
2K6-5	rectangular-rectangular
2K6A-148	rectangular-tongue
2K7A-151	rectangular
2K7B-640	rectangular-tongue

TABLE 2.2 (Continued)

R7C 2L5-51	rectangular
2L5-71	rectangular-tongue
72A-7	tongue-tongue
75A-19	tongue-tongue
OTHER ARCHITECTURAL ITEMS	
	DESCRIPTION
R7C 2F6A-10	metal strip with 2 countersunk holes
2G4A-392	door assemblage
2G4A-394	keyhole plate
2H8-138	metal hose clamp
2J7-11	twisted wire clamp
2K5-8	door hook
2K5-109	door latch fragment
2K6-15	iron washer
2L4A-188	twisted wire brace
2L5-50	draw-bolt catch
2L6A-188	linoleum fragments
2L7C-187	reworked horseshoe hook
63C-2	linoleum fragments
63C-130	linoleum fragments
76A-64	pipe, threaded end
78A-33	pintle hinge
81-64	linoleum fragments
81C-376	linoleum fragments

were metal and were found in the bunkhouse. The remainder are all white porcelain handles except one which has been fired to an intense blue/black colour (R7C2G5-1) possibly due to the effects of the building fire.

The association of porcelain doorknobs with the manager's residence and metal handles with the bunkhouse might lead one to suggest that porcelain was preferred and possibly more expensive as they were used in the manager's residence whereas metal ones were used in the bunkhouse. However, the T. Eaton 1901 (page 191) catalogue lists the price of porcelain door-knobs as 10 cents each, whereas bronze doorknobs were 45 cents each. The significant difference in cost may account for the general use of porcelain handles, and may indicate that the metal handles were used in a special situation.

ELECTRICAL FITTINGS (Table 2.3)

Electrical fittings are present in limited amounts from both the manager's residence and the bunkhouse suggesting that electricity was used in both buildings at least in their later periods of use (Table 2.2). Such fittings include light bulb bases, wire insulators, a fuse and two switches.

WINDOW GLASS

Window glass distribution of the manager's residence is plotted on Figure 12. Very high numbers of fragments were found in the kitchen cellar-fill area. Low numbers of fragments were recovered from the central interior area of the house while high numbers of fragments of glass were found nearer the walls. From the historic photographs, windows were located in units 2F5, 2F7, 2G4/2H4, and 2X4/2J4; that is, two on the front and two on the east side wall. None of these areas are exceptionally high in glass fragments and determination of window locations would be difficult based on the glass fragment count alone.

TABLE 2.3 DATA SHEET - ELECTRICAL FITTINGS

LIGHT BULB BASES

Screw Type R7C 2F5-62, 2G8-96, 2H3-56

WIRE INSULATORS

MARKS

R7C 2G5-8

2H6-1

2H68-3

2J4A-2

2K3A-15

MADE IN USA

WP5 USA

D & F

OTHERS

DESCRIPTION

R7C 2K3-35

2K3-140

72A-23

77A-9

78A-34

electric fuse, screw type

two piece light switch

porcelain light base CGE 2A 125V

light switch DE Co/No 870

aluminum conduit

APPENDIX 3 FURNITURE

This group of artifacts contains items that would generally be considered furnishings. Most of these items are moveable. Archaeologically this group contains stove parts, lamp fragments, large clocks and a variety of furniture parts.

STOVE PARTS

Stove fragments are quite common at Cochrane Ranch. Evidence for at least four stoves is provided by embossed stove parts. One of these from the bunkhouse is embossed: CANADA 14/FRONT END/REGISTERED 1906.

Two stoves were probably in use in the manager's residence at the time of the fire. In the centre of the area were numerous stove fragments of which two were embossed DESIGN REG^D 1888...(1) LTON ONT... . A second stove is indicated by numerous fragments in the kitchen cellar fill and was probably originally in the kitchen. Two stove doors from this area are marked 1884 and HOTEL COOK.

In the well fill was a fragment marked REG^D May 1884.

Three of the above dates indicated the stove designs were registered in the 1880's. If the buildings were provided with stoves shortly after construction, these may have been the original stoves.

LAMP PARTS

Thirteen fragmentary glass lamp chimneys were excavated at Cochrane Ranch (Table 3.1). In addition, 5 wick-assembly fragments were recovered, three of these made of copper and two of glass (Table 3.1). Four fragmentary lamp shades and two lamp bases were also recovered.

BELL

Three bells, two from the manager's residence, and one from the bunkhouse, provide an indication of either telephones or clocks. These are bowl-shaped with a single hole in the centre for attachment. The diameters of these were 5.7, 6.0 and 6.2 cm.

