## HISTORIC SITES ARCHAEOLOGICAL

 INVESTIGATIONS: FORT VICTORIA, 1975

Alberia

4 ARCHAEOLOGICAL INVESTIGATIONS:
FORT VICTORIA 1975,

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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 production procedures have been abbreviated.

During the 1975 field season, excavations at Fort Victoria were once again conducted by the Archaeological Field School of the Department of Anthropology, University of Alberta, under the sponsorship of the Historic Sites Service, Alberta Culture. Proceeding from the work done in 1974 (discussed in Historic Sites Service Occasional Paper No. 2), the crew excavated portions of the provisions store, the men's house and the blacksmith's forge complex within the palisade line, the front gate and the southeast corner of the palisade, and a midden north of the fort; as well, two units of an earlier (1971) dig were examined. The approach to the analysis of excavated material follows that begun in the 1974 report, with some modifications.
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Fort Victoria, Alberta, was constructed in 1864 by the Hudson's Bay Company; it was located near the Methodist Mission of George McDougall on the north bank of the North Saskatchewan River, about 70 miles downstream from Edmonton (Figure 1). In 1874, a plan of the post drawn by Richard Hardisty shows seven buildings: the trader's house, trading shop, dairy, stable, general and provisions store, the men's house, and a blacksmith's forge-men's house, all enclosed by a palisade measuring 220 by 134 feet (Figure 2). Ten years later, a survey report (Kanis 1884) containing a small-scale plan shows that the stable had been removed. This plan also suggests that there was a kitchen attached to the rear of the trader's house, and two bastions at the corners of the south wall (Figure 3). After the post had been closed from 1883 to 1887, repairs and renovations were necessary; these were made in 1889. In the fall of that year, Inspecting Officer E.K. Beeston drew a sketch map of Victoria which shows that the dairy had been removed and a new stable had replaced the blacksmith's forge-men's house complex (Figure 4). The new stable may have been built as early as 1884 since a building at that location on Kanis's plan is not labelled. Beeston also mentions a kitchen attached to the trader's house, and a post and rail fence that had been put up in 888. Following the abandonment of the fort in the outfit of 1897, all buildings were destroyed or removed with the exception of the trader's house. A more complete historical account of Fort Victoria may be found in volume one (1974) of this report, pp. 4-7

The initial proposal to develop the historical resources of Fort Victoria, submitted by W.D. Clark on 10 May 1971, resulted in the estabishment of an on-going archaeological research project at the site. Initial archaeological testing for the east palisade was conducted by K. Arnold and D. Gay (Arnold 1971) in 1971. During the same season, W.D. Clark and J.S. Nicks excavated the fill in front of the trader's house (R2M5) to provide information for the reconstruction of the front boardwalk. In the spring of 1974, a six-week University of Alberta archaeology field-school investigated the remains of the trader's shop and press room (R2M6), the dairy (R2M7), and the southwest corner of the pal-
isade (R2M 13,14) (Losey, et al 1974). During the sunmer of 1975, two six-week sessions of the field-school were conducted at the site by the Department of Anthropology of the University of Alberta under the direction of T.C. Losey. The crew consisted of J.R. Vickers, project supervisor; H. Pyszcyk, field supervisor; G. Gerhart, lab supervisor; 12 students from the University of Alberta, five students from the University of Calgary, three students from the University of Lethbridge, and one student each from McGill University and the University of Michigan.

## CONSTRUCTION

During the 1975 field season, excavations were conducted to investigate the general and provisions store (R2M9), the men's house (R2M10), and the southeast corner of the palisade (R2M13,14) (Figure 5). Additional units were placed to examine the front gate (R2M14), the blacksmith's forge-men's house complex (R2M11) and a midden deposit outside of the back (north) palisade (R2M12). Two units were also opened to examine one of K. Arnold's 1971 test units east of the palisade. Recent ploughing of the area east of the trader's house severely limited the recovery of building and other constructional data with the exception of deep subsurface features such as pits, trenches and cellars.

## Defensive Structures

A total of 88 feet of the palisade was exposed; this includes 38 feet of the east and 50 feet of the south palisade lines, as well as the front gate. In addition, a transverse section of each palisade, a lateral section of the east palisade, and a section at the corner post were excavated to provide constructional details. Large excavation units were situated in the area of the southeast corner of the stockade in an attempt to locate the remains of a bastion. Good exposure of all features was achieved at a depth of about one foot below surface. Ploughing in the upper zone has removed all evidence near the surface and has truncated the subsurface features.

The footer trench for the palisade is composed of dark and light mottled soils with occasional ash and charcoal inclusions. The mottling is the result of backfilling the trench with a random mix of soil horizons and the trench fill contrasts well with the sterile yellowish subsoil. The mottled lenses are generally large (about two inches in diameter), except in areas of rodent disturbance where the soil is broken into fine particles (about $1 / 4$ inch in diameter). The width of the palisade footer trench varies between $11 / 2$ and $21 / 2$ feet as exposed one foot below the surface. Although palisade exposure was incomplete at this depth, the post line appears to lie near the outer (east and south)
walls of the footer trench. There was a great deal of rodent disturbance on the exterior of the stockade line. Likely the posts were placed very close to the outer trench edge. The palisade lines converge at an angle of about 870 , except for a six-foot section of the east palisade, adjacent to the corner post. This segment forms a $90^{\circ}$ angle with the south palisade and, as a result, there is a distinct "kink" in the east palisade line (Figures 6, 17-21).

The transverse section of the south palisade line revealed a 1 1/2foot wide footer trench 11 inches below the surface. The trench at this point is two feet four inches deep and one foot wide at the bottom. Morphologically, the trench shows a vertical interior wall, a flat base, and a sloping exterior wall (Figure 7). No posts were observed in this area; wood fragments and fine mottled fill lenses suggest extensive rodent action.

The lateral section of the east palisade revealed a two-foot wide palisade footer trench at 10.5 inches below surface. Five posts were observed placed against the outer edge of the footer trench. These posts were the best preserved examples found to date at Fort Victoria. They varied from 30 to 31 inches long, three to $51 / 4$ inches wide at the top, $21 / 4$ to six inches wide at the lower end, and about four inches thick. The posts are contiguous and the butts appear to have been cut square. The post extend to the base of the footer trench.

Good definition of the east palisade footer trench was achieved at 14 inches below the surface in a transverse section of the wall near the Blacksmith's Forge complex. In this area, the footer trench is about three feet wide immediately below the plough zone. Four palisade posts and a kingpost, were encountered in this unit; the increased width of the footer trench is no doubt a function of the increased depth needed to set the kingpost. The kingpost is in line with the palisade pales. These pales, two on either side of the kingpost, are about three feet long, two inches thick at the top, some four to six inches thick at the base, and three to four inches wide. The base of the footer trench immediately underlies the two southern pickets and then drops about two feet to take the kingpost. The trench continues into the north wall of the unit at the latter depth. The base of this cut is around five feet
ten inches below the surface in the north profile. In this profile, the interior trench wall slopes to the 14 -inch wide basal cut while the exterior trench wall drops roughly straight to about three feet eight inches below surface and curves inward 10 inches or so before dropping straight to the trench base. The exterior trench wall, cut to about one foot outside the palisade line, gradually narrows so that the width is just larger than the kingpost. The kingpost is braced on the interior and exterior by two large rocks positioned two feet eight inches below the surface. These rocks were placed to fit snugly between the side of the footer trench and the kingpost. The exterior rock is roughly triangular with about 10 -inch long sides. It had been trimmed to size; only about $1 / 5$ of the original cortex is present, but the removed portions were not recovered from this section. The interior rock is an unmodified river cobble eight to 10 inches in diameter. Additional support was formed by a wood fragment about two inches thick, four inches wide and 10 inches long, braced between the kingpost and a small vertical wood fragment placed against the interior trench wall about one foot below the surface and immediately below the plough zone. The trench fill consists of the typical mottled soils, except in the basal cut which is differentiated from the subsoil primarily by texture (Figures 7,8,21,22).

An excavation was opened at the southeast palisade corner to investigate the corner kingpost and footer trench morphology (Figures 6,9). The kingpost is about eight inches in diameter and three feet long; the base of the post extends to four feet below the ground surface. The base of the footer trench visible in the north profile is about four feet below the surface and one foot wide. Due to the section orientation, the interior edge of the trench was not exposed. The footer trench on the interior enters the section at about two feet below the surface, then drops another two feet to the bottom. The west wall profile shows a different configuration, with the trench base only about three feet below the surface. The lower east trench was, of course, necessary in order to set the kingpost at a greater depth than the palisade posts. No special bracing system was found at this corner. The two observed pales are some $11 / 2$ feet long and thus extend to around $21 / 2$ feet below the surface; they were set against the exterior wall of the footer trench.

Some general, very speculative, remarks can be made concerning the construction of the palisade. The placement of the palisade stakes against the outer side of the footer trench suggests that the soil removed from the trench was piled on the interior prior to backfilling. Thus only one "gang", working from the interior, would be required in the backfill operation while another would be raising and pegging the posts from the outside. The shovel work, at least at the lower depths of the trench, would have had to be done while standing within an already excavated portion of the trench, since it would not be possible to remove the soil two or three feet down while standing on the surface. This would, of course, mean that only one man could be employed working at the face, although several could be busy removing the upper foot or two of soil while working from the surface. It does not seem unreasonable to suggest that a gang of, say, three to five men could have excavated the footer trench for the palisade. Of course, several such gangs could have been employed at various portions of the trench simultaneously Cutting, trimming and transporting the palisade posts would probably have required a more extensive outlay of man-hours, and it may we 11 be that the majority of the crew was employed at this, while a single small gang dug the footer trench. The human body is such that, at least for a right-handed individual, it is easier to dig and throw the dirt to the excavator's left. Thus, given the higher proportion of right-handed individuals in the human population, and the need to pile the dirt on the inside, it seems reasonable to suggest that the trench was excavated counter-clockwise.

The actual laying out of the trench line may also be speculated upon. The fact that neither of the southern palisade corners is a right angle suggests that no very rigorous system was used. It may be that the line was simply paced out and an occasional marker placed to indicate the direction to be dug. Thus, the men may have begun to dig from one corner and continued the trench by taking a bearing by eye on, say, a marker stake placed at the next corner. The kink in the east palisade is also of interest, and suggests that the north and south trenches had been completed. Assuming the trench was dug counter-clockwise, the east trench would have been excavated from south to north. If the north and
south trenches had not been dug, no such abrupt correction would have been required. The lack of such a correction at the southwest corner, on the other hand, suggests that the south trench had not been dug by the time the west trench was completed. In any case, it seems unlikely that both north and south trenches would be dug before a connecting east or west trench was opened. The kink, assuming it represents a correction of error, suggests that the east trench was the last to be dug. One might suggest that excavation began at the northeast corner of the palisade and continued counter-clockwise around the perimeter.

The kingpost discovered along the east wall was set at a lower level than the footer trench floor. The trench was excavated to its lowest depth north of this post, therefore the basal extension of the trench must have been dug from north to south. Since the widening of the trench is exterior to both the palisade line and the basal cut, one might again suggest that a right-handed individual excavated this portion of the trench and piled the fill to his left. The basal cut for the corner kingpost was also excavated from the north, although no widening of the trench was apparently required in this area. The special bracing discovered with the east wall kingpost is also of interest. The rocks would have had to be transported uphill from the river since no such rocks occur within the terrace alluvial deposit or elsewhere within the immediate area. The rocks are placed to prevent lateral motion of the post, suggesting that the post was free-standing for some period prior to backfilling of the palisade footer trench. Whether such bracing was required at other kingposts is difficult to guess; no such objects were seen at the southeast corner kingpost. If, however, the cross girths or ribbons were attached to free-standing kingposts, the corner post would be held more or less ridgedly by the ribbons, which would join at an angle. Such would not, of course, be true for a kingpost along the line and this may explain the presence of rock braces at the east wall kingpost.

To summarize, one could reconstruct the building of the palisade as follows: the man in charge paced out the palisade perimeter placing marker stakes at the corners and indicating the location of the gates. A small crew commenced excavation at the northeast corner of the perim-
eter and, taking a bearing by eye on the marker stakes, proceeded counter-clockwise along the north, west, south and east lines. Another crew cut and transported the kingposts to the site and placed them at intervals around the perimeter. They also brought the ribbons; probably a single ribbon was used in each section (Hussey 1957:131). The excavation gang, probably beginning at the northeast corner and working clockwise around the perimeter, dug the basal cut, set in the first pair of kingposts, cut an oblique notch and fitted the first ribbon. The basal cut, but not the palisade trench, was then backfilled, and the next kingpost was joined with the ribbon to the erected set. As they continued, they found it necessary to add special bracing at occasional intervals to provide lateral stability to the structure; longitudinal stability was provided by the ribbons. The other, larger, crew cut and transported the pickets. These were probably then drilled, raised into place and pegged with a dowel to the ribbon. Likely the ends were alternated so that the pickets would fit closely. None of the bases were charred as an anti-rot measure (Hussey 1957:130). As each section was completed, a gang working inside the palisade backfilled the footer trench.

## Bastion

Kanis' (1884) survey sketch of Fort Victoria apparently shows a bastion at the southeast corner of the palisade (Figure 3). Unfortunately, the scale is so small that this feature is not clearly represented. Although a large area was exposed at the southeast corner during the 1975 field season, no clear evidence of a bastion was uncovered. Two features were encountered which may be related to the hypothetical bastion, but these defy very good interpretation. For convenience, they have been designated the "block" and the "diagonal" (Figure 6).

The block is the earliest of these features (Figures 6,10 ). It is a regular rectangular pit about $51 / 2$ feet long north-south, $41 / 2$ feet wide east-west and the base some $21 / 2$ feet below the surface. The walls and floor of the block are remarkably straight. The fill is characterized by fine dark mottling with black soil lenses in the upper portion. No wooden construction members were discovered within the block. Very
few artifacts were recovered, except in the area of the picket fence which transects the block and is more recent.

Although a variety of trash pits were discovered in the general area of the southeast palisade, it seems unlikely that the block was a trash pit. The walls and floor indicate that considerable care was taken in the original excavation of the block; all identified trash pits are much more irregular. The lack of artifactual material also precludes the possibility that this was a trash pit. The block is too shallow and too wide to have been intended for a simple upright support post, unless it was designed to take a wooden crib with horizontal braces to a central upright in a manner similar to that recently used for telegraph poles on rocky ground. Given the soil type and other subsurface construction features on the site, it seems unlikely that such a construction technique would have been used. One would not expect removal of such a cribbing, especially since the area between the crib and central upright would have been dirt filled and removal would have required re-excavation. Lastly, the centre of the block is a good 15 feet northwest of the corner kingpost. If a platform bastion was carried over the curtain wall, one would expect the major supporting structure to be located much closer to the centre of mass of such a platform. In short, although it is associated with the early period of fort occupation and was excavated sometime prior to 1883, no unequivocal functional interpretation of this feature is possible.

The diagonal is a shallow trench oriented diagonally across the southeast corner of the palisade (Figures 6,10 ). This feature is about $11 / 2$ feet wide and the base is $11 / 2$ feet below the surface. The diagonal cuts into the edge of the east palisade footer trench, but was not excavated through the trench to the line of palisade posts. The diagonal is cut into, but not through, the block. No wood or other constructional members were discovered in the diagonal; very few artifacts were recovered from the fill. The diagonal is transected by the 1888 picket fence footer trench and thus, in relative chronology, it is post-palisade, post-block and pre-picket fence (Figures 18,20).

As with the block, it is difficult to interpret the function of this trench. It is too shallow to have carried vertical posts of any height, nor indeed are there any post remnants. It could have functioned as a
 have been removed. If this was the case, the gap in the trench where it cuts the block could have been a central doorway. Assuming such an enclosure did exist, one would expect that the second log would have extended to the palisade wall; perhaps it was not felt to be advantageous to excavate a trench up to the palisade pickets themselves. Two augered post holes adjacent to the diagonal might have functioned as interior vertical supports. If plates were notched into the palisade kingposts, the structure could have taken a plank roof and functioned as a battery, or at least as a large platform for riflemen. Unless this platform was carried across the palisade wall, enfilading fire would not have been possible and the structure would have been of dubious defensive value. The reader should note, however, that this hypothetical interpretation of the diagonal trench has little supportive evidence and is highly speculative.

## Front Gate

The front gate is located in the south palisade line, 92 to 100 feet west of the southeast corner of the palisade; it was eight feet wide according to Hardisty's 1874 plan of Fort Victoria (Figure 2). During the 1975 field season, the easternmost gate post was discovered 91 feet west of the southeast corner of the palisade. The distance between the two gate posts was eight feet. The area excavated at the front gate was laced with caragana and Manitoba maple roots, but good definition of the feature was obtained one foot or so below the surface, even though not all palisade posts were exposed at that level (Figure 11). The palisade footer trench terminates in the area of the gate, suggesting that the gate location had been determined and marked before footer trench excavation. The kingposts on either side of the opening are some eight inches in diameter and occur at the end of the palisade picket line. The eastern kingpost is offset to the interior of the palisade line; the west kingpost is offset to the exterior. It is not known whether the gate was hung from one or both posts. In the area between the kingposts, remnants of timbers oriented roughly east-west were discovered. Most of these were in very poor condition but a few examples appeared
to be two to three inches thick; the majority were so fragmented as to preclude measuring. Interestingly, most of the timbers had nails associated with them; in several instances, nails were present which had been driven through the boards. No cross members in a north-south line were discovered, but it is possible that a wooden threshold was present at one time. Alternatively, reused timbers may have been merely placed in fill to reinforce the gateway. Certainly some fill was added, since the soil in the gateway area has a coarse pebbly texture (Figure 24).

## Picket Fence

Inspecting Officer Beeston noted that a post and rail fence had been built at Fort Victoria in 1888. Such a fence is visible in a photograph taken in the 1890s; it runs between the southern corners of the trading shop (R2M6) and the warehouse (R2M9). A photograph of the same vintage, taken from across the river, shows what may be another fence enclosing the whole of the Hudson's Bay Company's compound. In the photo this fence is unclear, but appears as a "haze" such as might be produced by a picket fence. It certainly runs in front of the trading shop and the warehouse, and thus could not be the post and rail fence previously discussed. A sketch map of the post, submitted by Beeston along with his report, shows the compound enclosed with a line which does not correspond with Hardisty's 1874 palisade line (Figures 2,4). The western line runs north quite close to the trading shop and the compound appears square instead of rectangular. It also appears that the eastern line is closer to the men's house (R2M10) than was the case of the palisade, although the difference is not great. The north and south lines are little changed from those sketched by Hardisty.

The 1975 excavations revealed a rather shallow footer trench containing upright posts roughly parallel with, but interior to the palisade (Figures $6,7,10,11$ ). Varying between $11 / 2$ and two feet below the surface, the trench is 12 to 16 inches wide as exposed about one foot below the surface. The circular post remnants are small, about two inches in diameter, and spaced from two to four inches apart. The footer trench appears to have been more accurately laid out than the palisade; the southeast corner of the trench is much closer to a 900 angle (Figure 6).

The picket fence trench is three or four feet inside the south palisade post line, but is about 10 feet inside the east palisade post line at the southeast corner (Figures 6,7). About 80 feet north, however, the distance between the east palisade and picket fence narrows to around six feet due to the odd angle of the palisade. One probable support post, located exterior to the trench line in the block was discovered (Figure 10). A post at the southeast. corner of the picket fence trench, and one opposite, cut into the palisade trench, may be supports for a contemporary post and rail cattleguard fence (Figure 6). Excavations at the front gate show that the picket fence footer trench is interrupted opposite the palisade gate, suggesting that the gateway was maintained in the same position subsequent to palisade removal (Figure 11). A1though digging a footer trench for a picket fence seems like a rather odd technique compared to modern practice, there can be no doubt that the feature discussed was the fence shown on Beeston's plan and was put up in 1888. Since the fort was closed from 1883 to 1887, all features transected by the picket fence probably predate 1883.

## General and Provisions Store (R2M9)

Although excavation units totalling 334 square feet of area were exposed in the search for the general and provisions store (Figure 5), relatively little of this structure was discovered. Ploughing and extensive root disturbance of the area has destroyed most of the remains. A yellow, sandy clay intrusive soil horizon was discovered in one test unit, but when a large $10 \times 15$ foot unit was opened alongside, this soil was seen to attenuate and disappear. The yellow soil may have been a remnant of a building pad or, more likely, of a prepared dirt floor for the warehouse. Much of it had disappeared due to ploughing, and the little remaining material was probably the result of chance variation in plough depth. It was not possible to define building limits from the remnant soil horizon.

Two areas of wood fragments discovered in the northwesternmost excavation unit may represent a remnant of the east wall sill of the building. Although badly fragmented, most of the lower wood fragments were aligned north-south. The location of these wood fragments roughly cor-
responds to the expected east wall location as projected from Hardisty's 1874 plan. Plough marks were found in the profile, and a further test unit south failed to yield any more evidence. The west wall of the building was projected to lie under a caragana hedge, but although some wood fragments were found in a test unit across the hedge row, they were subsequently identified as oak and thus not related to building construction. In sum, little evidence survives of the general and provisions store, nor could further excavation in this area be expected to yield results.

## Men's House (R2M10)

The area of the men's house had also been ploughed. A few very small wood fragments, possibly sill remnants, were discovered in the test unit where the east wall of the building was expected. Large 10-foot square units were excavated over the projected areas of the southeast and southwest corners of the building, but no further evidence of the walls was discovered. Extensive shallow rodent burrows were exposed which may be from the animals burrowing below the building. They were, however, too extensive to allow definition of building location.