CLOCK PARTS

Parts of a clock, located in the manager's residence, include a back

TABLE 3.1 DATA SHEET - FURNITURE

LAMP CHIMNEY

CATALOGUE NUMBER	COLOUR	REFERENCE
R7C 2G4-34	clear	Figure 3.1a
2J4A-28	clear	Figure 3.1b
2K3-314,315	pale purple	Figure 3.1c
2K7A-240	clear	Figure 3.1d
2K8-157	pale purple	Figure 3.1c
2M7-41	clear	
63B-5,6	pale purple	Figure 3.1e
63B-7	clear	Figure 3.1d
72A-314	clear	Figure 3.1f
73B-49	clear	Figure 3.1f
81C-220	clear	Figure 3.1e
81-269	clear	Figure 3.1e
81C-220	clear	Figure 3.1e

WICK-ASSEMBLY FRAGMENTS

EMBOSSSED

R7C 2J4-67	metal	
2K7B-197	glass	GETTY COMPTON SOLE... MPLS. MINN PAT <u>D</u> APR...
2L7B-80	metal	
2L7C-179	glass	GETTY COMPTON SOLE... MPLS. MINN PAT <u>D</u> ...
72A-16		

LAMP SHADE FRAGMENTS

R7C 2F6A-20
73A-3
74A-67,77

GLASS LAMP BASES

R7C 2G4A-470
81D-30

TABLE 3.1 (Continued)

BELLS

R7C 2F5-63	dia. 5.7
2L6A-93	dia. 6.0
72A-1	dia. 6.2

CLOCK PARTS

R7C 2F7-47	clock back plate
2X5-4	coil spring
2L7B-53	clock assemblage

MISCELLANEOUS

R7C 2F6A-4	male end of plug
2F6A-9	drawer pull
2H8-137	drawer pull
2X7-197	small copper hinge
2K3-34	drawer pull
2K3A-26	glass light dangle
2K6-14	metal screen
2K6A-6	furniture handle
2L5-54	end of roller blind
2L6-1	cup hook
2L7B-541	glass vase
2L7B-807	iron drawer pull
61B-61	chair cross-piece, wood
64A-2	bedstead knob
64A-3	drawer handle
70B-51	mica sheet
73A-71	metal hasp
80-3	metal latch
81C-360	wooden box or drawer fragment
81C-359	metal hasp

plate, clock assemblage of sprockets and gears on a rectangular frame, a small clock bell (diameter 2.2 cm) and a metal coil spring.

MISCELLANEOUS FURNITURE

Miscellaneous furniture pieces include five drawer pulls, a glass light dangle, a furniture handle, the end of a roller blind, a cup hook, the male end of a plug, a wooden chair cross-piece, a bedstead knob and a metal latch. One of the most interesting items recovered was a fragmented tall glass vase with white adorned-glass circles and lines.

APPENDIX 4 ARMS

The ammunition and arms category at Cochrane Ranche provides an indication of historic trends, especially those of Western Canada. Most importantly, perhaps, the arms are exclusively centre or rim fire.

There are no gun flints or any other indications of muzzle-loading weapons. This suggests that the residents of Cochrane Ranche were no longer using muzzle-loading weapons.

All of the items found are ammunition except for one bullet mold (R7C2F6A-11). This is made of iron and probably cast .380 inch lead bullets.

SHOTGUN SHELLS

Shotgun shells are the most common arms on the site. Three number 10 shotgun shells were found (Table 4.1). Ten number 12 shotgun shells were recovered from the manager's residence, twenty-eight were from the bunkhouse and three from the well. These shotgun shells were primarily British made (56%), but some were American (37%) and Canadian (7%) (Table 10).

RIM FIRE CARTRIDGES

Rim fire cartridges include .22 short, .22 long, .22 long rifle and .25 standard specimens. The .22 short weapon was originally designed in 1856. Of the three .22 shorts recovered, one is stamped D for the Dominion Cartridge Company, one is stamped H for the Winchester Repeating Arms Company (WRAC⁰) and one is stamped U for the Union Metallic Arms Company.

Eight .22 long cartridges were recovered (Table 4.1). Of these one is stamped G for Genetot and Gaupillat (France), one is stamped D for Dominion Cartridge Company, one has an R for Remington, three are stamped H for the Winchester Repeating Arms Company and two are unmarked.

The single .22 long rifle cartridge is marked H for the WRAC⁰. The single .25 standard is badly flattened and unmarked.

TABLE 4.1 DATA SHEET - ARMS

RIM FIRE CARTRIDGES

	Catalogue Number	Length (measured in inches)	Dia. Neck	Dia. Head	Rim Thickness	Marks
.22 short	R7C2X4-57	.424	.230	.270	.027	D
	63C-1		.229	.270	.040	H
	69A-12	.440	.233	.270	.042	U
.22 long	R7C2H4-2	.600	.228	.271	.041	G
	2J6-11	.600	.228	.271	.041	
	2J6-12	.600	.228	.271	.041	
	2K7A-147	.611	.230	.263	.041	H
	69A-11	.615	.231	.270	.044	R
	70B-48	.610	.231	.270	.042	H
	71B-16	.610	.233	.270	.042	H
	77A-6	.610	.232	.270	0.42	D
.22 long rifle	R7C2F6A-17	.790	.320	.377	.050	H
.25 stan- dard	R7C2X3-166	1.120				
CENTRE FIRE CARTRIDGES						
.44/.40	R7C2F6A-13	1.320	.470	.511	.055	WRACO 44 WCF
	2F6A-14		.470	.515	.044	
	69A-14		.470	.523	.063	
	70B-42	1.305	.467	.525	.065	WRACO 44 WCF
.303 British	R7C2K7B-636	2.02	.455	.529	.065	RML/CII
	81-9	2.212	.458	.530	.060	0
	81-247 to 253	2.210	.462	.530	.060	RML/II/C
	81-254 to 258	2.210	.462	.530	.060	C/II/1
.577 Boxer	R7C2L7A-216					