In the excavation unit over the southeast corner of the men's house, a semi-circular fine light and dark mottled soil was exposed (Figure 12). This mottled area, rather poorly defined at a foot or so below the surface, was located in the northern part of the unit, adjacent to a semicircular depressed surface north of the excavation unit. A test unit excavated through the mottled soil revealed portions of a small cellar (Figure 12). Both profiles show roughly vertical walls to about four feet below the surface; a curved step one foot wide and then a gently rounded contour to the base at six feet four inches below the surface. The upper two levels are composed of a light and dark mottled fill, separated by an ash and dark soil lens. Immediately below, a good deal of wood was exposed. The upper portion consisted of fragments which appeared to be a random deposit of debris. Nails were present in some of the fragments, and some were charred. The charred wood, occasional ash deposits, whitewash flakes and chinking, suggest that this material may be redeposited building superstructure. Below this, four large timbers were discovered; oriented north northwest-south southeast, they may
represent collapsed flooring, or, perhaps, a partially displaced floor within the cellar. The largest timber, two feet eight inches long, six inches wide, and three inches thick, may be a joist. The other timbers are about an inch thick and could be floor boards. However, these wood remains are parallel to each other, and may represent some other feature(s). The lowest level of the cellar is filled with light and dark soil lenses and yellowish red fired clay fragments reminiscent of fireplace chinking (Figure 25).

In the unit placed over the southwest corner of the men's house, a similar mottled area was found in the northeast corner (Figure 12). The ground surface is depressed to the north and east of the mottled area. Presumably, this represents a feature similar to that discussed above. If so, it appears there were two small cellars in the men's house. This, and an interior partition shown on Hardisty's 1974 plan, suggests that two separate family groups may have occupied the building. More extensive excavation should reveal the nature of the wooden remains and the association of the two cellars.

## Privies

Between the east wall of the men's house and the east palisade, a deep, straight-walled rectangular pit was exposed (Figure 13). The pit is about five feet long, two feet wide and extends to around $51 / 2$ feet below the surface. Morphologically, it could be a two-seat privy. The lower $11 / 2$ feet or so of fill consists of a brown matrix which, although more or less homogeneous, shows textural distinctions on a roughly horizontal axis. Above are layers of trash and ash. The ash layer is particularly interesting since it begins around one foot below the surface and slopes steeply to four feet below the surface (Figure 13). The thickness of the ash along the wall, about four inches, and the slope of the stratum, an angle of approximately $75^{\circ}$, suggests that the ash layer has slumped considerably. Within this layer, a large sandstone slab, two feet square and some three inches thick, and fragments from possibly two other slabs, were discovered. These were also angled downwards; the portion near the pit edge was two feet below the surface and the stone sloped down to around $31 / 2$ feet. Extensive layers of sphagnum moss occur throughout
the pit. It appears that upon termination of the pit's use as a privy, the mass was capped with ash and several sandstone slabs. As the fluids percolated out of the lower fill, the ash settled and the sandstone slabs were displaced. Additional trash fill was then dumped into the pit until it was full. Both the ash and the sandstone slabs may have come from a fireplace. The presence of fireplace chinking in the men's house and absence of any stone chimney piles in that structure, suggest that the fireplaces may have been removed and replaced by iron stoves. If so, the ash and stone in the privy may derive from the men's house; the 10cation of the privy certainly suggests that it served the occupants of that building. Lastly, the artifactual content, and the fact that the pit fill is transected by the picket fence footer trench, suggest that the privy was used and filled early in the occupation of Fort Victoria.

What may be another privy was discovered in the southeast corner of the excavation unit placed over the projected location of the southwest corner of the men's house (Figure 12). Although only partially exposed, it is about three feet long and extends nearly two feet from the wall of the unit. The exposed surface is composed of white and orange ash deposits, and the upper borders of the pit as seen in the profile are very straight. Although there was insufficient excavation of this feature to tell for certain, the pit is certainly the right shape for a privy. It is located just south of the projected south wall of the men's house.

## Midden

An extensive midden deposit running from the rear palisade line north for about 50 feet was located in the 1975 field season (Figure 5). Located northeast of the projected position of the back gate, the highest part of the midden is 20 to 40 feet north of the estimated position of the north palisade line. Excavation began with a two-foot by 10 -foot test unit, another of the same size with more refined stratigraphic control at $90^{\circ}$ to the first, and a five-foot square unit between. All were excavated in natural levels although these levels were somewhat grossly defined in the initial test pit. The units were located on the north slope of the mound so that a stratigraphic column could be maintained at the highest point of the deposit. The deposit is composed of 17 layers
and lenses of differing composition (Figure 14). Two extensive white ash strata, and an orange ash-burnt soil horizon, indicate that accumulated trash was periodically burned in situ. Many strata are quite large; as much as four inches thick and extending throughout the 10 -foot long sections. This might suggest that accumulated trash was gathered elsewhere and deposited on the midden in some quantity. Presumably, everyday use would have resulted in a variety of small lenses rather than such extensive layers, although occasional examples of such lenses do occur in the profile. A 1915 Canadian five-cent piece was recovered from the second highest stratum indicating that at least the upper levels were laid down after the Hudson's Bay Company occupation. The presence of rimfire rather than centrefire cartridge cases in the lowest stratum suggests that the lowest levels probably date from the later period of Company occupation of Fort Victoria. Future excavation towards the north palisade wall should probably section earlier parts of the midden and, perhaps, allow some comments on the stratigraphic associations of the 1975 test units (Figure 28).

## Trash Pits

Several morphologically distinct trash pits were exposed near the southeast corner of the palisade (Figure 6). One of these, R2M14N4, is roughly four feet in diameter and extends to around three feet eight inches below the surface (Figure 15). Composed of many thin layers, many of ash and sphagnum moss, the pit was probably used as a daily trash depository until full. The presence of sherds from a single platter within several layers suggests that the pit was used over a relatively short period (Figure 29).

Another circular trash pit, R2M14N2, is about $41 / 2$ feet in diameter and extends to two feet eight inches below the surface (Figures 6,15). The presence of large subsoil lenses within the mottled fill suggests that the dirt had not dried out before the pit was filled. This, and the low artifact yield, suggest the pit was not much used before being backfilled. It may possibly represent an abortive attempt to clean up the compound which was interrupted by other business (Figure 30).

At least two other trash pits, R2M14N11 and 12, were located
(Figures 6,15). Due to extensive root disturbance above the pits, no clear plan view could be formed. A section along the edge of the feature shows two pits. The first shows roughly horizontal strata composed mostly of sphagnum moss deposits capped by a more or less uniform sterile soil. A second pit was then excavated through part of the backfilled trash pit. This pit again shows a high concentration of sphagnum layers and some ash inclusions. Since trash concentrations extended at least 10 feet north of the south edge of the trash pits, one would suspect that a number of such concentrations are located in this area. Some ash lenses visible around the root-disturbed area also suggest the presence of several superimposed trash pits (Figure 31).

## Unknown Structure

Arnold (1971) discovered some structural remains which he mistakenly interpreted as the Fort Victoria west palisade. Since these were about 20 feet east of the east palisade footer trench, it was decided to reexamine one of his test units. Two five-foot by 10 -foot excavation units were placed over Arnold's excavations, to bring the old test into the present grid (Figure 5). These were excavated to about $1 / / 2$ feet below the surface, at which point an undisturbed floor was reached. The base of a trench was visible in the floor of the unit (Figure 16). The width of the trench was 12 to 14 inches as exposed. The trench, defined as a dark soil matrix intruding into the yellow clay subsoil, entered the unit from the north, formed a roughly right-angled corner, and proceeded east along the floor of the excavation unit. Only about eight inches of definable trench fill occurred above the unit floor in the profile; the upper surface had been truncated by ploughing. The trench walls apparently expanded slightly as they approached the surface. An exploratory unit over the corner revealed that the east-west oriented trench was shallower than the north-south trench. Thus the base of the east-west trench was at about two feet below the surface and the north-south trench at $21 / 2$ feet below the surface. Six small two-inch diameter posts in a line near the outer (south) wall of the trench constitute the only in situ structure noted. These, and the trench morphology, are similar to the picket fence footer trench discussed previously. It does not seem un-
reasonable to suggest the feature is the remains of an enclosure, possibly a property fence line. The technique is suggestive of a fairly early construction, possibly from the same period as the later occupation of Fort Victoria (1883-97) (Figures 32,33).

Another trench was visible in the profile and the area outside Arnold's test pit which transected the east-west footer trench (Figure 16). This shallow - 14 inches below the surface - trench is roughly two feet wide. Few artifacts were recovered from the trench fill, but very small whitewash flakes were abundant. It is tentatively suggested that this trench was a drainage ditch which probably passed near a building situated somewhere north, or up-slope from the excavation unit. This ditch represents, of course, a more recent event than the previously discussed footer trench.

Arnold, K.
1971

Beeston, E.K. 1889

Datig, F.A. 1956

1958

Godden
1964

Hanson, C.E.
1955

Hardisty, R.
1874

Hussey, J.A.
n.d.

Kanis, $T$.
1884

Report on Excavations at Fort Victoria - 1971. Unpublished manuscript, Historic Sites Service of Alberta, Edmonton.

Untitled. Copy on file, Historic Sites Service of Alberta, Edmonton.

Cartridges for Collectors, Vo1. 1. Borden Publishing Co., Los Angeles, California.

Cartridges for Collectors, Vo1. 2. Borden Publishing Co., Los Angeles, California.

Encyclopaedia of British Pottery and Porcelain Marks. Herbert Jenkins, London.
"The Northwest Gun". Nebraska State Historical Society Publication in Anthropology No. 2, Lincoln.

Map of Fort Victoria. Personal papers of Richard Hardisty (unpublished), Glenbow 91:523. Glenbow Archives, Calgary, Alberta.

The History of Fort Vancouver and its Physical Structure. Limited edition (undated), Washington State Historical Society, Abbott, Kerns \& Bell Co., Portland, Oregon.

Field Notes of Victoria Settlement: Season of 1884. Department of Interior, Technical Branch, Ottawa.

Kidd, K.E.
1970

Losey, T.C.
1977

Purdon, C.J.
1963

Ridgway, R.
1912

Roberts, N.H.
1940

Sharpe, P.B.
1938

Whiter, L. 1970

The Pottery \& Porcelain Collector's Handbook: A Guide to Early American Ceramics from Maine to California. New York, Funk \& Wagnalls.
"A Classification System for Glass Beads for the Use of Field Archaeologists". Canadian Historic Sites: Occasional Papers in Archaeology and History No. 1. Ottawa, Canada.

Archaeological Investigations: Fort Victoria 1974. Historic Sites Service of Alberta: Occasional Paper No. 2, Edmonton.
"The Snider-Enfield". Canadian Journal of Arms Collecting, Historical Arms Series No. 2. Museum Restoration Service, Ottawa, Canada.

Color Standards and Color Nomenclature. A. Hoen \& Co., Baltimore

The Muzzle-Loading Cap Lock Rifle. Bonanza Books, New York.

The Rifle in America. William Morrow \& Co. New York.

Spode. Praeger Publishers, New York.


Alberta


Figure 3. Kanis's survey sketch of 1884. Fort Victoria at lower right.

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North Gate


Figure 5. 1974-75 Excavation Plan


Figure 6.


Figure 8. East Palisade Kingpost R2M11A5



Figure 10.
Plan and Profile of the Block R2M14N1




Munsell Soil Colours

1. 7.5 YR $3 / 2$ (Dark Brown)
2. 5 YR 2.5/1 (Black)
3. 10 YR $5 / 8$ (Yellowish Brown
4. 2.5 Y $3 / 2$ (Very Dark Greyish Brown)
5. 7.5 YR $2 / 0$ (Black)
6. 10 YR $3 / 1$ (Very Dark Grey)
7. 10 YR $4 / 3$ (Dark Brown)
8. 5.5 Y $5 / 1$ (Black)
9. 5 Y $2.5 / 1$ (Black)
10. 10 YR $2 / 1$ (Very Dark Greyish Brown)
11. 10 YR $2 / 1$ (Black)
12. 10 YR $2 / 1$ (Dark Greyish Brown)
13. 7.5 YR $/$ Black
14. 10 YR $2 / 1$ (Black)


South Wall

Trash Pit 4 R2M14N4


North Wall

Note: All features are one foot below the surface

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Figure 15. Trash Pit Morphology



Figure 17: East palisade footer trench, from the south.


Figure 18: Detail of the juncture of the diagonal and the east palisade.


Figure 19: Southeast corner of the palisade, with the block and the picket fence, from the south.

Figure 21: Rock-braced kingpost in the east palisade, from the west


Figure 20: Southeast corner of the palisade with the block, the diagonal and the picke fence, from the east.

Figure 22: Detail of the interior bracing rock and the base of the kingpost in the east palisade.


Figure 23: The block and the picket fence footer trench, from the south.


Figure 25: Section in the east cellar of the men's house, from the south.



Figure 27: Detail of the privy profile.


Figure 30: Profile of the trash pit (R2M14N2) from the south.


Figure 31: Profile of trash pits (R2M14N11,12) from the north.


Figure 33: Footer trench of unknown structure and drainage (?) ditch from the east

45

. Hinge (R2M10B4-18)
Hinge (R2M14E1-12, R2M14E3-13)
Hinge (R2M14E1-11)
Hinge (R2M13L1-16)
Hasp (R2M14E3-16)
Spring Catch (R2M12C1-23)
Eye Latch (R2M10C1-15)
Eye Latch (R2M12B1-10)
Crank (R2M12Cl-28)
Stove Rim (R2M12C2-15)
Stove Rim (R2M12A1-73)
Pump Part (R2M12C2-17)
Unidentified Object (R2M12C4-11)


Figure 35
METAL ARTIFACTS Gun Parts \& Ammunition

```
1. Tumbler (R2M9D1-8)
. Scaled Dragon Side Plate (R2M14N10-4)
Percussion Cap (R2M13H1-24)
Gunflint (R2M13L6-61)
Gunflint (R2M13L12-44)
Gunflint (R2M13L10-84)
Gunflint (R2M13L10-93
Gunflint (R2M13L12-43)
Minie Ball (R2M13E1-21)
10. Minie Ball Plug (R2M13L9-39)
11. Bullet (R2M13H1-20)
12. Bal1 (R2M14H1-11)
13. Shot (R2M9H1-9)
14. .22 Short Rimfire (R2M12B6-3)
15. . 22 Long Rimfire (R2M10A1-9)
16. . 22 Long Rifle Rimfire (R2M12B1-22)
25 Standard Rimfire (R2M12C1-17)
32 Calibre Rimfire (R2M13L6-7)
.32 Calibre Rimfire (R2M13L6-7)
.44 Calibre Rimfire (R2M13D2-18)
52 Short(?) (R2M14K1-17)
Shotshel1 (R2M13H1-19)
Shotshel1 (R2M12A1-6)
30 Calibre Centrefire (R2M12C1-16)
.32 Calibre Centrefire (R2M12C4-4)
38 Calibre Centrefire (R2M9K1-20)
.44 Calibre Centrefire (R2M14M3-15)
.44-40 Calibre Centrefire (R2M14F1-12)
45-75 Calibre Centrefire (R2M13H1-17)
45-90 Calibre Centrefire (R2M13A1-8)
577 Boxer (R2M14F1-11)
Shotshel1 (R2M10B4-14)
```

Figure
METAL ARTIFACTS
Hardware

1. Utility Knife (R2M13L10-16)
2. Table Knife (R2M13L12-10)
3. Handle (R2M14P1-35)
4. Fork (R2M12C1-26)
5. Fork (R2M10B4-24)
6. Spoon (R2M12C1-25)
7. Handle (R2M12B1-34)
8. Handle (R2M13L10-17)
9. Jackknife (R2M12C2-14)
10. Jackknife (R2M14H1-15)
11. Egg Beater Part (R2M12B1-23)


FIGURE 37
METAL ARTIFACTS:
Hardware

1. Scissors (R2M13L10-15) Crooked Awl (R2M14K1-18)
Thimble (R2M13C1-31)
2. Thimble (R2M14E3-21)
3. Pin (R2M14N6-16)
4. Safety Pin (R2M9G1-14)
5. Garter Clip (R2M10C1-27)
6. Garter Clip (R2M12A1-9)
7. Garment Catch (R2M10C1-42
8. Garment Catch (R2M10B1-20)
9. Adjuster (R2M13H1-21)
10. Adjuster (R2M9B1-6)
11. Buckle (R2M13L6-12)
12. Buckle (R2M14F2-14)
13. Buckle (R2M10B1-19
14. Buckle (R2M13C1-29)
15. Buckle (R2M12B3-8)
16. Buckle (R2M14K3-11)
17. Buckle (R2M12B1-37)
18. Loop (R2M12B1-38)
19. Loop (R2M14N2-6)


Figure 38
METAL ARTIFACTS:
Hardware

[^0]1. Pan Handle (R2M12C1-27)
2. Pot Handle (R2M12B1-35)
3. Pot Handle (R2M12C4-6)
4. Pot Handle (R2M12B5-43)
5. Pot Handle(?) (R2M12C1-32)
6. Pot Handle (R2M14D3-9)
7. Meal Grinder (R2M12B5-42)

Figure 40
METAL ARTIFACTS: Hardware

[^1]Figure 4
METAL ARTIFACTS:
Coinage \& Hardware

1. Lead Seal (R2MT3A1-58)
2. 1915 Canada $5 ¢$ (R2M12C1-44)
3. 1931 Canada $5 ¢$ (R2M14E3-17)
4. 1900 Canada 25c (R2M13B1-26)
5. Tobacco Brand (R2M13B1-24)
6. Tobacco Brand (R2M10A1-10)
7. Tobacco Brand (R2M11A1-10)
8. Tobacco Brand (R2M13H1-26)


CERAMICS:
Miscellaneous

1. Brownware Type 1 (R2M12N8-34)
2. Brownware Type 2 (R2M12C2-46
3. Brownware Type 3 (R2M13H1-75)
4. Stoneware Type 1 (R2M14N8-33) 5. Whiteware Type 1 (R2M14N8-37)


Figure 43
CERAMICS: Brownware


Figure 44
CERAMICS:
Blue-on-White Earthenwares

1. Type 1 (R2M12C1-75)
2. Type 2 (R2M12B1-110)
3. Type 1 Cup (R2M12A2-11)
4. Type 3 (R2M12C1-76)
5. Type 3 Cup (R2M12A2-13)




Figure 47
CERAMICS
Blue-on-White Earthenwares

1. Type 14 (R2M14N8-32)
2. Type 16 (R2M11A1-20)
3. Type 16 (R2M11A1-18)


Figure 48
CERAMICS
Blue-on-White Earthenwares

1. Type 17 (R2M14N8-31)

2. Brown-on-White Type 1 (R2M12A1-21)
3. Brown-on-White Type 2 (R2M12C4-23) 3. Brown-on-White Type 3 (R2M12B7-73) 4. Brown-on-White Type 3 (R2M12B7-72)
4. Brown-on-White Type 4 (R2M14F1-29)
5. Black-on-White Type 1 (R2M9D1-10)
6. Green-on-White Type 1 (R2M12B1-21)


## 1. Polychrome Type 1 (R2M9L1-18)

2. Polychrome Type 3 (R2M12B1-130)
3. Sponged Ware Type 1 (R2M14P1-19)
4. Sponged Ware Type 2 (R2M14J6-8)
5. Sponged Ware Type 3 (R2M13L9-19)
6. Sponged Ware Type 3 (R2M9K1-46)
7. Sponged Ware Type 3 (R2M13L7-34)
8. Sponged Ware Type 4 (R2M10C1-4.5)



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Figure 52
CERAMICS:
Makers' Marks

1. Blue-on-White Type 1 (R2M12B3-14) 2. Blue-on-White Type 1 (R2M12B1-114) 3. Blue-on-White Type 3 (R2M12A1-79) 4. Blue-on-White Type 4 (R2M10B1-38)
2. Blue-on-White Type 4 (R2M13A1-19)
3. Blue-on-White Type 4 (R2M14E1-29)

4. Blue-on-White Type 14 (R2Mi2N8-32)
5. Blue-on-White Type 16 (R2M11A1-18)
6. Miscellaneous Marks (R2M12A1-20)
7. Miscellaneous Marks (R2M12B2-20)
8. Miscellaneous Marks (R2M12B2-20)
9. Miscellaneous Marks (R2M13L6-29)
10. Miscellaneous Marks (R2M13B1-55)
11. Miscellaneous Stoneware (R2M12B1-141)
12. Miscellaneous Marks (R2M12A2-20)



[^2]

| 1. | Type 1 | (R2M13L1-22) |
| :---: | :---: | :---: |
| 2. | Type 2 | (R2M14K1-20) |
| 3. | Type 3 | (R2M13C1-146) |
| 4. | Type 4 | (R2M14E4-8) |
| 5. | Type 5 | (R2M14E3-127) |
| 6. | Type 6 | (R2M13C1-150) |
| 7. | Type 7 | (R2M13E1-29) |
| 8. | Type 8 | (R2M14N10-7) |
| 9. | Type 9 | (R2M13C1-153) |
| 10. | Type 10 | (R2M13L10-80) |
| 11. | Type 11 | (R2M13L7-66) |
| 12. | Type 12 | (R2M13C1-154) |
| 13. | Type 13 | (R2M13C1-149) |
| 14. | Type 14 | (R2M13H1-31) |
| 15. | Type 15 | (R2M1OA1-11) |
| 16. | Type 16 | (R2M13C1-151) |
| 17. | Type 17 | (R2M13L 7-65) |
| 18. | Type 18 | (R2M12B7-185) |
| 19. | Type 19 | (R2M12B3-10) |
| 20. | Type 20 | (R2M13E1-27) |
| 21. | Type 21 | (R2M12B1-99.1) |
| 22. | Type 22 | (R2M12B1-99.2) |
| 23. | Type 23 | (R2M9F1-14) |
| 24. | Type 24 | (R2M9F1-16) |