TABLE 4.1 (Continued)

	Catalogue Number	Length (measured in inches)	Dia. Neck	Dia. Head	Rim Thickness	Marks
Unknown #1	R7C2F6A-16	.595	.340	.380	.045	
Unknown #2	R7C2F6-9	.770	.388	.430	.030	
Unknown #3	R7C2F6A-12	2.120	.510	.610	.070	
	2F8-49	2.004	.515	.608	.073	
	2L7B-803	2.100	.511	.609	.071	
Unknown #4	R7C2K3A-113	1.879	.563	.620	.056	
	64A-22	1.880	.563	.623	.060	
	69A-13	1.865	.570	.620	.067	
Unknown #5	R7C81C-333		.520	.628	.065	
Unknown #6	R7C2F4-11		.687	.779	.104	

SHOTGUN SHELLS

Number 10

	Catalogue Number	Mark
Manager's Residence	R7C 2K3A-114	D C C ⁰ No. 10
	R7C 2L4A-4	D C C ⁰ No. 10
Bunkhouse	R7C 71-3	ELEY BROS/N ⁰ 10/ LONDON

Number 12

	Catalogue Number	Mark
Manager's Residence	R7C 2F7-7	ELEY.LONDON/No.12/ GASTIGHT
	2G5A-2	EB/NO.12/LONDON
	2G6-1	DOMINION/NO.12/CANADA
	2G8-67	KYNOCH/NO.12/BLACK
	2G8-66	EB /NO.12/ELEY LONDON
	2H7B-39	U.M.C.CO./NO.12/CLUB
	2H9-13	DOMINION/NO.12/CANUCK/ MADE IN CANADA
	2K7B-637	ELEY/NO.12/LONDON
	2L5-49	ELEY.LONDON/NO.12/GASTIGHT
	2M7-1	SFM/12/12/

TABLE 4.1 (Continued)

	Catalogue Number	Mark	
Bunkhouse	R7C 64A-1	ATK...ON/NO.12/LANCASTER	
	64B-20	ELEY/NO.12/LONDON	
	64B-21	E.B./NO.12/LONDON	
	64B-22	S.SMITH/NO.12/NEWPORT	
	64B-23	F.E. WALKER/NO.12/NEWBURY	
	64B-24	PURDEY & SONS/NO.12/LONDON	
	64B-25	W R A C ⁰ /NO.12/RIVAL	
	64B-26	W R A C ⁰ /NO.12/RIVAL	
	64B-27	E.B./NO.12/LONDON	
	71B-15	SHULTZE/NO.12/LONDON	
	72A-26	E.B./NO.12/LONDON	
	72A-27	E.B./NO.12/LONDON	
	72A-28	ELEY.LONDON/NO.12/GASTIGHT	
	72A-29	S.SMITH/NO.12/NEWPORT	
	72A-30	F.E.WALKER/NO.12/NEWBURY	
	72A-31	E.B./NO.../LONDON	
	72A-32	.../NO.../LOND...	
	72A-33	S.SMITH/NO.12/NEWPORT	
	72A-34	E.B./NO.12/LONDON	
	72A-35	E.B./NO.12/LONDON	
	72A-36	D.C. Co./NO.12/TRAP	
	72A-37	F.E.WALKER/NO.12/NEWBURY	
	72A-38	ELEY.LONDON/NO.12/GASTIGHT	
	72A-39	F.E.WALKER/NO.12/NEWBURY	
	72A-40	ELEY.LONDON/NO.12/GASTIGHT	
	72A-51	ELEY/NO.12/LONDON	
	72A-322	W R A C ⁰ /NO.12/...AL	
	72A-323	W R A C ⁰ /NO.12/RIVAL	
		R7C 81C-332	PURDEY & SONS/NO.12/LONDON
	Full Copper Cases	R7C 81C-334	WINCHESTER/NO.12
		81C-335	WINCHESTER/NO.12

CENTRE FIRE CARTRIDGES

.303 British

Thirteen .303 British cartridges were recovered, mainly from the well (Table 4.1). This cartridge has been the official military rifle cartridge of England and the British Empire since 1888. Manufacture in the United States began about 1897 (Barnes 1972:45). It has always been popular in Canada for use on big game.

.44/.40

The .44/.40 cartridge was originally made in 1873. Four of these were found on the site (Table 4.1). This was a general all-purpose weapon (Barnes 1972:61). Two of the specimens recovered are marked WRAC⁰/44 WCF and were made by the Winchester Repeating Arms Company. The other two are unmarked.

.577 Boxer

Only one specimen of this type was recovered from Cochrane Ranche. They were designed for the British Snider Enfield breech-loading converted rifle. These were issued to the Canadian Militia in 1867 and also to the North West Mounted Police (Losey 1977a:176).

Centre Fire Calibre Unknown

Six types of arms recovered have not been identified (Table 4.1). Unknown No. 4 is similar to the last two unknown centre fire cartridges of Losey 1972:195.

APPENDIX 5
CLOTHING

Indications of clothing at Cochrane Ranch are limited to a few sub-groups. These include buttons, a variety of hooks and buckles, a few cloth fragments, and a number of shoes. The pattern of button dispersal is demonstrated in Figures 8 and 14. The scattering of buttons over the area of these two buildings does not seem to be particularly useful for interpreting the buildings.

BUTTONS (Tables 5.1 and 5.2)

Fifty-six buttons were recovered in the excavation. Most (36) were found in the bunkhouse, 16 in the manager's residence and four in the well. Buttons were usually made of shell, glass or iron, but could also be made of bone or leather. Twenty-one buttons had 4 holes for attachment, 13 had 2 holes for attachment, 8 had a loop, 10 were rivet or snap types.

Some of the rivet buttons have manufacturer's marks. Of special interest are PEABODY'S, WINDSOR (R7C2J3A-3) and H. SHOREY & CO., MONTREAL (R7C2L7B-45) as both of these are Canadian and indicate that clothing was one of the Canadian products locally available.

TABLE 5.1 BUTTONS - MATERIAL AND METHOD OF ATTACHMENT

		MATERIAL				
BUILDING		SHELL	GLASS	IRON	OTHER	TOTAL
Manager's Residence		4	4	5	3	16
Bunkhouse		15	4	8	9	36
Well		1	1	1	1	4

		METHOD OF ATTACHMENT				
BUILDING	LOOP	2 HOLE	4 HOLE	RIVET	OTHER	TOTAL
Manager's Residence	4	3	5	3	1	16
Bunkhouse	4	9	16	6	1	36
Well		1		1	2	4

TABLE 5.2 DATA SHEET - BUTTONS

	CATALOGUE NUMBER	COLOUR	MATERIAL	METHOD OF ATTACHMENT	DIA. (CM)
Manager's residence	R7C 2F5-4	white	shell	4 holes	1.65
	2F5-5		iron	2 holes	1.77
	2F6-7	white	shell	loop	1.75
	2F6-8	white	shell	4 holes	1.0
	2F6A-5		iron	loop	1.1
	2F7-33	grey	stone?/ graphite?	2 holes	1.89
	2G5-6		iron	loop	2.33
	2G6-12	white	glass	4 holes	1.45
	2G6-69	white	glass	4 holes	1.15
	2H5-61		iron	rivet	1.8
	2J3A-3		copper	rivet	2.0
	2J3A-4	white	glass	4 holes	1.6
	2K4-225		copper	rivet	2.0
	2K6A-20	white	shell	2 holes	1.4
	2L7B-45		iron/copper	rivet	1.7
Bunkhouse	R7C 63C-3	white	shell	4 holes	1.3
	63C-4	black	wood	4 holes	1.7
	63C-5	black	wood	4 holes	1.7
	63C-6	blue	glass	2 holes	1.4
	63C-7	grey	shell	2 holes	1.3
	63C-8	white	shell	2 holes	1.3
	64A-11	white	shell	4 holes	1.0
	64A-12	white	shell	4 holes	1.1
	64A-13	white	shell	4 holes	1.1
	64A-14	white	shell	4 holes	1.3
	64A-15	cream	bone	4 holes	2.0
	64A-16		copper	4 holes	1.6
	64A-17		iron	rivet	1.7
	64A-18	silver	tin	2 holes	1.1
	64A-19	white	glass	4 holes	1.3
	64B-31		iron	2 holes	1.45

TABLE 5.2 (Continued)

	CATALOGUE NUMBER	COLOUR	MATERIAL	METHOD OF ATTACHMENT	DIA. (CM)
	R7C 66A-1	white	shell	2 holes	1.4
	67A-7		iron	loop	1.8
	69A-4	white	shell	2 holes	1.4
	69A-5	blue (dye)	shell	2 holes	1.4
	69A-6	black	glass	loop	1.3
	70B-43	white	glass	2 holes	1.4
	70B-44	white	shell	2 holes	1.3
	70B-45	white	shell	4 holes	1.2
	70B-46	white	shell	4 holes	1.1
	70B-47		iron	rivet	1.7
	72A-353		iron	rivet	1.7
	72A-354		iron	rivet	1.4
	72A-356	brown	leather covered	4 holes	2.5
	72A-357	black	bronze?	4 holes	1.7
	72B-6	white	shell	4 holes	3.1
	73A-66	brown	leather covered	loop	2.4
	73A-67	brown	leather covered	loop	2.4
	73A-68		iron	rivet	
	73A-69		iron	rivet	
	80-1	black	shell		1.4
Well	R7C 81B-1		iron		2.7
	81C-330	cream	bone	1 hole	2.9
	81D-51	white	glass	2 holes	1.5

HOOKS AND BUCKLES (Table 5.3)

The second major subgroup in the clothing category are hooks and buckles, including coat hooks (2), belt buckles (3), garter hooks (2) and strap adjusters (2). Also in this category is one button hook with a wooden handle (R7C74A-64). One of the buckles is stamped PARIS/SOLID (R7C2L7C-188). One of the garter hooks is stamped C.B. (R7C2L8A-102).

CLOTH AND CLOTHING (Table 5.3)

Other cloth and clothing include four cloth fragments, a leather glove and a corset stay.

SHOES

A large number of shoes and shoe fragments were recovered in the excavation.