$\because \because$
$\omega$

$\stackrel{\rightharpoonup}{\circ}$
(R2M13L10-79)

|  | Bone | Type 1 | (R2M13L10-79) |
| :---: | :---: | :---: | :---: |
|  | Bone | Type 2 | (R2M14G1-66) |
|  | Shell | Type 1 | (R2M13L14-6) |
|  | Shell | Type 2 | (R2M13H1-140) |
|  | Shell | Type 3 | (R2M13L1-73) |
|  | Shell | Type 4 | (R2M13L13-5) |
|  | Shell | Type 5 | (R2M14N8-55) |
|  | Shell | Type 6 | (R2M13H4-7) |
| 9. | Glass | Type 1 | (R2M12B2-45) |
| 10. | Glass | Type 1 | (R2M12B1-285) |
| . | Glass | Type 1 | (R2M14N5-7) |
| 12. | Glass | Type 1 | (R2M13C1-144) |
| 13. | Glass | Type 2 | (R2M12A1-68) |
| 14. | Glass | Type 3 | (R2M14P1-33) |


| 1. | Type 1 | (R2M14E3-118) |
| :--- | :--- | :--- |
| 2. | Type 2 | (R2M13L6-56) |
| 3. | Type 2 | (R2M13L10-70) |
| 4. | Type 3 | (R2M13H1-138) |
| 5. | Type 5 | (R2M13L10-68) |
| 6. | Type 6 | (R2M14P1-29) |
| 7. | Type 7 | (R2M14H1-62) |
| 8. | Type 8 8 | (R2M13D1-77) |
| 9. | Type 9 | (R2M14E3-87) |
| 10. | Type 10 | (R2M13C1-161) |
| 11. | Type 11 | (R2M13L12-31) |
| 12. | Type 12 | (R2M13C1-152) |
| 13. | Miscellaneous Stem |  |
| 14. | Miscellaneous Stem | (R2M14M3-36) |
| 15. | Miscellaneous Stem | (R2M13L7-56) |
| 16. | Miscellaneous Stem | (R2M13L12-26) |

Figure 59
BEADS \& PENDANTS

1. Type Ia20 (R2M12C4-89)
2. Type If (R2M13L12-37)
3. Type If (R2M14E3-130)
4. Type If (R2M9K1-93)
5. Type IIa8 (R2M12C1-282)
6. Type IIal3 (R2M9L1-28)
7. Type IVa6 (R2M12B7-186)
8. Jet Pendant (R2M12B7-184)
9. Type WIb16 (R2M14K1-61)
10. Type WIb16 (R2M13L12-38)
11. Type WIc8 (R2M13E7-1)
12. Type WIc8 (R2M14H1-65)
13. Type WIIIb (R2M12C3-10)
14. Dangler (R2M13L12-42)
15. Molded Bead (R2M14M3-43)
16. Bone(?) Bead (R2M13L12-41)
17. Brass ? Bead (R2M9A1-14)
18. Brass Bead (R2M13D2-25)
19. Various Beads from Garment (R2M13L12-48)
20. Pendant (R2M14M2-48) Pendant (R2M13C1-36)

21. Doll's Head 2. Doll's Eye
22. Harmonica
23. Marble
24. Marble
25. Wheel
26. Scalpel(?)
27. Ruler
28. Slate Pencil
29. Slate Board
(R2M14N8-59)
(R2M13C1-142)
(R2M12B2-13)
(R2M13M2-55) (R2M12C4-85) (R2M1OH1-28) (R2M13A1-44) (R2M13L10-85) (R2M13L7-71) (R2M13L7-72)


Included here are those artifacts designed for use on structures and probably forming part of the "capital goods" of Fort Victoria (Table 1). Of course, the artifacts need not necessarily have been used on the post buildings, although it seems likely that they were. The artifacts described here include nails, spikes, hinges, and door latches. Although wire and iron strapping were included in this section of the 1974 report, it has not been possible to analyse that category for this report. Due to the quantity of material recovered and the time required to process the material, such undiagnostic artifacts had to be excluded.

## Nails

A total of 5543 nails of all types were recovered from Fort Victoria during the 1975 field season. Of these, 1950 ( $35.2 \%$ ) are wire nails, $2112(38.1 \%)$ are machine-cut nails, 104 (1.9\%) are special purpose nails and 1377 (24.8\%) are fragments or were unidentifiable. By type, the recovery was 1897 (34.2\%) common wire nails, 53 (1.0\%) wire finishing nails, 1388 (25.0\%) T-head cut nails, 232 ( $4.2 \%$ ) rose-head cut nails, $376(6.8 \%)$ upset-head cut nails, 114 ( $2.1 \%$ ) gable-head cut nails, two $(0.001 \%)$ roofing nails, 78 (1.4\%) tacks, 26 ( $0.5 \%$ ) horseshoe nails and $1377(24.8 \%)$ unidentified or fragmentary nails (Table 2). Horseshoe nails and tacks are included in these totals since any fragments of these would have been added to the "unidentifiable" total. Although stock size, length, and other data were noted, it has not been possible to process that data for this report. Descriptions of the nail types and the historical manufacture of them are available in the 1974 Fort Victoria report.

## Spikes

A total of 297 spikes were recovered; 83 (27.9\%) were unidentifiable
and $214(72.1 \%)$ could be identified by head type (Table 3). The sample contains $60(20.2 \%)$ common wire spikes, 47 ( $15.8 \%$ ) T-head spikes, 41 (13.8\%) rose-head cut spikes, 55 (18.5\%) upset-head cut spikes, 11 (3.7\%) gable-head cut spikes in addition to the 83 which were too corroded Thus, $60(20.2 \%)$ wire spikes and $154(51.9 \%)$ machine-cut spikes are present. Again, other recorded data could not be processed for this report.

## Hinges (Figure 34)

Four hinges were recovered. One of these (R2M10B4-18) is about 10 inches long, one inch wide and $1 / 4$ inch thick. One end is painted; the other has been bent to form a loop. The artifact may be hand-forged, It is pierced by three holes for fastening.

Another hinge (R2M13L1-16) is of common manufactured variety. It is around $21 / 2$ inches long, 1 1/8 inches wide and $3 / 16$ inches thick. The leaves are folded and rusted together; each is pierced by three countersunk holes for fastening. Two screws are present.

The last two hinge plates are probably a matched pair. The complete specimen (R2M14E1-11) is approximately three inches long, one inch wide and $3 / 16$ inches thick. It has three countersunk holes for fastening, and two pin loops. The other fragmented leaf (R2M14E3-13, R2M14E12) has three pin loops and the fastening pin is present. This artifact may be hand-forged.

## Latches (Figure 34)

Two looped eyes for a hook-and-eye door latch are present. One is $11 / 4$ inches long, the other is about one inch long. Both have threaded shanks for fastening. In addition, an automatic spring catch for a screen door was recovered. This essentially modern catch has two arms joined so that pressure from the door on one arm causes the mechanism to rotate and hold the door closed.

## Padlock Hasp (Figure 34)

An iron padlock hasp fragment (R2M14E3-16) is about $11 / 2$ inches wide. It is broken along the arms and has beveled corners.

## Gun Parts and Ammunition

This section will only briefly discuss the parts and ammunition recovered in the 1975 field season. A full discussion of the historical development of these and data concerning the introduction and use of the firearms and cartridges can be found in the 1974 Fort Victoria report, and in Sharpe (1938) and Datig (1956, 1958).

## Muzzle-Loading Weapons

## Tumbler (Figure 35):

This tumbler is the only part of a lock mechanism recovered to date. The mortice for the main spring stirrup (link) is located above the sear notches, indicating that this is for a back-action lock. This, and the small size of the tumbler, suggests it is from a pistol lock.

Scaled Dragon Side-Plate (Figure 35):
This brass side-plate fragment consists of the tail portion of the figure and includes the hole for the proximal fastening screw. It is cast brass about $1 / 10$ inch thick. The tail morphology is identical to one illustrated in Hanson (1955:71, Plate XVA) which has the caption: "Serpent plate, 1865 period, Hudson's Bay gun".

Gunflints (Figure 35):
Five gunflints were recovered during the 1975 field season. Four are of a similar brown flint and are made on blades. The fifth specimen is a blade fragment of grey-blond flint.

Percussion Caps (Figure 35):
Two probable percussion caps were also recovered. The outside diameter is 0.21 inches and the height is 0.25 inches. They are made of copper or brass and have a straight-knurled exterior surface. Although these are taller than modern percussion caps, they are within the general size range of Eley Brothers number 26 caps (Roberts 1940:86). Roberts ( $1940: 84$ ) also notes that when he lived in Canada in the 1890s, ". . . the only caps carried by the different 'posts' were Eley Brothers."

Minie Ball (Figure 35):
This Minie ball is 1.10 inches long and has a basal diameter of 0.57 inches. It has three scraping grooves designed to remove debris and fouling from previous shots. In the base is a brown ceramic plug 0.40 inches in diameter. This was designed to expand the bullet skirt to better engage the rifling. It should be noted that although the specimen is listed as a Minie Ball, it is morphologically similar to a bullet illustrated in Purdon (1963:7, Plate 7) as a Boxer cartridge.

## Minie Ball Plug (Figure 35):

This brown ceramic plug from a Minie ball base is shaped like a truncated cone. The basal diameter is 0.40 inches and the height is 0.20 inches.

## Balls (Figure 35):

Many of the lead balls recovered have a slight mineral deposit on the surface and measurement to thousandths of an inch has not been attempted. There are 16 balls in the collection; three are flattened, one is about half an inch in diameter, eight are $0.55-0.01$ inches in diameter, and three are $0.57^{+} 0.01$ inches in diameter. One ball measuring 0.60 inches in diameter has a thick deposit on the surface and should likely be grouped with the 0.57 -inch balls.

## Rimfire Cartridges (Table 4)

## . 22 Short (Figure 35):

Twelve . 22 calibre short rimfire cartridges were recovered; all had been discharged. Of these, six are headstamped "H" and are Winchester Repeating Arms Company (W.R.A.Co.) products, while four are headstamped "D" and are products of the Dominion Cartridge Company of Canada (D.C.Co.). The other two cases have no headstamp.

## . 22 Long (Figure 35):

These three cartridges have been discharged. One is headstamped "D" for C.C.Co., one is stamped "H" for W.R.A.Co., and one is stamped "P"
for Peter's Cartridge Company.
. 22 Long Rifle (Figure 35):
This single specimen is spent. The case is corroded and it is not possible to read the headstamp, if any is present.
. 25 Standard (Figure 35):
This discharged case is headstamped "D" and is a D.C.Co. product.
. 32 Calibre (Figure 35):
This cartridge is headstamped "H" for W.R.A.Co.; it has been discharged and is somewhat damaged.

44 Henry (Figure 35):
Eleven . 44 calibre rimfire cartridges were recovered; all have been fired. Four of these are W.R.A.Co. products and are headstamped " H ", the other seven lack a headstamp.
.52 Sharpes and Hankin (Figure 35):
These seven large calibre rimfire cartridges have all been fired. None bear a headstamp and the identification is tentative.
. 52 Short(?)(Figure 35):
Two cartridges appear to be the same calibre as the previous group, but the case length is somewhat shorter. Both are headstamped "H" in a circular indented panel.

## Centrefire Cartridges (Table 5)

. 30 Calibre (Figure 35):
This bottlenecked . 30 calibre cartridge is obviously a rifle load, It has been discharged and is a W.R.A.Co. product.

## . 32 Calibre (Figure 35):

This specimen is probably a pistol load; it has not been fired and the bullet is still present. The headstamp shows it is a W.R.A.Co,
product. The " S " on the headstamp suggests the cartridge name is . 32 short.

## . 38 Calibre (Figure 35):

A single specimen has a slightly bottlenecked form and has been fired, It is a W.R.A.Co. product.

## . 44 (Short) (Figure 35):

Of the four examples of short-cased . 44 calibre centrefires recovered, three lack a headstamp. The fourth, a W.R.A.Co. product, has ". 44 S8W. AM." as part of the headstamp. This is probably a load for a Smith and Wesson revolver and, by extrapolation, all these cases are probably pistol loads.
. 44 - 40 Calibre (Figure 35):
Of four cases recovered, two lack headstamps. The other two are W.R.A.Co. products and are stamped " 44 W.C.F.". The case dimensions seen to correspond to the . $44-40$ calibre cartridges recovered in 1974, hence the designation. All have been discharged.
. 45 - 75 Calibre (Figure 35):
Six cases show a bottlenecked form. Although five have no headstamp, one bears the stamp " $45-75$ W.C.F." and is a W.R.A.Co. product. All have been discharged.
.45 - 50 Calibre (Figure 35):
This single specimen has straight case walls. It has been discharged and is a W.R.A.Co. product.

## Miscellaneous:

Two cases could not be identified. One may be a .44 calibre but the case is very damaged. The other may be about a .25 or .30 calibre but has been used for a ferrule and has an awl driven through it. It is illustrated in Figure 35.

Boxer Mark VI (Figure 35):
These are . 577 calibre paper-covered cartridges designed for the British Snider-Enfield breech-1oading converted rifle. The Mark VI cartridge, designed by Colonel Edward Boxer, was introduced October 8, 1868. It is distinguished by the iron base washer; such a washer is present on eight of the nine recovered cartridges. The other cartridge lacks any washer and damage to the rivet primer pocket suggests that the washer was removed prior to artifact deposition. The first shipment of the SniderEnfield to arrive in Canada was a lot of 30,000 rifles ordered for militia use against the Fenians in 1867. The North West Mounted Police were also issued the arm (Purdon 1963).

## Bullet (Figure 35):

This is a hollow base bullet, perhaps for a .45 calibre weapon. The bullet has two lubricating grooves. The diameter is 0.45 inches and length is 0.70 inches.

Bullet:
This is a fragment of a lead bullet and is too damaged for measurement.

## Shotshells (Table 6, Figure 35)

Of the 25 shotshells recovered, two are 16-gauge and the rest are probably 12 -gauge. The headstamps indicate five shotshells are D.C.Co, products, six were made by Eley for various retailers, three were manufactured by Kynoch, and two are Peter's Cartridge Co. items. Two of the case headstamps are illegible, and one had no headstamp. Six of the specimens are of Canadian manufacture, and 12 were made in Great Britain. Four cannot be assigned a place of manufacture. Perhaps the most interesting specimen is one bearing the headstamp: "MURRAY \& CO/KARACHI/NO 12/ ELEY". If this was produced by Eley for a Karachi distributor, someone goofed!

Shot (Figure 35):
Only four shot were recovered. Two of these are probably "buck" shot and are about a third of an inch in diameter. The other two pellets are 0.17 and 0.14 inches in diameter.

## Knives (Figure 36):

Two knives were recovered. One (R2M13L10-16) is about $71 / 2$ inches long with a full tang and remnants of a wooden handle. It is probably a utility or belt knife. The other (R2M13L12-10) is a full tanged specimen and has a broken blade. The bone handle is checked, as is another handle fragment (R2M14P1-35). Such handles are apparently common on table cutlery from Hudson's Bay Company sites (J. Nicks, pers. comm.) and examples are on display at Fort Garry (H. Pyszczyk, pers. comm.).

## Folding Knives (Figure 36):

A brass jackknife handle leaf (R2M12C2-14) has a ferrule at the distal end. There are three holes for fastening a face plate. The artifact is $31 / 2$ inches long. A second folding knife handle (R2M14H1-15) is hand-made of iron. It consists of a square curved plate forming the back of the handle and functioning as a blade stop. Fragments of iron side leaves remain. Three pins are present; these were used to attach the handle faces or scabs.

## Forks (Figure 36):

A full-tanged fork (R2M12C1-26) has pewter(?) ferrules and a wooden handle. This three-tined fork is similar to one recovered in 1974. The other fork (R2M1OB4-24) is a very corroded carving fork and has no handle.

## Spoon (Figure 36):

A silver-plated egg spoon (R2M12C1-25) has a small deep bowl. Stamped on the back of the handle, each in a separate cartouche is: "JH/\&/CO/EP/C".

## Handle Fragments (Figure 36):

Two handle fragments are of a design similar to the previously discussed spoon. One fragment (R2M12B1-34) suggests an implement such as a table fork or spoon, the other (R2M13L10-17), is quite large and may be part of a serving spoon. Lastly, a corroded iron handle fragment
(R2M13A1-11) has indented panels bearing a curvilinear motif. A complete knife in the local Pakan museum is of the same type and is listed as having been recovered from the post.

Egg Beater Part (Figure 36):
This is an open-work circular gear wheel (R2M12B1-23). It has an attached handle revolving pin and is probably from an egg beater.

Scissors (Figure 37):
A pair of scissors (R2M13L10-15) has rusted open and lacks one handle arm. The ends are squared and the intact arm with its handle loop is $63 / 4$ inches long.

Crooked Awl (Figure 37):
This crooked awl (R2M14K1-18) has one worn arm about one inch long; the artifact is some three inches long overall. The awl has been driven through a cartridge case which functioned as a ferrule to reinforce the distal end of the handle. Wood remnants from the handle are present in the cartridge case.

Thimbles (Figure 37):
Three thimbles (R2M13B1-25, R2M13C1-31, R2M14E3-21) are present.
All are made of brass.

Pins (Figure 37):
Seven straight pins and two safety pins were recovered. Two of the straight pins are about 1 1/2 inches long; the others are 1 1/4 inches long, and one is a fragment. The silver plating has disappeared from three of the specimens of straight pins and from one of the safety pins.

Garment Fasteners (Figure 37):
Included here are two garter clips, nine buckles of various sorts, and two loops of doubtful function. All are illustrated and need not be described here.

## Skate (Figure 38):

This is an archaic strap-on skate (R2M12A1-11,72) and consists of the blade, a toe plate, a heel plate and an adjusting centre plate. The skate blade is $121 / 2$ inches long.

## Trunk Parts (Figure 38):

A lock-plate and attached lock mechanism (R2M12B1-29) is about three inches long by two inches wide. Two hinges (R2M12C1-33), a pressure catch (R2M12A1-7) and a bolt catch (R2M12B1-30) may all be from a single steamer trunk.

## Lamp Parts (Figure 38):

A wick guide (R2M12B7-18) and wick adjusting mechanism (R2M12B7-19) may be from a single lamp. A second lamp may be represented by another wick guide (R2M12C2-18) and wick adjusting mechanism (R2M12C4-7). Two other possible wick guides (R2M12A1-8, R2M12C1-56) and a brass wick adjusting stem (R2M14E1-26) are also present.

## Stove Parts (Figure 34):

These include a grate fragment (R2M12B5-5) and a fancy metal rim (R2M12C2-15) from at least one wood stove. The distal end of a stove plate lifter (R2M12C2-16) and an iron stove pipe damper (R2M12B1-25) are also present.

## Grinder (Figure 39):

A large portion of a household corn(?) meal grinder (R2M12B5-42) is present. This part consists of the cutter housing but the cutter and crank are missing. A hopper was bolted to the top; grain flowed into the cutter housing and the ground meal passed out.

## Pump Part (Figure 34):

This artifact is a water well pump check valve housing (R2M12C2-17)
Tobacco Brands (Figure 41):
Eight tobacco brand plates were recovered
All have tabs for inser-
tion into cut plug tobacco. Five of these have a perforated heart shape (R2II9C1-9, R2M9K1-23, R2M1041-10, R2M13A1-9, P2M14E3-22), one is circular (R2M11A1-10), one is oval (R2M13HT-26) and one is rectangular with scalloped edges (R2M13B1-24).

## Lead Seal (Figure 41):

A lead seal (R2M13A1-58) is embossed "[R]ICE". Although irregular, the seal is about one inch in diameter.

Harness Accoutrements (Figure 40):
A fragment of a spring clasd (R2M13B1-23) is missing the spring. A large bell fragment (R2M9B1-7) is made of brass. It was probably cast in two hemispheres. The last part (R2M14H1-13) is made of iron and consists of a flat tongue pierced by two holes, perhaps for fastening to a wagon or carriage tree. The other end was formed into a loop but is now broken.

Files (Figure 40):
Three file fragments were recovered. One (R2M14K1-13) is $71 / 4$ by $3 / 4$ by $1 / 8$ inches, one (R2M14M3-14) is $21 / 4$ by $1 / 2$ by $3 / 16$ inches, and the third (R2M13L7-21) is four by $3 / 4$ by $3 / 16$ inches. The two former specimens have remnants of diagonal teeth, the latter is too corroded to retain such and may thus be misclassified.

Hoe (Figure 40):
This is a hand-made hoe fragment (R2M9G1-13). The blade base is about five inches wide and the maximum height from the edge to the apex of the artifact is about four inches. Remains of a riveted iron tang are present,

Wedge (Figure 40):
A large wedge (R2M12Cl-40 is $73 / 4$ inches long, $13 / 4$ inches wide and $1 / 2$ inch thick. One end is flattened by hammering, the other is expanded but no longer has an edge. Presumably this was used to split logs or firewood.

## Wedge(?) (Figure 40):

This artifact (R2M12B7-23) is in very poor condition, but might also be a wedge. About $141 / 2$ inches long and $11 / 2$ inches wide, it shows expansion of the proximal end from battering. The expanded distal end appears to come to a sharp edge but part of the metal has fragmented and it is difficult to be certain.

## Cranks (Figure 34):

Fragments of two cranks include one which is broken near the attaching end (R2M12C1-28) but is otherwise complete. The other, (R2M12B1-98) is merely a shaft fragment of the same type. The function of these artifacts is not known.

## Horseshoes (Figure 40):

Fragments of two horseshoes (R2M12B1-24,45) were recovered.

## Ledger Plate:

A ledger plate from a mower was recovered. This corroded specimen is similar to one recovered in 1974.