TABLE 5.3 DATA SHEET - CLOTHING

HOOKS AND BUCKLES

R7C 2F6A-7,8	belt buckle	manager's residence
2G5-	coat hook	manager's residence
2K6A-8	coat hook	manager's residence
2L7C-188	belt buckle	manager's residence
2L8A-102	garter hook	manager's residence
72A-6	garter hook	bunkhouse
74A-64	button hook	bunkhouse
80-2	buckle	bunkhouse
81-14	adjuster	well
81A-22	adjuster	well

CLOTH AND CLOTHING

R7C 2K6-160	blue cloth	manager's residence
2L7-3	corset stay	manager's residence
63B-2	cloth fragment	bunkhouse
66B-16	cloth fragment	bunkhouse
73A-108	blue cloth fragment	bunkhouse
81C-356	leather glove	well

APPENDIX 6
PERSONAL ITEMS

This group of artifacts includes a variety of personal items including beads, pipes, toys, harmonicas and combs. Each subgroup is discussed below. These items are plotted on Figures 9 and 15.

BEADS (Table 6.1),

Beads are not common on the site with only a total of 89 beads being recovered. Most of these (75) are small seed beads found together under floor boards of the bunkhouse living room (R7C66B-1). The remaining beads have considerable variation in colour and size. Most interesting of these are two red carnelian (natural stone) beads polished to a high gloss. Both of these were found in the manager's residence. Carnelian is a semiprecious stone most likely to derive from Brazil, India or Arabia (Funk and Wagnall 1975:5 pg 172).

COINS (Table 6.2)

Four coins were recovered from Cochrane Ranche Historic Site. From the floor level of the manager's residence came a British two-shilling piece (R7C2X5A-1). On the obverse in Gothic lettering is ONE FLORIN/ONE TENTH OF A POUND. On the reverse is VICTORIA d:g:orit:reg:f:d:mdccclxiv (1864). Also from the manager's residence was a Canadian five-cent piece dating 1898; Queen Victoria, of course, is on the reverse. Near the edge is a small hole probably for suspension on a charm bracelet or necklace.

Two Canadian one-cent pieces were found in the bunkhouse. One (R7C77A-1) pictures King George V and dates 1920. The other (R7C71-1) was issued 1937, under the reign of King George VI.

COSMETICS CONTAINERS (Table 6.3)

Cosmetic containers recovered include a compact or powder container (R7C2X4A-8) and two porcelain cylindrical containers which may have been perfume containers (R7C64B-3, R7C81-140). The compact/powder container is embossed with an elaborate floral design.

HAIR-RELATED ITEMS (Table 6.4)

Hair-related items include four combs, one hair curler and one mass of

TABLE 6.1 BEADS

CATALOGUE NUMBER	MATERIAL	MANUFACTURE	COLOUR (KIDD 1970)	SHAPE	DIA
R7C 2G7-7	carnelian	polished	maple	round	1.1
2G8-40	glass	wound	dark navy	round	.85
2H8A-1	carnelian	polished	maple	round	1.4
2J6-9	glass	wound	dark navy	round	.85
63A-1	glass	wound	redwood opaque	oval	.5
63C-9 to 11	glass	wound	bright navy	donut	.9
63C-12	glass	wound	bright navy	round	.7
63C-13	glass	wound	white	round	.8
63C-14	glass		clear	oval	.6
63C-15	glass	wound	surf green	round	.4
66B-1(75)	glass	wound	white/blue/yellow	round	small
(1)	glass	wound	white		medium
70B-8	glass	wound	bright navy	round	.8
73A-59	glass	wound	aqua blue	round	.2

TABLE 6.2 COINS

	COUNTRY	VALUE	RULER	DATE
R7C 2G5A-1	CANADA	FIVE CENTS	VICTORIA	1898
2X5A-1	BRITAIN	TWO SHILLINGS	VICTORIA	1864
71-1	CANADA	ONE CENT	GEORGE VI	1937
77A-1	CANADA	ONE CENT	GEORGE V	1920

TABLE 6.3 DATA SHEET - COSMETICS CONTAINERS

R7C 2X4A-8	compact/powder container	bronze/copper
64B-3	perfume container	porcelain
81-140	perfume container	porcelain

TABLE 6.4 HAIR-RELATED ITEMS

R7C 2H5-62	comb	bakelite/plastic
2K3A-8	hair curler	aluminum
2L7B-39	hair fall/wig	hair
2L7B-40	comb	plastic
74A-37	comb	rubber
74A-60	comb	rubber

TABLE 6.5 HARMONICAS

R7C 2F7-13,15	harmonica parts	metal
2L7B-805	harmonica parts	metal
2L7B-906	harmonica parts	metal
64B-33	harmonica parts	metal
81C-352	harmonica outer plate	metal









TABLE 6.6 JACKKNIVES

R7C 2F8-48	jackknife	bone handle
72A-10	jackknife	bakelite handle

TABLE 6.7 JEWELLERY

R7C 2F6-1	brooch fragment	copper/bronze
2K6-158	brooch fragment	copper
64A-20	ring	copper ?
69A-8	cuff link	copper ?
81C-33	brooch	copper/bronze

TABLE 6.8 PIPES

R7C 2F5-2	clay	"D" shamrock
2F6A-12	clay	
2G7-4	clay	"78"
2J4A-120	clay	tobacco leaves or feathers
2L7A-15	copper band	   
2L7A-16	wood	   
2L7A-217	wood	

hair which may have been a "fall" or wig.