## Pipe:

A pipe (R2M12B1-31) is about 13 inches long and $3 / 4$ inch in diameter. The specific function of this hollow iron pipe is not known. Another iron pipe ( $\mathrm{R} 2 \mathrm{M} 13 \mathrm{H} 3-1$ ) is pointed at one end and flattened and pierced at the other. It is about three feet 10 inches long and $3 / 4$ inch in diameter. It was probably an anchor post for a guy wire.

## Ornaments

This section is rather small compared to the section for 1974. Pendants and earrings have been placed in the "Beads" section and cuff-links in the "Buttons" section.

## Brooch:

This is a metal brooch with a broken fastening pin. The motif consists of a six-petalled flower.

## Containers

Quantities of tin cans were recovered from the mixed upper levels of the site and from the midden. None of these is of much interest although it should be noted that those from the midden were of the type with soldered lids.

Copper Bucket:
A copper bucket (R2M12C4-9) is about 11 inches high and perhaps seven inches in diameter, but damage makes this measurement doubtful. The base plate and two side sheets are joined by a folded seam; the rim is also folded. Two opposed pairs of iron rivets are all that remain of the handle attachment.

## Iron Buckets:

Remnants of three iron buckets (R2M12B1-73,75; R2M12B7-22) were also recovered. These fragments show folded rims and vertical seams but are so corroded that no measurement is possible.

## Handles (Figure 39):

A large iron handle (R2M12C1-27) perforated for suspension, may be from a frying pan. Three strap handles (R2M12B1-35, R2M12C3-5, R2M12C4-6) were probably riveted through both ends and attached to pots. Of the 10 wire handles recovered, seven are simple half-loops of the sort present on tin "billies", two are probably for a double-handled pot and one is a small loop with a riveted plate attached. Examples of these are illustrated.

Three coins were recovered during the 1975 field season. One (R2M13B1-26) is a 1900 25-cent piece of Canadian issue from Queen Victoria's reign. A 1931 Canadian five-cent piece (R2M14E3-117) bearing the profile of King George $V$ was also recovered. Lastly, a 1915 Canadian five-cent piece (R2M12C1-44) also has King George V's profile. The first two coins are from mixed upper levels and are of little interest. The last is from the upper level of the midden and serves to give a minimum age for that stratum. All coins are illustrated in Figure 41.

ARTIFACT
Construction and Building


| ARTIFACT | CATALOGUE NUMBER | PROVENANCE |
| :---: | :---: | :---: |
| Shot | R2M9A2-40 | Warehouse: Upper |
| Shot | R2M9H1-9 | Warehouse: Upper |
| Shot | R2M12C2-10 | Midden |
| Shot | R2M14N14-4 | Trash Pit 4 |
| Hardware |  |  |
| Knife | R2M13L 10-16 | Privy |
| Knife | R2M13L 12-10 | Privy |
| Knife(?) Handle | R2M14P1-35 | Palisade Trench |
| Folding Knife | R2M12C2-14 | Midden |
| Folding Knife | R2M14H1-15 | SE Palisade: Upper |
| Fork | R2M12C1-26 | Midden |
| Fork | R2M10B4-24 | Men's House: Lower |
| Spoon | R2M12Cl-25 | Midden |
| Handle Fragment | R2M12B1-34 | Midden |
| Handle Fragment | R2M13L 10-17 | Privy |
| Handle Fragment | R2M13A1-11 | East Test: Upper |
| Egg Beater Part | R2M12B1-23 | Midden |
| Scissors | R2M13L10-15 | Privy |
| Crooked AWl | R2M14K1-18 | SE Palisade: Upper |
| Thimble | R2M13B1-25 | SE Palisade: Upper |
| Thimble | R2M13C1-31 | SE Palisade: Upper |
| Pin | R2M14E3-21 | SE Palisade: Upper |
| Pin | R2M10C1-17 | Men's House: Upper |
| Pin | R2M13H1-29 | SE Palisade: Upper |
| Pin | R2M13L9-7 R2M13L $10-23$ | Privy |
| Pin | R2M14N6-16.1 | Privy Trash Pit 4 |
| Pin | R2M14N6-16.2 | Trash Pit 4 |
| Safety Pin | R2M14K1-21 | SE Palisade: Upper |
| Safety Pin | R2M9G1-14 | Warehouse: Upper |
| Sareter Clin | R2M10B1-21 | Men's House: Upper |
| Garter Clip | R2M10C1-27 | Men's House: Upper |
| Buckle | R2M12A1-9 | Midden |
| Buckle | R2M9B1-6 | Warehouse: Upper |
| Buckle | R2M10B1-19 | Men's House: Upper |
| Buckle | R2M12B1-37 | Midden |
| Buckle | R2M12B3-8 | Midden |
| Buckle | R2M13Cl-29 | SE Palisade: Upper |
| Buckle | R2M13H1-21 | SE Palisade: Upper |
| Buckle | R2M13L6-12 | Privy |
| Buckle | R2M14F2-14 | SE Palisade: Lower |
| Skate | R2M14K3-11 | Trash Pits 2 \& 3 |
| Trunk Lock | R2M12A1-11,72 | Midden |
| Trunk Hinges | R2M12B1-29 | Midden |
| Trunk Hinges | R2M12Cl-33 | Midden |


| ARTIFACT | CATALOGUE NUMBER | PROVENANCE |  |
| :---: | :---: | :---: | :---: |
| Trunk Catch | R2M12A1-7 | Midden |  |
| Trunk Catch | R2M12B1-30 | Midden |  |
| Wick Guide | R2M12B7-18 | Midden |  |
| Wick Adjuster | R2M12B7-19 | Midden |  |
| Wick Guide | R2M12C2-18 | Midden |  |
| Wick Adjuster | R2M12C4-7 | Midden |  |
| Wick Guide | R2M12A1-8 | Midden |  |
| Wick Guide | R2M12C1-56 | Midden |  |
| Wick Adjuster | R2M14E1-26 | SE Palisade: | Upper |
| Stove Grate | R2M12B5-5 | Midden |  |
| Stove Rim | R2M12A1-73 | Midden |  |
| Stove Rim | R2M12C2-15 | Midden |  |
| Stove Plate Lifter | R2M12C2-16 | Midden |  |
| Stove Pipe Damper | R2M12B1-25 | Midden |  |
| Grinder | R2M12B5-42 | Midden |  |
| Pump Part | R2M12C2-17 | Midden |  |
| Tobacco Brand | R2M9C1-9 | Warehouse: | Upper |
| Tobacco Brand | R2M9K1-23 | Warehouse: | Upper |
| Tobacco Brand | R2M10A1-10 | Men's House: | Upper |
| Tobacco Brand | R2M13A1-9 | East Test: | Upper |
| Tobacco Brand | R2M14E3-22 | SE Palisade: | Upper |
| Tobacco Brand | R2M11A1-10 | Blacksmith's: | Upper |
| Tobacco Brand | R2M13H1-26 | SE Palisade: | Upper |
| Tobacco Brand | R2M13B1-24 | SE Palisade: | Upper |
| Lead Seal | R2M13A1-58 | East Test: | Upper |
| Spring Clasp | R2M13B1-23 | SE Palisade: | Upper |
| Bell | R2M9B1-7 | Warehouse: | Upper |
| Harness Fragment | R2M14H1-13 | SE Palisade: | Upper |
| File | R2M14K1-13 | SE Palisade: | Upper |
| File | R2M14M3-14 | Front Gate: | Upper |
| File | R2M13L7-21 | Privy |  |
| Hoe | R2M9G1-13 | Warehouse: | Upper |
| Wedge | R2M12C1-40 | Midden |  |
| Wedge | R2M12B7-23 | Midden |  |
| Crank | R2M12C1-28 | Midden |  |
| Crank | R2M12B1-98 | Midden |  |
| Horseshoe | R2M12B1-24 | Midden |  |
| Horseshoe | R2M12B1-45 | Midden |  |
| Ledger Plate | R2M12C1-46 | Midden |  |
| Iron Pipe | R2M12B1-31 | Midden |  |
| Iron Pipe | R2M13H3-1 | SE Palisade: | Lower |
| Ornaments |  |  |  |
| Brooch | R2M9F1-17 | Warehouse: | Upper |

Table 2.
Distribution of Nail Types

| ARTIFACT | CATALOGUE NUMBER | PROVENANCE |
| :--- | :--- | :--- |
| Containers |  |  |
| Copper Bucket | R2M12C4-9 |  |
| Iron Bucket | R2M12B1-73 | Midden |
| Iron Bucket | R2M12B1-75 | Midden |
| Iron Bucket | R2M12B7-22 | Midden |
| Pan Handle | R2M12C1-27 | Midden |
| Strap Handle | R2M12B1-35 | Midden |
| Strap Handle | R2M12C3-5 | Midden |
| Strap Handle | R2M12C4-6 | Midden |
| Wire Handle | R2M12B1-32 | Midden |
| Wire Handle | R2M12B1-33 | Midden |
| Wire Handle | R2M12B6-6 | Midden |
| Wire Handle | R2M12C1-30 | Midden |
| Wire Handle | R2M12C1-31 | Midden |
| Wire Handle | R2M14D3-9 | Midden |
| Wire Handle | R2M12B5-43 | Front Gate: Upper |
| Wire Handle | R2M12C2-30 | Midden |
| Wire Handle | R2M12C1-32 | Midden |
|  |  | Midden |
| Coinage |  |  |
| Canada 25t |  |  |
| Canada $5 \mathbb{C}$ |  |  |
| Canada $5 \$$ | R2M13B1-26 | R2M14E2-117 |
|  | R2M12C1-44 |  |
|  |  |  |


| AREA |  | Wire Finishing |  |  |  |  | $\begin{aligned} & \text { 오 } \\ & \frac{4}{4} \\ & 8 \\ & 8 \end{aligned}$ | $\underset{\underset{\sim}{\text { U }}}{\substack{\text { un }}}$ |  | $\begin{aligned} & \frac{0}{0} \\ & \frac{0}{4} \\ & \frac{\pi}{0} \\ & \frac{0}{0} \end{aligned}$ | $\stackrel{\rightharpoonup}{⿺}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Warehouse: | 288 | 32 | 211 | 58 | 36 | 3 | 2 | 5 | 9 | 113 | 757 |
| Men's House: Upper | 283 | 4 | 286 | 36 | 115 | 19 | - |  | - | 154 | 910 |
| Men's House: Lower | 55 | - | 58 | 12 | 33 | 5 | - | - | - | 68 | 231 |
| Blacksmith's: Upper | - | - | 15 | 5 | 7 | 1 | - | - | - | 15 | 43 |
| SE Palisade: Upper | 148 | - | 426 | 90 | 96 | 53 | - | 44 | 13 | 268 | 1138 |
| SE Palisade: Lower | 12 | 2 | 50 | 12 | 13 | 6 | - | 3 | 1 | 35 | 134 |
| Front Gate: Upper | 14 | - | 27 | 9 | 8 | 5 | - | 2 | 3 | 16 | 84 |
| Front Gate: Lower | - | - | - | - | - | - | - | - | - | 1 | 1 |
| East Test: Upper | 14 | - | - | - | 1 | 3 | - | 1 | - | 15 | 34 |
| Palisade Trench | - | - | 12 | 1 | 2 | 2 | - | 2 | - | 1 | 20 |
| Picket Fence Trench | 1 | - | 3 | - | 1 | - | - | - | - | 2 | 7 |
| Block | - | - | 6 | 1 | 1 | - | - | - | - | 2 | 7 |
| Diagonal | - | - | 1 | 1 | - | - | - | - | - | 1 | 3 |
| Privy | 1 | - | 1 | 2 | 6 | - | - | - | - | 16 | 26 |
| Bird Feature 3 | - | - | - | - | 1 |  |  |  |  |  |  |
| Trash Pit 1 | 2 | - | 2 |  | , |  |  |  |  |  |  |
| Trash Pits 2 \& 3 | 3 | 1 | 19 | - | 8 | - |  |  | - |  | 9 |
| Trash Pit 4 | 2 | - | 73 | 3 | 25 | 6 | - | - | - | 79 | 188 |
| Midden | 1074 | 14 | 198 | 2 | 24 | 9 | - | 6 | - | 577 | 1904 |
| TOTAL | 1897 | 53 | 1388 | 232 | 378 | 114 |  | 76 | 26 | 1377 | 5543 |

Table 4.
Data Sheet For Rimfire Cartridges

| AREA |  | $\begin{aligned} & \dot{0} \\ & \frac{\pi}{\mathbb{N}} \\ & \frac{1}{i} \end{aligned}$ |  |  |  | $\begin{aligned} & 0 \\ & \stackrel{0}{0} \\ & \frac{0}{4} \\ & \frac{4}{4} \\ & \frac{0}{c} \\ & \stackrel{0}{5} \\ & \hline \end{aligned}$ | $\stackrel{\text { J }}{\stackrel{1}{\circ}}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Warehouse: Upper | 3 | 1 | 5 | 5 | 4 | 3 | 21 |
| Men's House: Upper | 8 | 9 | 7 | 8 | 3 | 4 | 39 |
| Men's House: Lower | 3 | 2 | - | 3 | 1 | 1 | 10 |
| Blacksmith's: Upper | - | - | 28 | - | - | 1 | 29 |
| SE Palisade: Upper | 5 | 8 | - | 9 | 1 | 14 | 37 |
| SE Palisade: Lower | 5 | 4 | 1 | 4 | - | 4 | 18 |
| Front Gate: Upper | 2 | 3 | - | - | - | 4 | 9 |
| Diagonal | - | 1 | - | 1 | - | - | 2 |
| Privy | - | - | - | 1 | - | - | 1 |
| Trash Pit 1 | - | 1 | - | - | - | - | 1 |
| Trash Pits 2 \& 3 | 1 | - | - | 2 | 1 | - | 4 |
| Trash Pit 4 | - | 17 | - | 19 | 1 | - | 37 |
| Midden | 33 | 1 | - | 3 | - | 52 | 89 |
| TOTAL | 60 | 47 | 41 | 55 | 11 | 83 | 297 |
| Relative Frequency (\%) | 20.2 | 15.8 | 13.8 | 18.5 | 3.7 | 28.0 | 100.0 |


| CATALOGUE NUMBER | PROVENANCE | HEAD STAMP |
| :---: | :---: | :---: |
| . 22 Short |  |  |
| R2M9K1-19.1 | Warehouse: Upper | - |
| R2M9K1-19.2 | Warehouse: Upper | H |
| R2M9K1-19.3 | Warehouse: Upper | D |
| R2M10C1-22 | Men's House: Upper | H |
| R2M12B1-22.1 | Midden | D |
| R2M12B2-10 | Midden | - |
| R2M12B6-3 | Midden | H |
| R2M12B6-4 | Midden | D |
| R2M12B7-34 | Midden | D |
| R2M13H1-43 | SE Palisade: Upper | H |
| R2M1 3L 1-19 | Men's House: Upper | H |
| R2M14F2-11 | SE Palisade: Lower | H |
| . 22 Long |  |  |
| R2M10A1-9 | Men's House: Upper | D |
| R2M13L6-8 | Privy | P |
| R2M14G1-16 | SE Palisade: Upper | H |
| . 22 Long Rifle |  |  |
| R2M12B1-22.2 | Midden | ? |
| . 25 Standard |  |  |
| R2M12C1-17 | Midden | D |
| . 32 |  |  |
| R2M13L6-7 | Privy | H |
| . 44 Henry |  |  |
| R2M13B1-21 | SE Palisade: Upper | - |
| R2M13B1-22 | SE Palisade: Upper | - |
| R2M13C1-20 | SE Palisade: Upper | H |
| R2M13C1-21 | SE Palisade: Upper | - |
| R2M13E1-19 | SE Palisade: Upper | - |
| R2M14G2-3 | Bird Feature 2 | - |
| R2M14M2-15.1 | Front Gate: Upper | - |
| R2M14M2-15.2 | Front Gate: Upper | - |
| R2M14M2-15.3 | Front Gate: Upper | H |
| R2M14M2-15.4 | Front Gate: Upper | H |

Table 5.
Data Sheet For Centrefire Cartridges



Table 6.
Data Sheet For Shotshells

| CATALOGUE NUMBER | PROVENANCE | HEAD STAMP |
| :---: | :---: | :---: |
| 16-Gauge |  |  |
| R2M13H1-16 <br> R2M13L6-68 | SE Palisade: Upper Privy | KYNOCH/No16/BIRMINGHAM <br> None (iron case wall) |
| 12-Gauge |  |  |
| R2M9K1-22 <br> R2M10B4-16 | Warehouse: Upper <br> Men's House: Lower | ELEY/LONDON/Nol2 <br> WOODDISSE \& DESBOROUGH/ <br> ASHBOURNE/ELEY No 12 |
| R2M10B4-15 | Men's House: Lower | [KYN]OCH/No12/BIRMINGHAM |
| R2M10B4-16 | Men's House: Lower | EDWINSON/GREEN/...?... |
| R2M12A1-6 | Midden | DOMINION/No12/REGAL |
| R2M12A1-70 | Midden | P/PETERS/No12/TARGET |
| R2M12A1-71 | Midden | ? (corroded) |
| R2M12B2-11 | Midden | ? (corroded) |
| R2M12B7-29 | Midden | MURRAY \& CO./KARACHI/No12/ELEY |
| R2M12B7-30 | Midden | [KY]NOCH/No12/[BIRMIN]GHAM |
| R2M12C1-18 | Midden | P/PETERS/No12/TARGET |
| R2M12C1-19.1 | Midden | DOMINION/No12/CROWN |
| R2M12Cl-19.2 | Midden | DOMINION/No12/CROWN |
| R2M12Cl-20 | Midden | DOMINION/No12/SOVEREIGN |
| -2M12Cl-21 | Midden | DOMINION/Nol2/REG[AL] |
| R2M12Cl-22 | Midden | E [L] [Y]/No12 [L]ONDO [N] |
| R2M12C2-11 | Midden | SMITH \& SONS/NEWARK/Nol2 |
| R2M12C2-12 | Midden | ELEY'S/GRANDPRIX/12 |
| R2M12C2-13 | Midden | [E]LEY ...?... |
| R2M13C1-22 | SE Palisade: Upper | E/B/Nol2/LONDON |
| R2M13H1-18 | SE Palisade: Upper | W.R.A.Co./No12/RIVAL |
| R2M13H1-19 | SE Palisade: Upper | J. HINGSTON SMITH \& CO/ |
| R2M14M2-16 | Front Gate: Upper | $\mathrm{K}[\mathrm{Y}] \mathrm{NOCH} / \mathrm{No} 12 / \mathrm{BI}$ RMINGHAM |

The ceramics recovered from Fort Victoria during the 1975 field season were classified on the basis of attribute variation in paste and decoration. This has yielded three major categories: earthenwares, stonewares and porcelains. Each category has been further classified into trial types according to the decorative attributes. These in turn are keyed to the illustrations for easy reference. It should be noted that this system has been revised from that used in the 1974 report and the types do not necessarily correlate between the two. Further revision will undoubtedly be necessary as new material is recovered and the bugs are worked out of the system. A final note on the organization of this section is required. Makers' marks, because of their special interest, are included by type in a separate portion of this appendix.

Earthenwares

The earthenwares vary in the preparation of the paste and in the firing temperature. Coarse, unsorted clays fired at relatively low temperatures produce the buff-to-reddish coloured soft paste earthenwares classified here as "redwares". These vessels, which are unglazed and therefore permeable, are probably flower pots. Such products have a long history and are manufactured to the present day.

Finer textured, higher fired clays producing a buff, medium-to-hard paste earthenware are here classified as "brownwares". Although a few examples have a clear lead or alkaline glaze over the yellow body, most sherds of this sort show the glaze known as "Rockingham" (Ketchum 1971: 95). This glaze produces a mottled yellow-to-brown surface having a tortoise shell effect.

Medium-to-hard paste white earthenwares constitute the majority of the Fort Victoria ceramic sample. These are made from a more refined clay fired at high temperatures to produce a white, non-vitrified, porous body. The hardest of these earthenwares were often marketed as "ironstone china, granite ware, semi-porcelain and flint china". The paste
may reach a hardness and density exceeded only by the stonewares,
These sherds are classified on the basis of decoration. The method of decoration and the colour of the motifs form the major categories. The trial types are based on the design of the decorative motif. The term "whitewares", although applicable to all of these bodies, is used here only to designate those vessels which lack applied decorative elements. For a further discussion of the techniques of pottery manufacture and decoration which form the basis for this classification, see W. Ketchum (1971). The catalogue numbers and provenance of the typed sherds are listed in Table 1.

## Redwares

Type 1:
Three sherds with a buff coloured body, soft paste, and no glaze fom this type. These appear to be from a single cylindrical vessel, probably a flowerpot.

## Type 2:

This single body sherd has a red coloured soft paste. Both surfaces appear to be slipped. The sherd is probably from a flowerpot

## Brownwares

Type 1 (Figure 4\%):
These sherds have a molded floral decoration and a yellow-to-brown mottled "Rockingham" glaze. The interior is pale yellow. The sherds may be from a fancy vase.

Type 2 (Figure 42):
Possibly three vessels are represented by sherds of this type. The sherds have a "Rockingham" mottled yellow-to-brown glaze on both interior and exterior surfaces. The vessels appear to have been deep bowls, possibly for food preparation.

## Type 3 (Figure 42)

These sherds may represent one vesse1, possibly a crock. The dark brown glaze, present on both surfaces, fades to yellow on the molded floral design. One rim sherd shows an interior ledge to take a top. Sherds from a large strap handle are also present.

Type 4:
These sherds are characterized by a pale yellow glazed surface on both the interior and exterior. The sherds are thick and one rim sherd suggests a large-mouthed vessel, possibly a crock.

## Type 5 (Figure 43)

These sherds represent most of a single large crock. The outer surface is a pale grey-brown, the inner surface is a dark reddish-brown colour. Both surfaces are salt-glazed, as was most commonly done on stonewares, but the sherds have a medium paste. Impressed on the shoulder is "6/BELLVUE POTTERY CO."

## Blue-on-White Earthenwares

## Type 1 (Figure 44)

The ceramics classified under this type show the border pattern illustrated in Figure 44. There may well be several variants lumped under this heading since some sherds show a repetition of the border pattern around the central field. This repetition does not appear to be related to vessel size. There is also some variation in the attributes of the central pattern itself but, in general, the fragments are too incomplete to be typed using the central motif. Fragments of a cup show the border pattern applied around the interior while the main pattern placed on the exterior lacks a repetition of the border pattern. Other vessel forms include large and small plates, bowls and saucers, but no vessel count has been attempted. Two sherds, probably of this type, have makers' marks.

Type 2 (Figure 44):
Three sherds have been classified as type 2. They show a scalloped edge with a gilded band at the lip, and a row of gilded dots to the in. terior. The rest of the border pattern is identical to the type 1 pattern. These sherds are probably from a single saucer.

Type 3 (Figure 44):
These ceramics have the border pattern illustrated in Figure 44. This pattern is similar to that designated "Temple" of Spode manufacture (Whiter 1970:150). Sherds are printed in both light and dark blue variants. In contrast to the type 1 cup, these cup sherds are undecorated in the interior and include a border pattern above the main motif on the exterior surface. The central pattern, although composed of Chinesederived elements, may be a variant of the willow pattern. Unfortunately, the sherds are nor sufficiently complete to illustrate the whole pattern. Vessel forms include several plates, cups and probably a single bowl.

## Type 4 (Figure 45):

Ceramics of this type are common in Hudson's Bay Company sites (J. Nicks, pers. comm.). The distinctive geometric "Grecian" motif illustrated in Figure 45 is the defining attribute. Vessel forms include primarily cup and side plate or saucer sherds, and probably a single bowl. Makers' marks are present on three sherds.

Type 5 (Figure 45):
Only two sherds were classified here on the basis of the border pattern illustrated. Both are probably from a single plate.

## Type 6 (Figure 45):

A larger sample size would probably enable this type to be subdivided, as the sherds show great variation in the shade of blue and in the design elements. The defining attribute is a single row of leaves in the border pattern. One series of sherds has a motif composed of a fineline vine-like motif in blue on white. The other series shows large white fronds and blue flowers on a blue ground. A single sherd, probably
from a cup, shows the former pattern on the exterior and the latter pattern on the interior. All sherds are very small, but cup and plate forms are indicated.

## Type 7 (Figure 45):

The sherds classified here are probably from a single large platter and a serving bowl. The border pattern illustrated is easily recognized. The central motif is incomplete, but includes a pastoral-nautical scene.

$$
\text { Type } 8 \text { (Figure 46): }
$$

Sherds classified here represent a dinner plate, side plate or saucer, and at least one cup. The formal geometric-floral border pattern illustrated is printed in Prussian blue on one of the sherds.

## Type 9 (Figure 46):

The geometric border pattern illustrated defines this type. The sherds are all small, but appear to represent one or more cups and a single small bowl.

Type 10 (Figure 46):
The sherds of this type represent probably several cups, a side plate or saucer, a bowl, and a dinner plate. Although the sherds are small, the motif appears to consist of a vine, leaf, grape complex encircling the vessel.

Type 11 (Figure 46):
These sherds have the formal rope and rosette border pattern illustrated. The sherds are probably from a single cup.

Type 12 (Figure 46):
Sherds of this type have the formal stylized border pattern illustrated. The sherds are probably from a dinner plate and a side plate.

Type 13 (Figure 46):
The border pattern consists of a trellis and fronds motif; the main
pattern is a floral motif. Several cups, a sugar bowl, and a saucer or side plate are represented.

## Type 14 (Figure 47):

The illustrated border pattern of acorns and leaves defines this type. Although incomplete, the dominant element of the main motif is an overgrown arched facade, possibly a Roman ruin. The sherds are all froma single platter. A maker's mark is present on a basal sherd.

## Type 15 (Figure 46):

These sherds have a floral motif enclosed by a rosette style border pattern. The sherds are all probably from a single cup.

## Type 16 (Figure 47):

These sherds, which may be from a single platter, have a floral border pattern. An inner border of grapes on a trellis surrounds a boating scene set in front of a large manor house. A makers' mark is present.

Type 17 (Figure 48):
Printed in the "flow" blue method, two vessels are represented here: A sugar (?) bowl and a large rectangular platter. Surrounded by a flora border pattern, the central motif is composed of pseudo-Egyptian elenernts Makers' marks are present on both vessels.

Type 18 (Figure 46):
These few sherds, probably from a dinner plate and perhaps two side plates, show a "feather" border pattern. This pattern was common on early nineteenth century ceramics (J. Nicks, pers. comm.).

## Miscellaneous Blue-on-White Sherds:

Although several hundred additional sherds were recovered, these are generally small and contain very little in the way of diagnostic attributes. As the sample size increases, it will undoubtedly be possible th type some of these sherds.

## Brown-on-White Earthenwares

```
Type 1 (Figure 49):
```

These sherds are probably from a single large platter. The border pattern is executed in a distinctive light brown colour and a gilded band is present around the edge of the vessel. It is not known if there was a central motif.

Type 2 (Figure 49):
These sherds are probably from a dinner plate and a bowl. The reddishbrown floral motif was printed from a fine-line engraving.

$$
\text { Type } 3 \text { (Figure 49): }
$$

The small sherds listed here have a reddish-brown floral motif of mediocre quality. These sherds may be from a single plate. A cup rim sherd (R2M12B7-71) has also been tentatively assigned to this type. The decoration on the cup consists of a portion of a music sheet and stand; the colour and quality of this design are very similar to the floral sherds, although the motif is different.

Type 4 (Figure 49):
A single rimsherd is probably from a cup. The decoration consists of a hand-painted horizontal brown band below the lip on both interior and exterior surfaces.

## Black-on-White Earthenwares

Type 1 (Figure 49):
These sherds have a black printed floral motif on the interior. They are probably from a single cup.

## Miscellaneous Black-on-White Sherds:

Five small sherds (R2M13C1-80,81; R2M13D1-31; R2M13D2-26) are probably from the same vessel, but are too small to indicate either vessel form or motif, Of three other black-on-white sherds, one has a portion of a waterfall motif (R2M10B4-33), one has a simple geometric border (R2M13L1-36),
and one has a portion of a fine-line design of a tree.

## Green-on-White Earthenwares

Type 1 (Figure 49):
These two sherds are probably from a single plate. The decoration consists of a floral motif.

## Polychrome Earthenwares

Type 1 (Figure 50):
These sherds are probably from a single straight-walled cup. The lip and base are white and the body is green. An applied white monogram is present, but only the letter "a" can be distinguished

Type 2:
These sherds have a bright green underglaze on one side with a mottled yellow and brown surface opposite. Many of the sherds are "potlidded" and all are too small to indicate vessel form.

Type 3 (Figure 50):
Probably all of these sherds are from a single large crock. The interior surface is black. The upper portion of the exterior surface is black and the lower portion is white. Separating the two colours is a narrow yellow band.

## Sponged Wares

Type 1 (Figure 50):
These sherds have a hand-painted band below which is the sponge-applied decoration. Vessel forms include cups and side plates or, more likely, saucers.

## Type 2 (Figure 50):

These sherds are decorated with a brown sponged pattern. The sherds are probably from a cup and saucer.

Type 3 (Figure 50):
These sherds have a red border band, a red floral-1ike motif, green leaves and a lower black border band. The vessel forms probably include cups and saucers.

Type 4 (Figure 50):
These sherds are sponge-decorated in purple with a hand-painted green band. The sherds are too small to indicate vessel form.

## Whitewares

White earthenwares constitute perhaps half of the ceramic sample recovered from Fort Victoria; the sherds probably represent the remains of inexpensive table wares. The relatively small sherd sizes, combined with the general lack of diagnostic attributes, make the construction of an adequate typology for this material almost impossible. Since decorative attributes are lacking, only elements of vessel form would be suitable typological indicators. Since time does not allow us to fit sherds together, no realistic discussion of vessel form or numbers is possible. Thus, for example, while one might identify rim sherds from several lots as representing dinner plates, there would be no way of ascertaining whether one or several plates were present. Nor is one able to decide if various body sherds belong with specific rims. Lack of diagnostic attributes makes, at least at this stage of the analysis, a typology of whitewares of no value. The single exception, presented below, was possible because the rim sherds show a molded decoration which allows recognition and definition of the type. Those sherds with makers' marks are discussed in the appropriate section.

Type 1 (Figure 42):
These sherds are possibly from several dinner plates. The molded decoration consists of intertwined stalks of wheat.

## Stonewares

The stonewares have a very hard, vitrified non-porous paste, usually grey in colour. These ceramics are produced from fine-grained clays fired to very high temperatures. Relatively few stoneware sherds were recovered.

Type 1 (Figure 42):
A single rimsherd from a plate or platter is decorated with a floral motif in violet. The sherd has only remnants of the original glaze.

## Type 2

These stoneware sherds lack decoration; they are equivalent to the whiteware earthenwares. Vessel forms include three cups, a plate, a deep serving bowl and perhaps several soup bowls.

## Type 3:

A single sherd, possibly from a cylindrical vessel, is listed here. This is the only salt-glazed stoneware sherd recovered during the 1975 field season.

## Porcelains

Composed of a mixture of kaolin, ground flint and feldspar, and fire at very high temperatures, porcelain has a hard, vitreous, translucent paste. Softer paste porcelains, made with powdered glass or bone ash added, could be produced at lower temperatures (Ketchum 1971). Some of these "demi-porcelains" are opaque because translucency is, to some extent, a function of the thickness of the vessel walls

Type 1 (Figure 51):
Two sherds, probably from a single cup, have a fine-line blue transfel: printed decoration. The quality of the ceramics suggest that they were imported from Japan (J. Nicks, pers. comm.).

Type 2 (Figure 51):
These sherds probably represent a cup, saucer, and cream pitcher The sherds have a scalloped edge with molded roses and dots. A transferprinted polychrome motif consists of a floral design of roses and leaves.

## Type 3:

These sherds, rather thick-walled and opaque, represent at least one cup and saucer. The polychrome decoration, a leaf motif in shades of green, is done in the hand-painted overglaze method.

## Type 4 (Figure 51):

These sherds have a thick opaque body with a lightly scalloped edge and a molded frond-like motif. Applied to the exterior is a polychrome transfer-printed floral motif and a gilded band on the lip. The sherds are from a single cup

Type 5 (Figure 51):
These sherds of opaque porcelain have a deeply scalloped lip and a molded floral pattern. A gilded band along the lip and a pale rose transfer-printed motif are present. The sherds may be from a single cup.

Type 6 (Figure 51):
These sherds are from an opaque porcelain cup. Decoration consists of a gilded band and floral motif on the exterior. A gilded band is also present on the handle. The base lacks a maker's mark.

Type 7 (Figure 51):
These sherds of fine translucent porcelain are probably from a single cup and saucer. Decoration consists of a gilded line along the scalloped rim and a pale green and white body.

## Miscellaneous Porcelain Sherds

Many sherds were too small to type. Perhaps a larger sample will allow these to be inserted into a future typology. Suffice it to say that most of this material was recovered from the midden and the remainder from the mixed upper levels of the site

## Marks on Blue-on-White Earthenwares

Type 1 (Figures 44,52):
Makers' marks are presert on two type 1 willow pattern sherds. One of these (R2M12B3-14) has a blue-printed scroll device with "STAFFORDSHIRE" within, "WARRANTED" above, and "WA \& CO/ENGLAND" below. Godden $(1964: 21,22)$ notes that this is a William Adams \& Sons (Potters) Ltd,, Staffordshire, product and the mark dates 1893-1917.

The second type 1 mark (R2M12B1-114) consists of a blue-printed double lined square with "W. RIDGW..." below. Godden (1964:539) illustrates the complete mark and notes it was used after 1927 by Ridgways (Bedford Works Ltd. , Staffordshire.

Type 3 (Figures 44,52):
This mark (R2M12A1-79), probably from the type 3 willow pattern, consists of a double-lined square with "...AVED/1832" printed around the exterior and a crossed bow and quiver device with "[RID]GWAY" blue-printed on the quiver. Godden (1964:539) notes that the square mark is for Ridgways (Bedford Works) Ltd., Staffordshire, and was used after 1927. The bow-quiver mark was registered in 1880.

Type 4 (Figures 45,52):
Three type 4 sherds have blue-printed makers' marks present. The first (R2M1OB1-38) consists of a portion of a floral wreath with "WALLIS ..." below. The second (R2M13A1-19) has part of the wreath with a beehive and "TRA...." above, and "WALLIS G..." below. Godden (1964:273) notes that this beehive device was used by Wallis Gimson \& Co., Staffordshire, in the period 1884-90. The third mark (R2M14E1-29) consists of a loop above a bell or beehive, enclosed by a wreath with "...[B]UCKLE" above. If the first letter is in fact a "B", this would indicate J.T. Buckle \& Co. of York, Yorks (Godden 1964:114). Buckle was a retailer in the period circa 1840. It should be noted that, alternatively, the word may be a part of a pattern name.

Type 14 (Figures 47,53):
A green mark (R2M14N8-32) consists of an impressed "COPELAND" and a green-printed crown above a wreath with "[CO]PELAND" circling the interior. Godden (1964:171) notes that the printed mark was used circa 1850-67 by W.T. Copeland (\& Sons Ltd.) of Staffordshire.

Type 16 (Figures 47,53):
One sherd (R2M11A1-18) has a blue-printed mark consisting of a rampant lion holding a banner and encircled by a crowned garter mark. Godden (1964:55) notes that Samuel Barker and Son of Yorkshire used the mark in the period 1851-93.

## Type 17 (Figure 48):

Two sherds (R2M14E1-30, R2M13L14-5) have a green-printed "COPELAND" Godden (1964:171) notes that the mark was used in the period 1847-67. The third sherd (R2M14N8-31) has a green-printed "COPELAND", an impressed "COPELAND" and a blue-printed "81". The impressed mark was used from 1847 into the twentieth century. The firm of W.T. Copeland (\& Sons Ltd.) of Staffordshire also used the last two digits of the year; possibly the " 81 " noted is 1881 .

## Miscellaneous Marks

Many sherds bear only a maker's mark and lack design elements on the opposite surface. It is not possible to tell if these are really undecorated whitewares or bore their decoration around the rim without it extending to the centre of the vessel. Since the marks themselves are of interest, they are listed below.

## (R2M13B1-55, Figure 53):

This black-printed mark has a floral border above, "TRADE" and a crossed anchor and dagger below. At the bottom is "[E]NGL[A] ...". Godden (1964:264) notes that the mark was used by Furnivals (Ltd.) of Staffordshire in the period 1890-1910. The addition of "England" indicates a date after 1891 (Godden 1964:11).
(R2M12B2-20, Figure 53):
This black-printed mark consists of half of the royal arms surrounded by a wreath and with "...NE CH.../...P..." below. The use of the term "bone china" indicates a twentieth century product (Godden 1964:11).

## (R2M14M2-36):

This black-printed mark consists of part of a scroll(?) with "...N" inside and "...[0]NE C.../[COP]..." below. Possibly this is a Copeland product from the twentieth century (Godden 1964:11).

## (R2M12A2-18) :

This black-printed mark consists of "R0..." above part of a wreath. Godden (1964:11) notes that "Royal" was used after 1850.

## (R2M10B4-37):

This black printed mark consists only of "...[1]N."
(R2M14J6-13) :
This black-printed mark consists of a portion of the royal arms suggesting only a date of the nineteenth or twentieth centuries (Godden 1964:11).

## R2M14E3-44)

This black-printed mark contains part of the royal arms and "...NA" above.
(R2M13H1-74):
A black-printed mark consists only of "...TONE C...."

## (R2M14H1-33):

A black-printed mark of the royal arms with "...NSTONE CHINA" above.

## (R2M12B1-141, Figure 53):

This black-printed mark graces the base of a stoneware cup. It consists of part of the royal arms with "...OR, TAYLOR \& CO/ENGLAND" below

This mark was used by Mellor, Taylor and Co. in the period 1880-1904 (Godden 1964:432).
(R2M13C1-86):
This black-printed mark is "...[E]...", and no more can be said of it.
(R2M12A2-20, Figure 53):
This green-printed mark consists of a wreath with "W.H. GRINDLEY \& CO" circling the interior and "ENGLAND" across. Godden (1964:294) notes that this Staffordshire company used the mark in the period 1914-25.
(R2M12C1-109) :
This green-printed mark consists of "ROYAL....". It is post-1850, but no other information is known (Godden 1964:11).
(R2M13L6-29, Figure 53):
This is a brown-printed mark of a Union Jack with "DURA..." on the diagonal and "J.H.W. \& SONS/HANLEY/ENGLAND/SEMI-PORCELAIN" below. Godden (1964:653-54) notes the use of this by J.H. Weatherby \& Sons (Ltd.), Staffordshire, from 1891.
(R2M12C2-51):
The brown-printed mark is "BRIGHTON" inside scrolled lines. No information has been found regarding the mark.
(R2M12A1-20, Figure 53):
This brown-printed mark consists of "...ON'S" above a crowned shield with "ENGLAND" in a diagonal across and "W/W" on either side; below is ROYAL SEMI-PORCELAIN". The mark could not be identified, but it might be a Mason's product, in which case the "ENGLAND" indicates a post-1891 date (Godden 1964:11).
(R2M14K3-16):
This impressed mark is "[C]OPELA..." over a crown. Such an impressed ark was used from circa 1850 into the twentieth century by Copeland (Godden 1964:171)
(R2M12Cl-108):
This mark consists only of an impressed "12.97"; perhaps it could be interpreted as December 1897 since wares were often dated at the manufacturers. This is, of course, highly speculative.

Table 1.
Catalogue List and Provenance of Ceramic Types

| TYPE | CATALOGUE NUMBER | PROVENANCE |
| :---: | :---: | :---: |
| Redwares |  |  |
| Type 1 | $\begin{aligned} & \text { R2M12B7-93 } \\ & \text { R2M12C4-34 } \end{aligned}$ | Midden Midden |
| Type 2 | R2M9G1-20 | Warehouse: Upper |
| Brownwares |  |  |
| Type 1 | R2M14N8-34 | Trash Pit 4 |
| Type 2 | R2M12A2-17 <br> R2M12B1-125 <br> R2M12B6-12 <br> R2M12B7-76 <br> R2M12C2-46 | Midden Midden Midden Midden Midden |
| Type 3 | R2M10B4-34 <br> R2M13A1-17 <br> R2M13C1-87 <br> R2M13C9-30 <br> R2M13D1-34,41 <br> R2M13D2-27 <br> R2M13E1-52 <br> R2M13H1-75 <br> R2M14E1-41 <br> R2M14E3-39 <br> R2M14F1-30 <br> R2M14F2-32 | Men's House: Lower East Test: Upper SE Palisade: Upper SE Palisade: Lower SE Palisade: Upper SE Palisade: Lower SE Palisade: Upper SE Palisade: Upper SE Palisade: Upper SE Palisade: Upper SE Palisade: Upper SE Palisade: Lower |
| Type 4 | R2M10A1-25 <br> R2M13C1-89 <br> R2M13D1-42 <br> R2M13E1-53 <br> R2M13H1-76 <br> R2M14E3-38 <br> R2M14N6-28 | Men's House: Upper SE Palisade: Upper SE Palisade: Upper SE Palisade: Upper SE Palisade: Upper SE Palisade: Upper Trash Pit 4 |
| Type 5 | R2M12A1-24 R2M12B1-157 <br> R2M12C1-119 | Midden Midden Midden |
| Blue-on-White Earthenwares |  |  |
| Type 1 | $\begin{aligned} & \text { R2M10B1-30,41 } \\ & \text { R2M10B4-28 } \end{aligned}$ | Men's House: Upper <br> Men's House: Lower |


| TYPE | CATALOGUE NUMBER | PROVENANCE |
| :---: | :---: | :---: |
|  | $\begin{aligned} & \text { R2M12A1-15,18,80 } \\ & \text { R2M12A2-11 } \\ & \text { R2M12B1-103,107,111,113, } \\ & \quad 114,116,120 \end{aligned}$ | Midden <br> Midden <br> Midden |
|  | R2M12B3-14 | Midden |
|  | R2M12B7-55,56 | Midden |
|  | $\begin{gathered} \text { R2M12C1-71, } 75,78,83, \\ 84,86 \end{gathered}$ | Midden |
|  | R2M12C2-34,38,39 | Midden |
|  | R2M12C4-19 | Midden |
|  | R2M13H1-60,61 | SE Palisade: Upper |
|  | R2M14J6-12 | Palisade Trench |
| Type 2 | R2M12B1-110 | Midden |
|  | R2M12C2-33 | Midden |
| Type 3 | R2M9B1-10 | Warehouse: Upper |
|  | R2M10C1-48,77,79,80,82 | Men's House: Upper |
|  | R2M12A1-16,17,77,79 R2M12A2-13 | Midden <br> Midden |
|  | R2M12B1-109 | Midden |
|  | R2M12C1-76 | Midden |
|  | R2M12C2-36 | Midden |
|  | R2M13C2-18,35 | SE Palisade: Upper |
|  | R2M13L10-31 | Privy |
|  |  |  |
| Type 4 | R2ME2-9 | Warehouse: Upper |
|  | R2M9E4-8 | Warehouse: Upper |
|  | R2M9J1-11 | Front Gate: Upper |
|  | R2M9K1-42 | Warehouse: Upper |
|  | R2M10B1-38 | Men's House: Upper |
|  | R2M10C1-47 | Men's House: Upper |
|  | R2M11A1-7 | Blacksmith's:Upper |
|  | R2M12C4-20 | Midden |
|  | R2M13A1-18,19 | East Test |
|  | R2M13C1-54,55,56 | SE Pal isade: Upper |
|  | R2M13D1-25 | SE Palisade: Uppeer |
|  | R2M13H1-47,48 | SE Palisade: Upper Men's House: Upper |
|  | R2M13L1-35 | Men's House: Upper Privy |
|  | R2M13L6-19 | Privy |
|  | R2M13L9-10 | Privy |
|  | R2M14E1-29,34 | SE Palisade: Upper |
|  | R2M14F1-19 | SE Palisade: Upper SE Palisade: Lower |
|  | R2M14F2-27 | SE Palisade: |
|  | R2M14H1-28 | SE Palisade: Upper |