HARMONICAS (Table 6.5)

A number of harmonica parts were recovered. Most of these are interior frame or bellows parts. One outer plate was recovered stamped faintly: M. HOHNER/TRADE MARK/DEM VERDIENSTE G.R. BRONCE/crest with WIEN 1873; STUTT 1881; PHILA .8.6.

JACK-KNIVES (Table 6.6)

Two jack-knives were excavated, one from each of the building areas. The one from the manager's residence (R7C2F8-48) has bone plating on the handle. The other (R7C72A-10) has black bakelite or early plastic on the handle.

JEWELLERY (Table 6.7)

Five pieces of jewellery were excavated at Cochrane Ranche. These include 3 brooch fragments, 1 cuff-link with shell inlay, and 1 small copper(?) ring.

PIPES (Table 6.8)

Pipes made of clay and wood (briar?) are relatively rare on the site. Only 10 fragments of pipes were recovered. Of the clay pipes, four have marks of some kind. Two copper bands that were placed at the join of the stem of the briar pipe are marked EP and stamped with initials in Gothic letters (see Table 6.8).

PINS (Table 6.9)

Of the five pins recovered three are hairpins and two are safety pins.

STATIONERY (Table 6.10)

The nineteen items of this subgroup include 7 ink bottles, 5 pencils, 2 pieces of slate board, a slate pencil, a straight pen, a mechanical pencil, a paper tack and a notebook cover. The ink bottles are illustrated in Figure 6.1. The notebook cover is aluminum and composed of two leafs joined by a hinge at the top. It is stamped PATENTED 1913 (R7C74A-86).

SUITCASE FRAGMENTS (Table 6.11)

A number of suitcase fragments were excavated. These include locks,

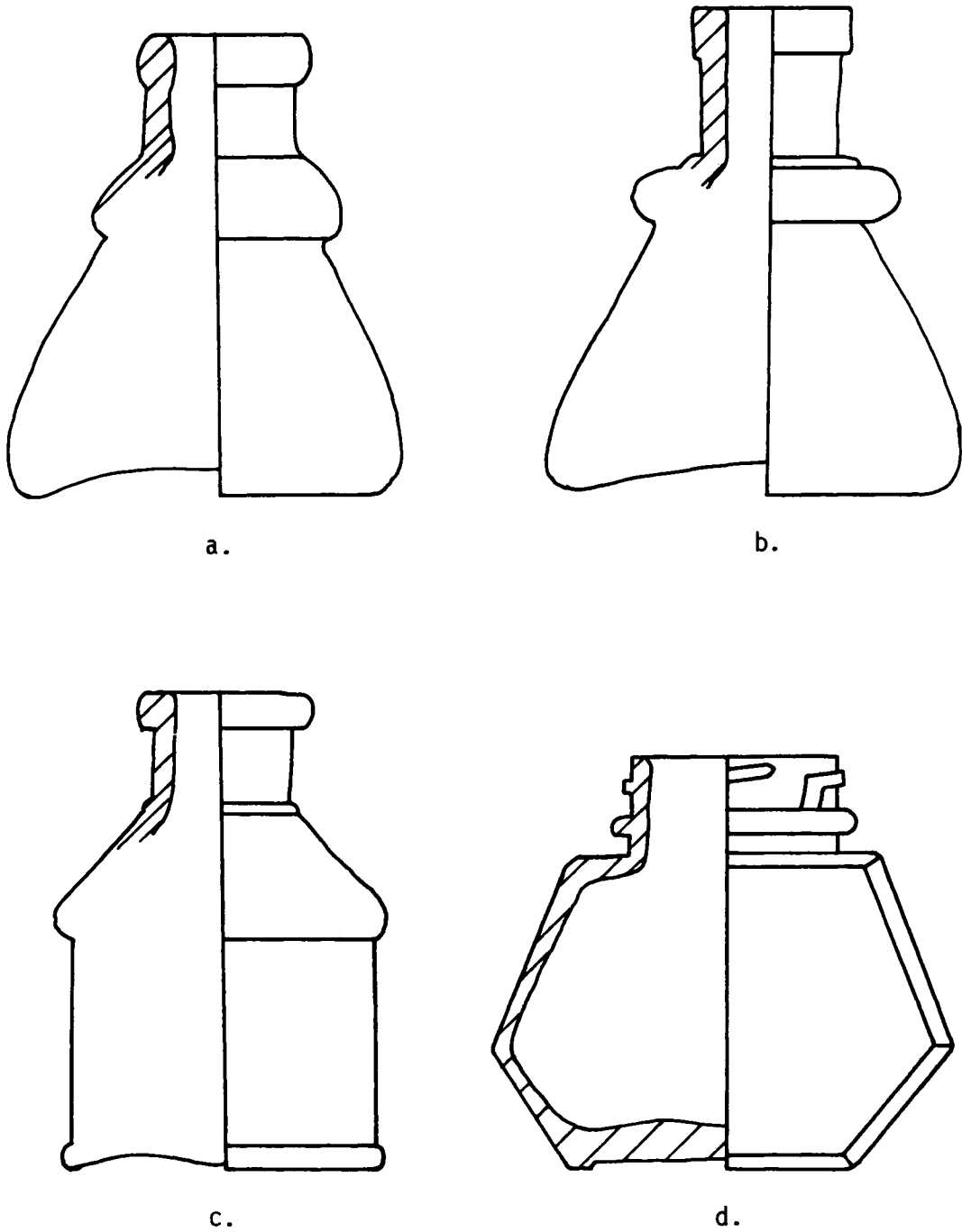


Figure 6.1: Glass Ink Bottles, Scale - 1:1.