| TYPE | CATALOGUE NUMBER | PROVENANCE |
| :---: | :---: | :---: |
|  | $\begin{aligned} & \text { R2M14K1-22 } \\ & \text { R2M14M3-21, } 22 \\ & \text { R2M14N6-25 } \\ & \text { R2M14N8-28 } \\ & \text { R2M14P1-13 } \end{aligned}$ | SE Palisade: Upper <br> Front Gate: Upper <br> Trash Pit 4 <br> Trash Pit 4 <br> Palisade Trench |
| Type 5 | $\begin{aligned} & \text { R2M9G1-21 } \\ & \text { R2M13H1-49 } \\ & \text { R2M13L9-1 } \\ & \text { R2M14K1-24 } \end{aligned}$ | Warehouse: Upper <br> SE Palisade: Upper Privy <br> SE Palisade: Upper |
| Type 6 | R2M10B1-32 <br> R2M10B5-5 <br> R2M11A1-31,32 <br> R2M13A1-26,27,29 <br> R2M13B1-60 <br> R2M13E1-39,47 <br> R2M13H1-31,54 <br> R2M13L10-36 <br> R2M14E3-46,54,55 <br> R2M14F1-20 <br> R2M14G1-40 <br> R2M14G2-6,7 <br> R2M14J8-6 <br> R2M14K1-26 <br> R2M14M2-27,31 <br> R2M14M3-24,31 <br> R2M14N1-9 <br> R2M14P1-15 | Men's House: Upper <br> Men's House: Lower <br> Blacksmith's:Upper <br> East Test: Upper <br> SE Palisade: Upper <br> SE Palisade: Upper <br> SE Palisade: Upper <br> Privy <br> SE Palisade: Upper <br> SE Palisade: Upper <br> SE Palisade: Upper <br> SE Palisade: Lower <br> Picket Fence Trench <br> SE Palisade: Upper <br> Front Gate: Upper <br> Front Gate: Upper <br> Block <br> Palisade Trench |
| Type 7 | $\begin{aligned} & \text { R2M10B4-29 } \\ & \text { R2M12B1-105 } \\ & \text { R2M12B3-13 } \\ & \text { R2M12B7-57 } \\ & \text { R2M12C1-90 } \end{aligned}$ | Men's House: Lower <br> Midden <br> Midden <br> Midden <br> Midden |
| Type 8 | R2M9B1-9 <br> R2M9K1-44 <br> R2M12B7-64 <br> R2M13C1-82 <br> R2M13H1-46 <br> R2M13L7-25 <br> R2M14E3-40 <br> R2M14H1-32 <br> R2M14K1-25 <br> R2M14M2-25 | Warehouse: Upper <br> Warehouse: Upper <br> Midden <br> SE Palisade: Upper <br> SE Palisade: Upper <br> Privy <br> SE Palisade: Upper <br> SE Palisade: Upper <br> SE Palisade: Upper <br> Front Gate: Upper |


| TYPE | CATALOGUE NUMBER | PROVENANCE |
| :---: | :---: | :---: |
|  | R2M14N8-25,26 | Trash Pit 4 |
| Type 9 | R2M9F1-23 <br> R2M10B1-39 <br> R2M12B7-65 <br> R2M13C1-57 <br> R2M13E1-44 <br> R2M13F2-2 <br> R2M13H1-50,59 <br> R2M14E1-31,37 <br> R2M14E2-10 <br> R2M14E3-47 <br> R2M14F1-26 <br> R2M14F2-21,22 <br> R2M14G1-27 <br> R2M14H1-29 <br> R2M14N1-10 <br> R2M14N12-8 | Warehouse: Upper <br> Men's House: Upper Midden <br> SE Palisade: Upper <br> SE Palisade: Upper <br> SE Palisade: Lower <br> SE Palisade: Upper <br> SE Palisade: Upper <br> SE Palisade: Lower <br> SE Palisade: Upper <br> SE Palisade: Upper <br> SE Palisade: Lower <br> SE Palisade: Upper <br> SE Palisade: Upper <br> Block <br> Trash Pit 3 |
| Type 10 | R2M9C1-10 <br> R2M9F1-24 <br> R2M10A1-19 <br> R2M10C1-51 <br> R2M11A1-16 <br> R2M13B1-49 <br> R2M1 3D2-28 <br> R2M13H1-45 <br> 2M13L7-80 <br> R2M13L9-14,15 <br> R2M14E3-45 <br> R2M14F1-21 <br> R2M14F2-23 <br> R2M14G1-43 <br> R2M14J10-1 | Warehouse: Upper Warehouse: Upper <br> Men's House: Upper <br> Men's House: Upper <br> Blacksmith's:Upper <br> SE Palisade: Upper <br> SE Palisade: Lower <br> SE Palisade: Upper <br> Privy <br> Privy <br> SE Palisade: Upper <br> SE Palisade: Upper <br> SE Palisade: Lower <br> SE Palisade: Lower <br> SE Palisade: Lower |
| Type 11 | $\begin{aligned} & \text { R2M12A1-82 } \\ & \text { R2M12B1-112 } \\ & \text { R2M12C1-91 } \end{aligned}$ | Midden <br> Midden <br> Midden |
| Type 12 | R2M9D3-7 <br> R2M9K1-41 <br> R2M10B1-40 <br> R2M13B1-59 <br> R2M13C1-58 <br> R2M13L6-20 <br> R2M14E2-9 | Warehouse: Upper <br> Warehouse: Upper <br> Men's House: Upper <br> SE Palisade: Upper <br> SE Palisade: Upper <br> Privy <br> SE Palisade: Lower |


| TYPE | CATALOGUE NUMBER | PROVENANCE |
| :---: | :---: | :---: |
|  | $\begin{aligned} & \text { R2M14J6-9 } \\ & \text { R2M14M2-26 } \end{aligned}$ | Palisade Trench Front Gate: Upper |
| Type 13 | R2M13B1-58,65,70 <br> R2M13C9-21.1 <br> R2M13D2-29 <br> R2M13E1-42 <br> R2M13H1-53 <br> R2M13L1-31,33 <br> R2M13L7-26,27 <br> R2M13L9-12 <br> R2M13L11-6 <br> R2M14E3-62 <br> R2M14G1-24,44 <br> R2M14N8-27,29 <br> R2M14N12-9 <br> R2M14P1-14 | SE Palisade: Upper <br> SE Palisade: Lower <br> SE Palisade: Lower <br> SE Palisade: Upper <br> SE Palisade: Upper <br> Men's House: Upper <br> Privy <br> Privy <br> Privy <br> SE Palisade: Upper <br> SE Palisade: Upper <br> Trash Pit 4 <br> Trash Pit 3 <br> Palisade Trench |
| Type 14 | R2M9K1-58 <br> R2M12C4-21 <br> R2M13B1-76 <br> R2M13B2-9 <br> R2M13C4-2 <br> R2M13E1-38 <br> R2M13H1-62 <br> R2M14K1-29 <br> R2M14K3-15 <br> R2M14M2-30 <br> R2M14N2-11 <br> R2M14N8-32 | Warehouse: Upper Midden <br> SE Palisade: Upper <br> SE Palisade: Lower <br> Trash Pit 4 <br> SE Palisade: Upper <br> SE Palisade: Upper <br> SE Palisade: Upper <br> Trash Pits 2 \& 3 <br> Front Gate: Upper <br> Trash Pit 1 <br> Trash Pit 4 |
| Type 15 | $\begin{aligned} & \text { R2M12A2-10,12 } \\ & \text { R2M12A3-5 } \\ & \text { R2M12C2-40 } \end{aligned}$ | Midden Midden Midden |
| Type 16 | R2M9K1-38 <br> R2M10B1-33 <br> R2M10C1-50,59 <br> R2M11A1-18,20,22 <br> R2M13B1-57,62 <br> R2M13D1-32 <br> R2M13D2-31 <br> R2M13L5-5 <br> R2M13L10-27 | Warehouse: Upper <br> Men's House: Upper <br> Men's House: Upper <br> Blacksmith's:Upper <br> SE Palisade: Upper <br> SE Palisade: Upper <br> SE Palisade: Lower <br> Privy <br> Privy |
| Type 17 | R2M12A3-6,7 | Midden |



| TYPE | CATALOGUE NUMBER | PROVENANCE |
| :---: | :---: | :---: |
| Green-on-White Earthenwares |  |  |
| Type 1 | R2M12B1-121 | Midden |
| Polychrome Earthenwares |  |  |
| Type 1 | $\begin{aligned} & \text { R2M9L1-18 } \\ & \text { R2M10C1-56 } \end{aligned}$ | Warehouse: Upper <br> Men's House: Upper |
| Type 2 | $\begin{aligned} & \text { R2M12B1-122,123,124,126 } \\ & \text { R2M12C1-103 } \end{aligned}$ | Midden <br> Midden |
| Type 3 | $\begin{aligned} & \text { R2M10B4-35 } \\ & \text { R2M12A1-23 } \\ & \text { R2M12B1-130,158 } \\ & \text { R2M12C1-106 } \\ & \text { R2M12C4-24 } \end{aligned}$ | Men's House: Lower <br> Midden <br> Midden <br> Midden <br> Midden |
| Sponged Wares | R2M9F1-26 <br> R2M13A1-14 <br> R2M13B1-66,68 <br> R2M13C1-92 <br> R2M13C9-19,20 <br> R2M13D1-27 <br> R2M13G2-1 <br> R2M14E2-18 <br> R2M14E3-41 <br> R2M14F1-28 <br> R2M14F2-26 <br> R2M14G1-26 <br> R2M14H1-23 <br> R2M14P1-19 | Warehouse: Upper East Test <br> SE Palisade: Upper SE Palisade: Upper SE Palisade: Lower SE Palisade: Upper Bird Feature 2 SE Palisade: Lower SE Palisade: Upper SE Palisade: Upper SE Palisade: Lower SE Palisade: Upper SE Palisade: Upper Palisade Trench |
| Type 2 | R2M9G1-22 <br> R2M13C1-79 <br> R2M13D1-26 <br> R2M13HI-79 <br> R2M14J6-8 | Warehouse: Upper <br> SE Palisade: Upper <br> SE Palisade: Upper <br> SE Palisade: Upper <br> Palisade Trench |
| Type 3 | R2M9K1-46,48 <br> R2M13H4-5 <br> R2M13L1-38 <br> R2M13L7-34 | Warehouse: Upper <br> Trash Pits 2 \& 3 <br> Men's House: Upper Privy |

Table 1 (Cont'd). Catalogue List and Provenance of Ceramic Types

| TYPE | CATALOGUE NUMBER | PROVENANCE |
| :---: | :---: | :---: |
|  | $\begin{aligned} & \text { R2M13L9-12,20 } \\ & \text { R2M14E1-36 } \\ & \text { R2M14G1-29 } \\ & \text { R2M14G2-5 } \\ & \text { R2M14M2-24 } \end{aligned}$ | Privy <br> SE Palisade: Upper SE Palisade: Upper Bird Feature? Front Gate: Upper |
| Type 4 | R2M10C1-45 <br> R2M13C1-78 <br> R2M13L1-39 | Men's House: Upper SE Palisade: Upper Men's House: Upper |
| Whitewares |  |  |
| Type 1 | $\begin{aligned} & \text { R2M12A3-9 } \\ & \text { R2M13L1-45 } \\ & \text { R2M14N8-37 } \end{aligned}$ | Midden <br> Men's House: Upper Trash Pit 4 |
| Stonewares |  |  |
| Type 1 | R2M14N8-33 | Trash Pit 4 |
| Type 2 | $\begin{aligned} & \text { R2M10B1-43 } \\ & \text { R2M10C1-2,6 } \\ & \text { R2M12B1-141 } \\ & \text { R2M12B3-15, } 16 \\ & \text { R2M12B7-85 } \\ & \text { R2M13C1-94 } \\ & \text { R2M13L5-6 } \\ & \text { R2M14E1-40 } \\ & \text { R2M14E3-64 } \\ & \text { R2M14G1-32 } \end{aligned}$ | Men's House: Upper <br> Men's House: Upper <br> Midden <br> Midden <br> Midden <br> SE Palisade: Upper <br> Privy <br> SE Palisade: Upper <br> SE Palisade: Upper <br> SE Palisade: Upper |
| Type 3 | R2M13C1-88 | SE Palisade: Upper |
| Porcelains |  |  |
| Type 1 | $\begin{aligned} & \text { R2M12C1-92 } \\ & \text { R2M12C2-42 } \end{aligned}$ | Midden Midden |
| Type 2 | $\begin{aligned} & \text { R2M12A1-86 } \\ & \text { R2M12A2-24 } \\ & \text { R2M12A3-11 } \\ & \text { R2M12C1-104 } \end{aligned}$ | Midden <br> Midden <br> Midden <br> Midden |
| Type 3 | R2M12B7-79 | Midden |

Table 1 (Cont'd). Catalogue List and Provenance of Ceramic Types

| TYPE | CATALOGUE NUMBER | PROVEMANCE |
| :--- | :--- | :--- |
|  | R2M13E1-50 | SE Palisade: Upper |
|  | R2M13L1-40 | Men's House: Upper |
| R2M13L10-37 | Privy |  |
| Type 4 | R2M12C1-100 | Midden |
|  | R2M12B1-131,138 | Midden |
| Type 5 | R2M12A2-23 | Midden |
| Type 6 | R2M12C1-98 | Midden |
| Type 7 | R2M12A1-19 | Midden |
|  | R2M12A2-26 | Midden |
|  | R2M12B1-133 | Midden |
|  | R2M12C1-95 | Midden |
|  | R2M12C2-44 | SE Palisade: Upper |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

$44(25.3 \%)$ are the first variant and consist of a simple ring above a cylindrical neck. The variant type BI, consisting of a ring below the lip, is represented by two ( $1.1 \%$ ) specimens. The two (1.1\%) Type BII specimens have a ring lip and a second narrow ring applied around the lower neck region. The last variant, type BIII, is represented by six ( $3.4 \%$ ) specimens which show an additional ring on the lower neck. All of the type B lips are made of clear or tinted glass (table 3). The majority were made from post-bottom molds and may have contained household products or patent medicines (table 1).

Type C (Figure 54):
Only four (2.3\%) of the sample have the expanded, funnel-shaped lip on a cylindrical neck which defines this type; there are no variants (table 2). All specimens are made of clear or tinted glass (table 3). All are probably of post-bottom mold manufacture and may be medicine bottles (table 1).

## Type D (Figure 54):

The 20 type D and variant lips form $11.5 \%$ of the sample (table 2). Most (15) of these are type D and only five variant specimens were noted. All are of clear or tinted glass and were made from post-bottom molds, (tables 1,3). These double ring lip bottles possibly contained patent medicines.

## Type E (Figure 55):

The 28 type E and variant collared lips form $16.1 \%$ of the sample (table 2). Fifteen are of coloured glass and 13 are made of clear or tinted glass. Of the coloured glass specimens, eight are green, five are brown and two are blue (table 3). Most are of post-bottom mold manufacture and may be liquor bottles (table 1).

Type $F$ (Figure 55 ):
The 22 type $F$ and variant $1 i p s$ form $12.6 \%$ of the sample (table 2). Seven examples are made of coloured glass and 15 are of clear or tinted glass (table 3). All of the coloured specimens are of brown glass.

Probably all are of post-bottom mold manufacture (table 1).

Type G (Figure 55):
Only five ( $2.9 \%$ ) specimens are listed as type $G$ or variant bottles (table 2). All are of clear or tinted glass (table 3). Two of the specimens appear to be early machine-made bottles; the method of manufacture could not be determined for the other type $G$ specimen (table 1). The types GI and GII variants are both of the post-bottom mold type.

Type H (Figure 55):
The three type $H$ and variant lips form only $1.7 \%$ of the sample (table 2). These specimens, designed for a screw-on cap, are all made of clear or tinted glass (table 3). Probably all are machine-made (table 1).

## Stoppers

Of 12 glass stoppers recovered, seven are green glass, three are brown glass and two are tinted or clear glass (table 4). Three specimens are identified as "CARTON'S H.P. SAUCE", and one is for Lea and Perrins sauce. One specimen contains a lead seal with a wolf or boar's head design. One stopper is a cut glass spheroid, possibly for a perfume bottle. All other specimens have a circular top and cylindrical plug.

## Jars

Type A:
The type $A$ jar rims are designed for a screw cap. The morphological variants are illustrated in Figure 2. Of the 12 tyoe $A$ and variant jars, one is brown glass and the rest are of clear or tinted glass (table 5).

## Type B:

The type B jars lack threads for screw caps and were presumably closed by a stopper-like arrangement (Figure 2). The eight type B and variant jars are made of clear or tinted glass (table 5).

Table 1.
Bottle Lip Types

| TYPE | COLOUR NAME | PLATE | MANUFACTURE | FUNCTION | CATALOGUE NUMBER | PROVENANCE |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A | Raw Sienna | III 17c | post-bottom mold |  |  |  |  |
| A | Anber Brown | III 13k | machine-made |  | $\begin{aligned} & \text { R2M12AT-26 } \\ & \text { R2M12A1-28 } \end{aligned}$ | Midden Midden |  |
| A | Raw Sienna | III 17c |  |  | R2M12A1-93 | Midden |  |
| A | Antique Brown | III 17k | post-bottom mold (late) |  | R2M12B1-167 | Midden |  |
| A | Amber Brown | III 13k | post-bottom mold (late) |  | R2M12B1-168 | Midden |  |
| A | Mars Yellow | III 15i | machine-made |  | R2M12B1-165 | Midden |  |
| A | Sanford's Brown | II 11k | machine-made | beverage | R2M12C1-121 | Midden |  |
| A | Burnt Sienna | II 9k | machine-made | beverage | R2M12C1-123 | Midden |  |
| A | Amber Brown | III 13k | machine-made | beverage | R2M12C1-138 | Midden |  |
| A | Antique Brown | III 17k |  | beverage | R2M12C1-139 | Midden |  |
| A | Mars Yellow | III 15i | machine-made (early) | beverage | R2M12C1-144 | Midden |  |
| A | Amber Brown | II I 13k | machine-made | beverage | R2M13A1-36 | East Test: |  |
| A | Biscay Green | XVII 27i |  | beverage | R2M13A1-37 | East Test: | Upper |
| A | Light Hellebore Green | XVII 25k | machine-made | beverage | R2M12A1-96 | Midden |  |
| A | Cress Green | XXVI 29k | machine-made (early) | beverage | R2M12B1-159 | Midden |  |
| A | Light Hellebore Green | XVII 25k | post-bottom mold (late) | beverage | R2M12B1-162 | Midden |  |
| A | Light Cress Green | XXXI 29k | machine-made | beverage | R2M12C1-156 | Midden |  |
| A | Light Elm Green | XVII 27k | post-bottom mold |  | R2M12C1-159 | Midden |  |
| A | Light Hellebore Green | XVII 25k | machine-made |  | R2M12C1-161 | Midden |  |
| A | Rinneman's Green | XVIII 31 i | machine-made | beverage | R2M12C1-162 | Midden |  |
| A | Courage Green | XVII 25i |  |  | R2M12B1-163 | Midden |  |
| A | Biscay Green | XVII $27 i$ | post-bottom mold | beverage | R2M12B1-164 | Midden |  |
| A | Biscay Green | XVII 27i | machine-made | beverage | R2M12C1-169 | Midden |  |
| A | Warble Green | IV 23k | machine-made | beverage | R2M12C1-170 | Midden |  |
| A | (Greenish Glaucous) | XLI 33f | machine-made |  | R2M12A1-48 | Midden |  |
| A | Clear |  | machine-made | beverage | R2M12C1-160 | Midden |  |
| A | Clear |  | machine-made | beverage | R2M12C1-143 | Midden |  |
| A1 | Chestnut Brown | II 9 m | post-bottom mold |  | R2M12B1-168 | Midden |  |
| AI | Amber Brown |  | post-bottom mold | beverage | R2M12C1-129 | Midden |  |
| AI | Amber Brown | III 173 k | post-bottom mold | beverage | R2M12C1-130 | Midden |  |
| AI | Amber Brown | III 13 k | post-bottom mold | beverage | R2M12C1-131 R2M12C1-149 | Midden Midden |  |
| ${ }_{\text {AI }}$ | Courage Green Biscay Green | XVII $\times$ VII $27 i$ | machine-made | beverage | R2M12A1-34 R2M12C1-174 | Midden |  |

The type A and variant lamp chimney rims are illustrated in Figure 3. All are of clear or tinted glass, as would be expected (table 6).

This is a simple category for the lower rims recovered. Five specimens, all of clear glass, are listed (table 6). These undoubtedly form the lower border for the type $A$ and variant lamp chimney rims.

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Table 1 (Cont'd). Bottle Lip Types


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Table 1 (Cont'd). Bottle Lip Types


Table 2. Frequencies of Bottle Lip Types and Closures

| TYPE/ vaRIETY | N | \% | TYPE | N | \% | CLOSURE | N | \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A | 27 | 15.5 | A | 38 | 21.8 | Crown Cap (A) | 38 | 21.8 |
| AI | 10 | 5.8 | B | 54 | 31.0 | Stopper (B-G) | 133 | 76.4 |
| AII | 1 | 0.6 | C | 4 | 2.3 | Screw Cap | 3 | 1.7 |
| B | 44 | 25.3 | D | 20 | 11.5 |  |  |  |
| BI | 2 | 1.1 | E | 28 | 16.1 | TOTAL |  |  |
| BII | 2 | 1.1 | F | 22 | 12.6 | total | 174 | 99.9 |
| BIII | 6 | 3.4 | G | 5 | 2.9 |  |  |  |
| c | 4 | 2.3 | H | 3 | 1.7 |  |  |  |
| D | 15 | 8.6 |  |  |  |  |  |  |
| $\stackrel{\text { DI }}{\text { DII }}$ | 1 | 0.6 1.1 | TOTAL | 174 | 99.9 |  |  |  |
| DIII | 1 | 0.6 |  |  |  |  |  |  |
| DIV | 1 | 0.6 |  |  |  |  |  |  |
| E | 17 | 9.8 |  |  |  |  |  |  |
| EI | 2 | 1.1 |  |  |  |  |  |  |
| $\stackrel{\text { EII }}{\text { F }}$ | 9 | 5.2 |  |  |  |  |  |  |
| FI | 5 | 2.9 |  |  |  |  |  |  |
| FII | 4 | 2.3 |  |  |  |  |  |  |
| FIII | 2 | 1.1 |  |  |  |  |  |  |
| $\stackrel{G}{G}$ | 3 | 1.7 0.6 |  |  |  |  |  |  |
| GII |  | 0.6 |  |  |  |  |  |  |
| H | 1 | 0.6 |  |  |  |  |  |  |
| HI | , | 0.6 |  |  |  |  |  |  |
| HII | 1 | 0.6 |  |  |  |  |  |  |
| TOTAL | 174 | 100.0 |  |  |  |  |  |  |

Table 3.
Frequencies of Lip Type Colours

| TYPE |  | BROWN | GREEN | BLUE | TINTED | CLEAR | N |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A |  | 12 | 12 | - | 1 | 2 | 27 |
| AI |  | 5 | 2 | - | 3 | - | 10 |
| AII |  | 1 | - | - | - | - | 1 |
| TOTAL <br> Colour/Clear: 32/6 |  | 18 | 14 | - | 4 | 2 | 38 |
|  |  |  |  |  |  |  |  |
| B |  | - | - | - | 26 | 18 | 44 |
| BI |  | - | - | - | 2 | - | 2 |
| BII |  | - | - | - | , | , | 2 |
| BIII |  | - | - | - | 4 | 2 | 6 |
| TOTAL | 0/54 | - | - | - | 33 | 21 | 54 |
| Colour/Clear: |  |  |  |  |  |  |  |
| c |  | - | - | - | 2 | 2 | 4 |
| TOTAL | 0/4 | - | - | - | 2 | 2 | 4 |
| Colour/Clear: |  |  |  |  |  |  |  |
| $\begin{aligned} & 0 \\ & \text { DI } \\ & \text { DII } \\ & \text { DIII } \\ & \text { DIV } \end{aligned}$ |  | - | - | - | 14 | 1 |  |
|  |  | - | - | - | 1 | - | 1 |
|  |  | - | - | - | 2 | - | 2 |
|  |  | - | - | - | 1 | - | 1 |
| TOTAL | 0/20 | - | - | - | 19 | 1 | 20 |
| Colour/Clear: |  |  |  |  |  |  |  |
| $\begin{aligned} & E \\ & E I \\ & E I I \\ & \text { EII } \end{aligned}$ |  | 4 | 2 | 2 |  | - | 17 |
|  |  | - | - | 2 | 1 | 1 | 2 |
|  |  | 1 | 6 | - | 2 | - | 9 |
| TOTAL |  | 5 | 8 | 2 | 12 | 1 | 28 |
| Colour/Clear: 15/13 |  |  |  |  |  |  |  |
| $\begin{aligned} & F \\ & F I \end{aligned}$ |  | 4 | - | - | 6 | 1 | 11 |
| FII |  | 3 | - | - | 4 | 1 | 5 |
| FIII |  | 3 | - | - | $\overline{2}$ | 1 | 4 2 |
| TOTAL |  | 7 |  | - | 12 | 3 | 22 |
| Colour/Clear: $7 / 15$ |  | 7 | - | - | 12 | 3 |  |

Table 4. Glass Stoppers

| COLOUR <br> NAME | PLATE | MANUFACTURE | FUNCTION | CATALOGUE NUMBER | PROVENANCE |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Dull Opaline Green | XIX 37f |  | (wolf's head) | R2M12A2-34 | Midden |
| Microline Green | XIX 39 f |  | Carton's H.P. sauce | R2M12C1-185 | Midden |
| Clear |  |  | (cut glass) | R2M12A1-62 | Midden |
| Lichen Green | XXXIV 37f |  | Carton's H.P. sauce | R2M12B1-208 | Midden |
| Glaucous Green | XXXIII 39d |  | Carton's H.P. sauce | R2M12B1-209 | Midden |
| Glaucous Green | XXXIII 39d |  | Lea \& Perrins | R2M12B1-210 | Midden |
| Clear Fluorite Green | XXXII 33b |  |  | R2M14E3-98 | SE Palisade: Upper |
| Glaucous Green | XXXIII 39d |  |  | R2M12A1-52 | Midden |
| Mahogany Red | II 7k |  |  | R2M12B7-94 | Midden |
| Chestnut | II 9m |  |  | R2M12C2-54 | Midden |
| Amber Brown | III 13k |  |  | R2M12C4-37 | Midden |
| (Pale Turquoise Green) | VII 41f |  | sealer liner | R2M12B2-22 | Midden |



# Table 5. Jar Rims 

| COLOUR NAME | PLATE | MANUFACTURE | FUNCTION | CATALOGUE NUMBER | PROVENANCE |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| n Brown | III 15k |  | pill bottle | R2M12C1-147 | Midden |  |
| r |  |  |  | R2M12C1-244 | Midden |  |
| r |  |  |  | R2M9G1-29 | Warehouse: | Upper |
| r |  |  |  | R2M12B2-31 | Midden |  |
| r |  |  |  | R2M14M2-45 | Front Gate: | Upper |
| ht Gull Grey) | LIII cg10 |  |  | R2M9 K1-78 | Warehouse: | Upper |
| lid Quaker Drab) | LI lf |  |  | R2M12C1-213 | Midden |  |
| - |  |  |  | R2M12C1-246 | Midden |  |
| r |  |  |  | R2M12B1-231 | Midden |  |
| ht Vinaceous Grey) | L 69f |  |  | R2M12C1-209 | Midden |  |
| r |  |  |  | R2M12B1-229 | Midden |  |
|  |  |  |  | R2M12B1-229 | Midden |  |
| ucous) | XLI 39f |  |  | R2M12B1-197 | Midden |  |
| r |  |  |  | R2M12B1-227 | Midden |  |
| r |  |  |  | R2M14F1-48 | SE Palisade: | Upper |
| e Glaucous Green) | XXXIII $39 f$ | machine-made |  | R2M12B1-196 | Midden |  |
| r |  |  |  | R2M12B1-230 | Midden |  |
|  |  |  |  | R2M12L6-46 | Privy |  |
| 11 Opaline Green) | XIX 37 f |  |  | R2M12B1-195 |  |  |
| ar |  |  |  | R2M12C2-69 |  |  |



TYPE




III


There were 120 buttons recovered. Of these, 48 were metal, 11 were bone, 27 were she 11 , and 26 were glass. There is also one faceted jet button, two glass insets, and five buttons of unidentified material. A11 of the bone and she 11 buttons are of the sew-through type, as are 24 of the glass buttons and 25 of the metal buttons. Two of the glass buttons, 23 of the metal buttons, and the single jet button, were fastened to the gament by means of a loop shank. The two glass insets probably also belonged to shank-type buttons. Of the 23 metal shank buttons, three are sleeve buttons, that is double buttons of a similar size and shape connected by means of a metal pole-shank, and one is a cuff-link.

## Yetal Buttons

Type 1 (Figure 56):
These are one-biece sew-through brass buttons. The face has a flat rim with a deep centre concavity which contains four holes for fastening. There is variation in the face decoration. Three of the buttons (R2M13C1-145, R2M14E3-126, R2M14K1-19) have a raised ring around the outer edge of the rim. The edge of the concavity has short (less than $1 / 16$ inch) lines radiating outward. The rim has "BEST-RING-EDGE" embossed on it. One button has the remains of black paint on both the face and back. Inree other buttons (R2M13E1-26, R2M13H1-30, R2M13L1-22) have a raised ring around the outer edge of the rim. There is an impressed dotted ring around the edge of the concavity, and an impressed ring around each of the fastening holes. The rim has "SUSPENDER" and a fleur-de-lis and dots impressed on it. One button has the remains of black paint on it, single button (R2M13C2-11) has a raised ring around the outer edge of the rim, and "W. WATSUN/GUELPH" and two stars embossed on it. One button (R2M M 3H1-44) has a raised ring around the outer edge of the rim and a raised ring around the edge of the concavity. Seven embossed stars are on the rim between the rings,

Tyoe 2 (Figure 56):
This is a one-piece sew-through brass button, (R2M14K1-20) which is similar in shape to type 1 , but the central concavity is oval, and contains two holes for fastening. There is no decoration on the face, but remains of shiny black paint adhere to both the face and back.

## Type 3 (Figure 56):

These are one-piece cloth-covered sew-through buttons (R2M12B4-5, R2M13C1-146). The rim of the flat brass back was crimped over to hold in place a stuffed cloth front. There are two fastening holes in the centre of the back. One button has the remains of the cloth front.

Type 4 (Figure 56):
Four of these buttons (R2M9F1-15, R2M9K1-124, R2M14G1-17, R2M9K1-26) are the iron fronts of two-piece sew-through buttons. A fifth button (R2M14E4-8) is complete. The faces have four fastening holes set in a centre concavity, with a rounded rim which was crimped over the edge of the convex back.

## Type 5 (Figure 56):

These are two-piece sew-through buttons. The back is convex, with a ring around the two fastening holes formed by double bars in a centre perforation. The convex face has a single centre perforation to expose the fastening holes in the back, and is crimped over the edge of the back. Remains of black paint adhere to both buttons (R2M13E1-28, R.2M14B3-127). One button has eight flowers impressed around the rim of the face and "J.N. \& C./PATENT" impressed on the back.

## Type 6 (Figure 56):

These are two-piece sew-through iron buttons similar to type 5, but the front is brass with an embossed ring around the centre perforation. The two holes for fastening are formed by a single bar across the centre perforation in the back. One button (R2M13C1-150) has an inscription on the rim of the face which is indistinct except for a crossed oval motif. The other three buttons are too corroded to show any decoration (R2M11A1-11, R2M13E1-30, R2M14E3-125).

Type 7 (Figure 56):
These are hollow two-piece sew-through iron buttons. The rim of the convex face is crimped over the edge of the convex back and the two fastening holes are formed by a single bar across the centre perforations in both face and back. They may have been cloth-covered as one of the buttons (R2M13E1-29) has the imprint of cloth on the back. The other three buttons of this type are very corroded (R2M13B2-4, R2M13D2-19, R2M13E1-29).

Type 8 (Figure 56):
This iron button (R2M14N10-7) is similar to types 5, 6 and 7, but corrosion makes it impossible to determine the number of fastening holes, or if it was hollow. It does have the remains of black paint on both face and back.

Type 9 (Figure 56):
These are two (R2M13C1-153, R2M14M2-19) one-piece shank buttons. They consist of a brass disc with a flat, undecorated face, and a slightly concave "spun-back". The shank is a brass wire loop cast in place.

Type 10 (Figure 56):
This is a one-piece shank button, consisting of a brass disc with a slightly convex undecorated face, and a slightly concave back which has "SUP[R]..INE/QUALITY" surrounded by an impressed dotted ring. The shank is a brass loop cast in place (R2M13L10-80).

Type 11 (Figure 56):
This is a brass one-piece inset button back. There is a deep cavity in the face for the missing inset. The edges are straight and the back is slightly convex. The shank is a brass wire loop, possibly attached through a perforation in the centre (R2M13L7-66).

Type 12 (Figure 56):
This is a hollow two-piece button. The brass face is convex, and decorated with an embossed American Eagle. The rim is crimped over the elfe of a flat brass disc back with "SC[0].ILLS \& C. /E [X]TRA" impressed
on it. The shank is a brass wire loop inserted through a perforation in the centre of the back (R2M13C1-154)

## Type 13 (Figure 56):

These are hollow two-piece buttons with slightly convex fronts and backs. The rims of the fronts are crimped over the edges of the backs, Two of the buttons (R2M12C1-287, R2M13C1-152) are complete, but corroded, The shank of one consists of an iron wire loop inserted through a perforation in the centre back, while the shank of the other is missing. A single button front (R2M12C1-286) is brass, and was attached to an iron back which has corroded away. Embossed on the face is "CARHARTT'S/OALL. .. [N]ES" with a heart and bar motif in the centre. Another brass button front (R2M13C1-149) has no remains of the back, and is decorated on the face by an embossed "H" in a flattened circular area in the centre.

## Type 14 (Figure 56):

This is a hollow two-piece "ball" button. The front is an undecorated silver-plated brass dome attached to a flat brass disc back. The shank is a brass wire loop inserted through a perforation in the centre of the back (R2M13H1-31).

Type 15 (Figure 56):
This is the front of a flat two-piece button. The face is undecorated and the rim had been crimped over the edge of the missing back. It is possibly tin, or iron (R2M10A1-11).

## Type 16 (Figure 56):

This is a two-piece inset button back. It is iron, with a pebbletextured brass rim crimped over the edge around a flat recessed centre for the missing inset. The shank is a brass wire loop, probably attached through a perforation in the centre back (R2M13C1-151).

## Type 17 (Figure 56):

This is a flat, two-piece, cloth-covered button. The face is slightly concave, and the rim is crimped over the edge of the flat back. A large perforation is in the centre of the back for the missing shank. There
are remains of textile on both the face and the back; the weave is finer on the face of the button (R2M13L7-65).

## Type 18 (Figure 56)

These are hollow, two-piece, cloth-covered iron buttons. The rims of the slightly convex fronts are crimped over the edges of the slightly convex backs. There are single perforations in the centre of the backs for the missing shanks. One button (R2M12B7-185) has remains of the textile covering on the face; the other button (R2M14P1-32) has the fabcic weave imprinted in the rust.

Type 19 (Figure 56):
This is the iron front of a cloth-covered button. It has a high convex centre, and a ruffled rim for the attachment of the back (R2M12B3-10).

## Type 20 (Figure 56)

This is a two-piece button the face of which has a flat rim set off by a domed centre. Lines radiate out across the rim, which is crimped over the edge of the convex back. There is a flattened dome in the centre of the back. Judging from a small round disc on the interior of the back centre, the shank was probably a wire loop (R2M13E1-27).

Type 21 (Figure 56):
This is a sleeve button. Both halves are brass and have a convex face, with an indented centre ring around a perforation through which the brass shank is inserted. The edges angle in towards the back, which is convex. The outside button face is inscribed "WRIST FIT" with a scroll motif (R2M12B1-99).

## Type 22:

Both of these sleeve buttons (R2M12B1-99, R2M12B1-99) are incomplete, with the shank and one button missing. They are similar in size and shape to type 1, but the shank perforation does not extend through the button face. One is an outside button, and has a convex brass face with the rim crimped over an iron back. A recessed textured oval is in the
centre of the face with "DENTON/TORONTO" printed around it. The other could be an inside button. It is copper, with a raised circle around the perforation in the centre back and no decoration on the face.

Type 23 (Figure 56):
This is a complete oval brass cuff-link. The outside button was molded in one piece, and the slightly convex face is decorated with a ring of embossed dots around the rim and embossed chevrons longitudinally across the centre. The soldered-on shank appears to have been cut from sheet metal, has a right angle bend in the middle, and ends in a " $T$ ", which is inserted into a slot in the back of the inside button, allowing it to swivel. The two-piece inside button has a convex undecorated face, and the rim is crimped over the edge of the slotted back.

## Type 24 (Figure 56):

These are two-piece buttons. It is unknown whether they fastened by sewing through holes, by shank, or whether they were sleeve buttons. The brass face is flat, and there is a centre perforation. The rim is crimped over an iron back. Two of the buttons (R2M9F1-14, R2M13L6-54) have a raised ring around the edge of the rim, and a raised ring around the edge of the centre perforation. One button (R2M12C2-80) has no decoration on the face.

## Bone Buttons

Type 1 (Figure 57):
These are circular sew-through buttons. They have a rounded rim set off by an incised ring around a slightly concave centre which contains four fastening holes. The back is slightly convex. All of the buttons have a slight dent in the centre from the turning tool, and a cutting mark around the circumference. Five of the buttons (R2M13C1-143, R2M13H1-139, R2M13L10-79, R2M13L10-81, R2M13L11-12) have faint lines etched between the holes at right angles to each other through the centre.

## Type 2 (Figure 57):

This is a circular sew-through button. The slightly concave face has
a rim set off by an incised 1 ine $1 / 16$ inch from the edge, and a recessed centre containing four fastening holes. The back of the button has a flat rim and a convex centre. There is a deep dent in the centre of the face from the turning tool and a cutting mark around the edge (R2M14C1-66).

## Shell Buttons

Type 1 (Figure 57):
These are sew-through buttons. The face has a flat rim set off by a flat recessed centre containing four fastening holes. The backs are flat.

## Type 2 (Figure 57):

This is a sew-through button. The back is flat. The face has a rounded rim and a central concavity containing four fastening holes (R2M13H1-140).

Type 3 (Figure 57):
These are sew-through buttons, with a convex back. The centre of the face is concave, and contains four fastening holes. It is surrounded by a flat rim. One of the buttons (R2M10B1-68) has an incised decoration of five scallops around the rim in a flower shape.

Type 4 (Figure 57):
These are sew-through buttons with an undecorated concave face and an undecorated convex back. There are four fastening holes in the centre. One button (R2M13L12-34) has three of the holes broken out.

Type 5 (Figure 57):
These are undecorated flat sew-through buttons, with four fastening holes in the centre.

## Type 6 (Figure 57):

These are flat sew-through buttons, with two fastening holes in the centre. All but one of the buttons (R2M13H4-7) have an incised painted oval containing two fastening holes in the centre of the face with an incised double ring around the rim.

## Glass Buttons

Type 1 (Figure 57):
These are sew-through buttons. The face has a rounded rim and a concave centre containing four fastening holes. The back is convex. All the buttons of this type are white glass except two (R2M14N5-7) which are black. Four of the buttons have a band of paint applied around the edge and partly over the rim of the face. On three of these (R2M12A1-67, R2M12B1-258, R2M12C2-81) the paint is red, on the fourth (R2M12B2-45) the paint is blue. One button (R2M13C1-144) has red flowers painted at random over the face. Three other buttons have 24 ridges radiating out across the rim (R2M10B1-69, R2M13L10-82, R2M14N4-7), and one (R2M14K3-25) has a raised ring around the edge of the rim.

## Type 2 (Figure 57):

This is a sew-through button of white glass. The back is flat, with a rounded rim set off by an impressed ring. The face is undecorated and slightly convex, with an oval depression in the centre containing the two fastening holes (R2M12A1-68).

Type 3 (Figure 57):
This button is made of white glass and has a cone-shaped face. The back is flat to allow the attachment of a flat metal disc and a wire loop shank for fastening (R2M14P1-33).

Type 4:
This button is made of black glass and is patinated. The face is flat with six facets cut into the rim. One of these facets has been chipped away. The back is slightly convex. The metal inset shank for fastening has been broken off (R2M13L12-35).

## Miscellaneous Buttons

Type 1:
This is a jet button. The face is flat with seven facets cut into the rim, and the back is slightly convex. The metal inset shank is broken off (R2M14K1-60).

## Type 2:

This is a broken one-piece sew-through button. The material of manufacture is unknown. The face is slightly convex with "...M.R.C0/...T. 1851 " embossed on $i t$. The back is broken but had a flat rim which probably rose to a convex dome. The button originally had two fastening holes (R2M13L10-83).

## Type 3:

These are sew-through buttons of an indeterminate material, both warped. The face had a raised rounded rim and four holes for fastening. The back appears to have been convex. One button has light grey streaks on it (R2M13L9-38).

## Type 4:

This is a broken one-piece sew-through button of unidentified material, The face is flat, and the back is convex with a raised circle in the centre, containing four fastening holes. It could be a bone button, type 2 (R2M12C1-285).

Type 5:
This is a faceted clear glass dome inset. A butterfly has been carved into the flat back and silvered (R2M12C1-283).

## Type 6:

This is an opaque white glass inset. The face is slightly convex, with an abruptly rounded edge, and the back is flat (R2M12B2-44).

Type 7:
This is a flat disc with a central perforation. There are three concentric rings incised around the perforation on one side, and one ring incised on the other side (R2M9C1-18).

Type 8:
This is a brass boot-lace hook.