TABLE 6.8 (Continued)

R7C 70B-2	clay	leaf ?
72A-19	bakelite	
72A-20	clay	

TABLE 6.9 PINS

R7C 2F4-16	hair pin	metal
2F6-2	safety pin	metal
69A-29	hair pin	metal
71B-8	hair pin	metal
71B-9	safety pin	metal

TABLE 6.10 STATIONERY

R7C 2G8-70	carbon pencil	carbon
2J3A-146	paper tack	copper
2K3-313	slate pencil	slate
2K3A-112	pencil	lead/wood
2K6A-136	slate board	slate
2L4A-59	ink bottle	glass
2L7B-41	slate board	slate
69A-1	pencil	lead/wood
72A-12	mechanical pencil	metal
74A-9	ink bottle	glass
74A-10	ink bottle	glass
74A-75	straight pen	wood
74A-84	pencil	lead/wood
74A-86	notebook cover	aluminum
80-53	charcoal pencil	charcoal
81C-67 to 69	ink bottles	glass
81C-88	ink bottle	glass

TABLE 6.11 SUITCASE FRAGMENTS

R7C 2G7A-1	miniature lock	copper/bronze
2L7B-56	suitcase frame	iron

reinforcements for corners and angle iron framework.

TOBACCO TINS (Table 6.12)

Two tobacco tins were found. R7C74A-25 is embossed ...YEARS THIS TRADEMARK HAS BEEN ...S THE SAFEST GUIDE TO RELIABLE TOBACCOS...DONALD/...URER OF.

R7C63E-7 is a metal strip marked G.L. FLAKE/50/CIGARETTES.

TOOTHBRUSHES (Table 6.13)

Two bone toothbrush fragments were recovered.

TOYS (Table 6.14)

Twelve items have been classed in the toys subgroup. Perhaps most interesting are two doll fragments. R7C2L7A-232 is a cheek and mouth fragment of a glazed porcelain doll. R7C81C-1 is an almost complete white unglazed "parian" doll. Other toys include 4 marbles, 1 scrabble block "Q", 1 wood block checker, a strap-on ice skate blade, a hand bar bell, a miniature shovel and a rubber yellow toy wheel.

WATCH FRAGMENTS (Table 6.15)

Four parts of pocket watches are included in this category. Two are face plates and one is a back plate.

MISCELLANEOUS (Table 6.16)

A number of one-of-a-kind items were recovered. These are generally self explanatory. The bone handle (R7C2G6A-1) may be from a brush or other personal item and is inscribed with chinese characters.

A cardboard fishing line spool has a label (R7C73A-64) VICTORY/HARD BRAIDED COTTON/75 FEET/THE SCHINDLER CO./OF CANADA LTD./MIMICO/CANADA.

TABLE 6.11 (Continued)

R7C 2L7B-809	lock hasp (trunk?)	iron
73A-107	lock hasp	iron
81C-369	lock hasp	iron

TABLE 6.12 TOBACCO TINS

R7C 63E-7	cigarette box
75A-25	tobacco tin

TABLE 6.13 TOOTHBRUSHES

R7C 2F5-3	tooth toothbrush	bone
2G7-10	toothbrush	bone

TABLE 6.14 TOYS

R7C 2G5-3	toy wheel	rubber
2H4-8	marble	glass
2L4A-120	miniature shovel	metal
2L7A-232	doll fragment	porcelain
63B-1	checker	wood
63E-1	ice skate blade	iron
63E-3	hand bar bell	iron
64A-10	marble	clay
69A-2	marble	clay
69A-3	scrabble block "Q"	wood
75A-11	marble	clay
81C-1	parian doll	clay

TABLE 6.15 WATCH FRAGMENTS

R7C 2F4-4	pocket watch back plate	nickel plated copper
2G8-65	pocket watch plate	bronze copper
2J3A-1	pocket watch face plate	enamel/copper
72A-24	pocket watch face plate	enamel/copper

TABLE 6.16 MISCELLANEOUS

R7C 2G6A-1	handle (chinese inscription)	bone
2K7A-148	handle (shaving brush?)	wood
69A-19	fingernail file	shell
72A-21	sea shell	shell
73A-64	fishing line spool	cardboard
74A-24	sunglasses	glass
74A-87	medical tape spool	metal
75A-12	key	copper/bronze
78B-7	stirring stick	plastic

APPENDIX 7
TOOLS

A wide variety of tools were recovered from the Cochrane Ranch excavations. A total of 75 items are listed in Table 7.1. Most of these are self explanatory. The distribution of these is plotted on Figures 7 and 13. Tools do not seem to cluster in any particular fashion but rather seem to be well distributed over the areas excavated.

The most common of these tools are related to wood working. These include axes, files, drill bits, and a saw. Other tools are related to other activities such as a rake, curry comb, mop parts, weigh scales, and meat saw.

TABLE 7.1 DATA SHEET - TOOLS

CATALOGUE NUMBER	DESCRIPTION
R7C 2F5-64	axe
2F6A-3	scissors
2F8-47	flat iron handle
2G5-9	square-nosed pliers
2G5-35	round file
2G6-3	forceps
2G6A-4	lead solder strip
2G8-39	sewing needle
2H4-57	pick
2H5-58	axe
2H5-59	sandstone abrader
2H5-60	iron hook
2H6-1	scissors
2H6B-1	meat saw
2H8-342	flat file
2H9-8	pick
2X3-1	square-sectioned iron shaft
2X3-4	round file
2X4-1	wire handle (pail)
2X6-13	flat file

TABLE 7.1 (Continued)

CATALOGUE NUMBER	DESCRIPTION
R7C 2X8-59	wire handle (pail)
2J3A-104	scissors
2J3A-105	iron fly-wheel fragment
2J6-5	scale weight
2J6-6	machinist file
2J6-8	arm of weigh scale
2J6A-8	scale weight
2J6A-9	scale weight
2J7-1	hay-mower tooth
2K3-40	drive-shaft chain
2K3-322	wire handle (pail)
2K5-107	drill bit
2K7-5	rake
2K7-8	screw driver
2K7-13	wire handle (pail)
2K7-18	broom handle (rings)(?)
2K7B-638	drill bit
2L4A-6	curry comb
2L4A-54	metal mop clamp
2L5-4	wooden handle
2L5-72	wire handle (pail)
2L7-1	scale? hook
2L7-2	wire handle (pail)
2L7B-38	handle, wood
2L7B-756	iron exterior handle
2L7B-822	one-man cross-cut saw
2L7C-189	scissors
61B-4	sandstone grinding wheel
63E-2	iron poker
64A-26	flat bastard file
64A-27	hay-mower tooth
64A-28	iron shaft
64A-29	fly-wheel fragment
67A-54	claw hammer

TABLE 7.1 (Continued)

CATALOGUE NUMBER	DESCRIPTION
R7C 69A-17	Whetstone
70B-38	wooden handle
70B-41	metal bearing
72A-2	axe
72A-4	Whetstone
72A-11	small wrench
72A-17	small spool for wire or bandages
73B-91	spade handle
73B-96	flat bastard file
74A-31	differential gear
74A-33	reinforcing plate
74A-36	axe
74A-62	round file
76A-61	grooved pulley wheel
77A-7	broom handle rings (?)
78A-37	half-round bastard file
81-282	shovel blade
81B-3	handle ferrule
81C-350	hand drill brace crank
81C-351	brush fragment

APPENDIX 8
TRANSPORT

In the transport group are items that provide an indication of transport methods or related materials. Such items are horseshoes, leather straps related to harnesses or saddles and a bicycle wheel.

HORSESHOES (Table 8.1)

Seven horseshoes were excavated at Cochrane Ranche. These are all different in size but have the same general shape. All have four holes for nails each side of the toe. Caulks are common on the toe and heels.

HARNESS PARTS (Table 8.1)

Numerous leather fragments are presumed to have been parts of harness or saddles. Real indications of harnesses are provided by a few heavy buckles and rings.

WAGON PARTS (Table 8.1)

Three portions of possible wagons were located.

MISCELLANEOUS TRANSPORT (Table 8.1)

In this subgroup are a bicycle wheel, an automobile-light backing-plate and some rubber mat with floral design. The bicycle wheel is completely of iron with no indication of a rubber tire on the rim. Its diameter is 51 cm. The automobile-light backing-plate is bowl-shaped and made of a metal (zinc-tin?) alloy. The rubber mat may have been used on the floor of a car or wagon.

TABLE 8.1 DATA SHEET - TRANSPORTATION

HORSESHOES

CATALOGUE NUMBER	LENGTH	WIDTH OF HEEL
R7C 2F4-15	12.4	8.8
2G6-72	13.8	9.9
2G8-42	11.8	9.4
2L7B-52	16.2	8.2
2L8-1	16.4	14.0
72B-15	16.6	11.6
75A1-1	17.4	15.5
81-283	15.0	9.8
81B-2	13.0	10.0

HARNESS PARTS

CATALOGUE NUMBER	DESCRIPTION
R7C 2X3-29	bakelite ring
61A-13	leather straps and buckles
72A-2	iron ring
72A-318	leather strips with metal rivets
73B-90	leather strip with metal rivets
73B-91	iron ring
73B-93	iron belt buckle
73B-97	metal hook
78A-1	leather and iron buckle
81C-359	leather and iron buckle

WAGON PARTS

R7C 2G8-87	part of wagon wheel?
2J6-10	unidentified wagon part?
2J6-19	unidentified wagon part?

MISCELLANEOUS TRANSPORT

R7C 2F5-60	rubber mat with floral design
63B-58	automobile headlight backing-plate
81-389	bicycle wheel