Table 1. Buttons

| TYPE | QUANTITY | CATALOGUE NUMBER | $\begin{aligned} & \text { DIAMETER } \\ & \text { SIZE } \\ & \text { (inches) } \end{aligned}$ | PROVENANCE |
| :---: | :---: | :---: | :---: | :---: |
| Metal Buttons |  |  |  |  |
| Type 1 | 1 | R2M13C1-145 | 3/4 | SE Palisade: Upper |
|  | 1 | R2M13C2-11 | 3/4 | SE Palisade: Upper |
|  | 1 | R2M13E1-26 | 1/2 | SE Palisade: Upper |
|  | 1 | R2M13H1-30 | 3/4 | SE Palisade: Upper |
|  | 1 | R2M13H1-44 | 3/4 | SE Palisade: Upper |
|  | 1 | R2M13L1-22 | 5/8 | Men's House: Upper |
|  | 1 | R2M14E3-126 | 5/8 | SE Palisade: Upper |
|  | 1 | R2M14KT-19 | 5/8 | SE Palisade: Upper |
| Type 2 | 1 | R2M14K1-20 | 5/8 | SE Palisade: Upper |
| Type 3 | 1 | R2M12B4-5 | 5/8 | Midden |
|  | 1 | R2M13C1-146 | 5/8 | SE Palisade: Upper |
| Type 4 | 1 | R2M9F1-15 | 5/8 | Warehouse: Upper |
|  | 1 | R2M9K1-26 | 5/8 | Warehouse: Upper |
|  | 1 | R2M14E3-124 | 5/8 | SE Palisade: Upper |
|  | 1 | R2M14G1-17 | 5/8 | SE Palisade: Upper |
|  | 1 | R2M14GI-17 | 5/8 | SE Palisade: Lower |
| Type 5 | 1 | R2M13E1-28 | 5/8 | SE Palisade: Upper |
|  | 1 | R2M14E3-127 | 5/8 | SE Palisade: Upper |
| Type 6 | 1 | R2M11A1-11 | 5/8 | Blacksmith's:Upper |
|  | 1 | R2M13C1-150 | $5 / 8$ | SE Palisade: Upper SE Palisade: Upper |
|  | 1 | R2M13E1-30 | 5/8 | SE Palisade: Upper SE Palisade: Upper |
|  | 1 | R2M14E3-125 | 5/8 | SE Palisade: Upper |
| Type 7 | 1 | R2M13B2-4 | 5/8 | SE Palisade: Lower |
|  | 1 | R2M13D2-19 | 1/2 | SE Palisade: Lower |
|  | 2 | R2M13E 7 -29 | 3/4 | SE Palisade: Upper |
| Type 8 | 1 | R2M14N10-7 | 5/8 | Trash Pit 4 |
| Type 9 |  | R2M13C1-153 | $7 / 8$ | SE Palisade: Upper Front Gate: Upper |
|  | 1 | R2M14M2-19 | $3 / 4$ | Front Gate: |
| Type 10 | 1 | R2M13L 10-80 | $3 / 4$ | Privy |
| Type 11 | 1 | R2M13L6-77 | 3/8 | Privy |
| Type 12 | 1 | R2M13Cl-154 | 5/8 | SE Palisade: Upper |


| TYPE | QUANTITY | CATALOGUE NUMBER | DIAMETER <br> SIZE <br> (inches) | PROVENANCE |
| :---: | :---: | :---: | :---: | :---: |
| Type 13 | 1 1 1 | $\begin{aligned} & \text { R2M12C1-286 } \\ & \text { R2M12C1-287 } \\ & \text { R2M13C1-149 } \\ & \text { R2M13C1-152 } \end{aligned}$ | $\begin{gathered} 1 \\ 1 \\ 1 / 2 \\ 5 / 8 \end{gathered}$ | Midden <br> Midden <br> SE Palisade: Upper <br> SE Palisade: Upper |
| Type 14 | 1 | R2M13H1-31 | 1/2 | SE Palisade: Upper |
| Type 15 | 1 | R2M10A1-11 | 5/8 | Men's House: Upper |
| Type 16 | 1 | R2M13C1-151 | 5/8 | SE Palisade: Upper |
| Type 17 | 1 | R2M13L 7-65 | 5/8 | Privy |
| Type 18 | $1$ | $\begin{aligned} & \text { R2M12B7-185 } \\ & \text { R2M14P1-32 } \end{aligned}$ | $\begin{aligned} & 3 / 4 \\ & 5 / 8 \end{aligned}$ | Midden <br> Palisade Trench |
| Type 19 | 1 | R2M12B3-10 | 1 | Midden |
| Type 20 | 1 | R2M13E1-27 | 3/4 | SE Palisade: Upper |
| Type 21 | 1 | R2M12B1-99 | 5/8 | Midden |
| Type 22 | 2 | R2M12B1-99 | $3 / 8$ and $5 / 8$ | Midden |
| Type 23 | 1 | R2M9FT-16 | $3 / 4$ | Warehouse: Upper |
| Type 24 | $\begin{aligned} & 1 \\ & 1 \\ & 1 \end{aligned}$ | $\begin{aligned} & \text { R2M9F1-14 } \\ & \text { R2M12C2-80 } \\ & \text { R2M13L6-54 } \end{aligned}$ | $\begin{aligned} & 5 / 8 \\ & 5 / 8 \\ & 5 / 8 \end{aligned}$ | Warehouse: Upper Midden Privy |
| Bone Buttons |  |  |  |  |
| Type 1 | $\begin{aligned} & 1 \\ & 1 \\ & 1 \\ & 1 \\ & 1 \\ & 2 \\ & 1 \\ & 1 \\ & 1 \end{aligned}$ | R2M9E2-21 <br> R2M13Cl-143 <br> R2M13H1-139 <br> R2M13L6-53 <br> R2M13L10-78 <br> R2M13L10-79 <br> R2M13L10-81 <br> R2M13L11-12 <br> R2M14N8-56 | $\begin{gathered} 7 / 16 \\ 3 / 4 \\ 7 / 16 \\ 11 / 16 \\ 3 / 4 \\ 11 / 16 \\ 7 / 16 \\ 3 / 4 \\ 7 / 10 \end{gathered}$ | Warehouse: Upper <br> SE Palisade: Upper <br> SE Palisade: Upper <br> Privy <br> Privy <br> Privy <br> Privy <br> Privy <br> Trash Pit 4 |
|  | 1 | R2M14Gl-66 | 1/2 | SE Palisade: Upper |

Table 1 (Cont'd). Buttons


Table 1 (Cont'd). Buttons

| TYPE | QUANTITY | CATALOGUE <br> NUMBER | DIAMETER <br> SIZE <br> (inches) | PROVENANCE |
| :--- | :--- | :--- | :--- | :--- |

No complete pipes were found in the 1975 excavations. The typology developed for the 1974 report has been maintained and expanded. No type 4 bowls were recovered during the last field season and there is thus a g.p in the type numbers. Many of the bowl and stem fragments contain no diagnostic attributes and cannot be classified (table 1).

Type 1 (Figure 58):
Four stem fragments are impressed "BANNERMAN/MONTREAL", or portions thereof. An additional 63 stem fragments are also classified as type 1 pipes on the basis of a seam line which runs the length of the stem. Ihree bowl-stem fragments are also grouped here. The more complete impressed specimens show a seam and a spur without an impressed monogram, lence the use of those attributes in the classification of the fragments. The reader should note, however, that the diagnostic value of these attribites is minimal and the classification should be considered tentative. Historical data concerning the manufacturer of Bannerman pipes is available in the 1974 Fort Victoria report, appendix V.

Type 2 (Figure 58):
These pipe fragments are classified on the basis of "I/F" impressed in the spur. Stem fragments are also listed here; these lack a seam. hgain, the classification is somewhat tentative. A total of 18 spur fragnents and 174 stem fragments are grouped under type 2 pipes. These lere manufactured by Fiolet of St. Omer, France (J. Nicks, pers, comm.),

Type 3 (Figure 58):
One bowl fragment is included here on the basis of vertical fluting.
Type 5 (Figure 58):
The four bowl-stem fragments grouped here show no evidence of a spur.

Type 6 (Figure 58):
A single hexagonal stem fragment is listed here. The orange clay is impressed "M. MURPHY/MONTREAL". No historical data has yet been discovered for this manufacturer.

Type 7 (Figure 58):
A single bowl fragment shows a molded floral motif. The flowers are painted purple and blue; the leaves are painted green.

Type 8 (Figure 58):
This single bowl fragment has a molded vine-and-leaf motif flanked on one side by a row of circles in relief. The bowl was not painted.

Type 9 (Figure 58):
This bowl fragment has a dark brown paste and is glazed on both surfaces. A prominent vertical seam appears on the exterior surface.

## Type 10 (Figure 58):

This bow 1 fragment has a soft reddish paste and a dark brown exterior surface. The crude molding and soft paste suggest it is homemade.

Type 11 (Figure 58):
Two fragments, probably from a single bowl, are of grey paste and show a molded ring below the lip on the exterior surface.

## Type 12 (Figure 58):

This is a single stem fragment of buff paste. There is a ring lip at the shank end, and no spur below the bowl. The shank is only about one inch long and was probably designed to take a hollow willow-twig stem.

An additional 135 fragments could not be assigned a type. Eleven of these are stem fragments, the rest are undecorated bowl fragments. Presumably the latter are from the types 1,2, and 3 pipes discussed above.

Table 1. Provenance of Pipe Types


Table 1 (Cont'd). Provenance of Pipe Types

| NUMBER OF FRAGMENTS | CATALOGUE NUMBER | PROVENANCE |
| :---: | :---: | :---: |
| 1 | R2M13B1-118 | SE Palisade: Upper |
| 1 | R2M13L 1-70 | Men's House: Upper |
| 1 | R2M13L5-11 | Privy |
| , | R2M13L6-56 | Privy |
| 1 | R2M13L 7-58 | Privy |
| 1 | R2M13L7-59 | Privy |
| 1 | R2M13L 7-60 | Privy |
| 2 | R2M13L 10-70 | Privy |
| 1 | R2M13L10-71 | Privy |
| 1 | R2M13L10-72 | Privy |
| 1 | R2M13L10-73 | Privy |
| 1 | R2M13L 10-74 | Privy |
| 1 | R2M13L 10-75 | Privy |
| 1 | R2M13L 11-14 | Privy |
| 1 | R2M13L12-26 | Privy |
| 1 | R2M9D1-20 | Warehouse: Upper |
| 1 | R2M9D2-9 | Warehouse: Upper |
| 1 | R2M9E 1-30 | Warehouse: Upper |
| 1 | R2M9E2-17 | Warehouse: Upper |
| 1 | R2M9G1-37 | Warehouse: Upper |
| 2 | R2M9K1-86 | Warehouse: Upper |
| 1 | R2M10A1-40 | Men's House: Upper |
| 1 | R2M10A3-9 | Men's House: Upper |
| 2 | R2M10B1-67 | Men's House: Upper |
| 7 | R2M10C 1-80 | Men's House: Upper |
| 1 | R2M11A1-46 | Blacksmith's: Upper |
| 1 | R2M12B7-190 | Midden |
| 1 | R2M12B7-257 | Midden |
| 1 | R2M12C3-9 | Midden |
| 1 | R2M12C4-82 | Midden |
| 1 | R2M13A1-48 | East Test: Upper |
| 1 | R2M13A1-50 | East Test: Upper |
| 2 | R2M13B1-118 | SE Palisade: Upper |
| 2 | R2M13B1-119 R2M13C1-155 | SE Palisade: Upper |
| 1 | R2M13C1-156 | SE Palisade: Upper |
| 2 | R2M13C9-49 | SE Palisade: Lower |
| 1 | R2M13D1-80 | SE Palisade: Lower |
| 1 | R2M13D2-62 | SE Palisade: Upper |
| 1 | R2M13E1-81 R2M13H1-138 | SE Palisade: Upper |
| 13 | R2M13L1-70 | Men's House: Upper |
| 1 | R2M13L4-8 | Privy |
| 2 | R2M13L5-11 | Privy |
| 1 | R2M13L5-12 | Privy |
| 1 | R2M13L5-13 | Privy |
| 14 | R2M13L6-53 | Privy |

Table 1 (Cont'd). Provenance of Pipe Types


Table 1 (Cont'd).
Provenance of Pipe Types
NUMBER OF FRAGMENTS
CATALOGUE NUMBER
PROVENANCE

## Type 8

1

Type 9
1
Type 10
1
Type 11
2

Type 12
1
Misc.
1
1
1
1
1
1
1
3
2
2
2
7
1
2
1
1
1
4
1
3
1
8
2
2

R2M14E3-87

R2M13L12-31
R2M13D1-77

R2M13C1-161

R2M14N8-52

R2M10B3-20 R2M10C1-80 R2M13H1-138 R2M13L11-13
R2M14K1-58
R2M14K2-5
R2M9D1-21
R2M9K1-87
R2M9K1-88
R2MIK1-88
R2M10A 1-39
R2M10B1-67 R2M10C1-80 R2M11A1-47 R2M12C7-92 R2M12C1-281 R2M12C4-83 R2M13A1-52 R2M13A1-53 R2M13B1-118 R2M13B1-119 R2M13B1-120 R2M13C1-156 R2M13D1-78 R2M13D1-79

SE Palisade: Upper

SE Palisade: Upper

SE Palisade: Upper

Trash Pit 4

Men's House: Lower Men's House: Upper SE Palisade: Upper Privy
SE Palisade: Upper Trash Pit 1
Warehouse: Upper Warehouse: Upper Warehouse: Upper Men's House: Upper Men's House: Upper
Men's House: Upper Men's House: Upper
Men's House: Upper Blacksmith's: Upper Midden
Midden
Midden
East Test: Upper East Test: Upper East Test: Upper SE Palisade: Upper SE Palisade: Upper SE Palisade: Upper SE Palisade: Upper SE Palisade: Upper

R2M13E1-81
R2M13H1-138
R2M13L1-70 R2M1 3L5-11
R2M13L5-12
R2M13L7-54
R2M13L7-60
R2M13L10-65
R2M13L10-66
R2M1 3L10-67
R2M13L11-14
R2M13L11-15
R2M13L11-16
R2M1 3L12-29
R2M1 3L12-30
R2M13L12-32
R2M14E1-59
R2M14E3-122
R2M14E3-123
R2M14E4-21
R2M14F1-67
R2M14G1-71
R2M14J5-9
R2M14K1-58
R2M14K1-59
R2M14K1-69
R2M14N1-7
R2M14N2-22
R2M14N8-54
R2M14N12-12
R2M14P1-31
R2M10A3-9
R2M13C1-155
R2M13L7-56
R2MI3L12-26
R2M14M3-36

SE Palisade: Upper SE Palisade: Upper Men's House: Upper Privy
Privy
Privy
Privy
Privy
Privy
Privy
Privy
Privy
Privy
Privy
Privy
Privy
Privy
Privy
SE Palisade: Upper SE Palisade: Upper SE Palisade: Upper SE Palisade: Lower SE Palisade: Upper SE Palisade: Upper Trash Pit 1
SE Palisade: Upper SE Palisade: Upper SE Palisade: Upper Block
Trash Pit 1
Trash Pit 4
Trash Pit 2,3
Palisade Trench
Men's House: Upper SE Palisade: Upper
Privy
Privy
Front Gate: Upper

Included in this appendix are beads and pendants. All glass beads have been typed according to the system developed by Kidd and Kidd (1970). Some difficulty was found in matching the bead colours and where this occurred it is shown in table 1 by an incomplete listing of the type designation. One bead, listed in brackets under class II, has a flattened end and may possibly have been mold-made. Lastly, one should note that the several hundred glass beads recovered from a garment in the privy are not included in the bead count. A specimen of each bead type present on the garment is described according to the classificatory system in table 2.

## Beaded Garment

The garment, possibly a bag or moccasin, has almost completely de composed and the bead pattern is disturbed (Figure 1). The pattern probably consisted of four motifs separated by two rows of white beads. The end motifs each consist of a central area composed of seven rows of dark blue beads. Around this are two rows of yellow beads, then two rows of red beads. The central motifs each consist of a main area composed of four rows of white beads. This area is progressively encircled by two rows of amber, two rows of green and two rows of red beads. Separating each motif, and circling the complete design, are two rows of white beads (Figure 1). Although the design is illustrated as if rectangular, the bead rows actually are parabolic.

## Miscellaneous Beads (Table 3 )

(R2M14M3-43, Figure 59):
This is an opaque red disc-shaped bead similar to type WId, but appears to have a mold seam around the circumference. The bead is eight milimetres in diameter.

## (R2M9A1-14, Figure 59):

This bead is similar in shape to that discussed above, but is 12 mili metres in diameter. It is opaque beige in colour.
(R2M13D2-25, Figure 59):
This large bead, similar in shape to class II beads, is made of brass.
(R2M13L12-41, Figure 59):
This is a roughly tubular-shaped shell bead.

## Pendants (Table 3)

(R2M12B7-184, Figure 59):
This is a circular black jet pendant and is 11 milimetres in diameter Both faces are shaped into an eight faceted cone. One edge is pierced for suspension.
(R2M14M2-48, Figure 59):
This faceted opaque red pendant is 37 milimetres long and 20 milimetres in maximum width. The material has not been identified, but is probably a stone of some sort.

## (R2M13L12-42, Figure 59):

This mother-of-pearl pendant is 21 milimetres $10 n g$ and 12 milimetres in maximum width. It may have been used to decorate a garment rather than as a pendant.
(R2M13C1-36, Figure 59):
This is a gilt-brass pendant in the form of a capital "A". There is an embossed "leaf" cap at the apex, and a row of embossed dots on each arm, increasing in size from top to bottom. The circle at the top of the pendant for attachment has broken, leaving a hook. The pendant is one inch long and $5 / 8$ inch at widest point.

Table 1. Glass Bead Types


Table 2. Glass Bead Types From Garment

| TYPE |  | $\stackrel{\underset{N}{\mathrm{~N}}}{\stackrel{\rightharpoonup}{n}}$ | ¢ | COLOUR | LOCATION |
| :---: | :---: | :---: | :---: | :---: | :---: |
| IIa7 | ${ }^{\circ}$ | vs |  | Black (Dark Blue?) |  |
| IIal4 | c | VS | op | White | All beads are from a beaded |
| IIal9 | c | VS | op | Amber |  |
| IIa23 | $\stackrel{C}{C}$ | VS | cl | Bright Mint Green | garment. This is catalogued |
| IIa31 | C | VS | op | Turquoise | as R2M13L12-48 |
| IIa20 | C | VS | op | Cinnamon | and is from |
| IIa43 | C | VS | op | Bright Blue | the privy. |
| IVa9 | C | vs | $\begin{aligned} & \mathrm{cl} \\ & \mathrm{op} \end{aligned}$ | Scarlet (Exterior) White (Core) |  |

Table 3. Miscellaneous Beads and Pendants

| TYPE | CATALOGUE |
| :--- | :--- | :--- |
| NUMBER |  |$\quad$| PROVENAMCE |
| :--- |
| Bead |
| R2M14M3-43 |


| COLOUR | NO. OF |
| :--- | ---: |
|  |  |
| White | 2 |
| Red | 2 |
| Citron | 2 |
| Dark Blue | 7 |
|  |  |
| Citron | 2 |
| Red | 2 |
| White | 2 |
| Red | 2 |
| Green | 2 |
| Cinnamon | 2 |
| White | 4 |
| Cinnamon | 2 |
| Green | 2 |
| Red | 2 |
| White | 2 |
| Red | 2 |
| Green | 2 |
| Cinnamon | 2 |
| White | 4 |
| Cinnamon | 2 |
| Green | 2 |
| Red | 2 |
| White | 2 |
| Red | 2 |
| Citron | 2 |
| Dark Blue | 2 |
| Citron | 2 |
| Red | 2 |
| White |  |
|  | 2 |
| 2 |  |

APPENDIX VII:

## The Method

The analyses of osteological remains from Fort Victoria are based on a sample of 29.27 kilograms mammalian fauna, . 409 kilograms avian fauna, and .833 kilograms fish fauna recovered from the 1975 excavations. A11 bone was collected along with other artifacts and catalogued according to the appropriate operation-sub-operation-1ot designation scheme. The material was sorted in the field to separate bone scrap (unidentifiable) from identifiable specimens.

Laboratory analyses commenced with washing of the material considered potentially diagnostic. The unidentifiable bone was simply weighed and the results (not presented here) tabulated by lot number. The same was done with the diagnostic bone which was then identified according to element (femur, rib), side (right, left, axial), portion (proximal, distal, shaft), and animal type. The generic identification was taken as far as possible using comparative specimens in the Department of Anthropology and Department of Zoology collections at the University of Manitoba. Assistance rendered by Virginia McGowan in identifying fish remains is gratefully acknowledged.
After the faunal remains were identified, the results were tabulated according to four groups; large mammals, small mammals, avi-fauna (birds), and fishes; and the minimum number of individuals present for each group (fishes excepted) was computed. The fishes were tabulated on a presenceabsence chart by lot designation (table 7). The results for birds and mammals are shown in tables 5 and 6 . Finally, the remains of each animal were displayed for distribution by activity area within the site (tables 1, 2, 3 and 4).

[^3]Beads: Fig. 1

## The Sample

The recovered sample of small manmal remains (table 6) (primarily fur-bearers) consists of eight genera, including Microtus, Phenacomys,

Marmota, Lepus, Mustela, Ondatra, Felis, and Lynx. Small mammal remains account for 1.124 kilograms (3.8\%) of the total sample of mammalian remains. Of this, .519 kilograms ( $46.2 \%$ ) were identified. A total of 17 individuals are represented (by minimum count) in the eight genera. Varying hare (Lepus americanus) is by far the largest component in the assemblage with six individuals, representing $28 \%$ of the small mammal total. Mice and voles (Microtus sp. and Phenacomys sp.) are the next most important in this category with four individuals representing 23.5\%. The balance is represented by one individual each.

The sample of large mammal remains (table 6) consists of eight genera including Canis, Odocoileus, Cervus, Alces, Bison, Sus, Bos, and Equus. These remains account for 28.659 kilograms or $96.2 \%$ of the mammalian sample. Of these, $33.3 \%$ were identified. This category can be further divided by separating wild mammals, coyote-dog(?), deer, elk, moose, and bison from domestic resources and beasts of burden such as pigs, cattle, and horses.

Large mammals are not numerous in spite of the large percentage of remains represented by this category. Moose (Alces alces) and buffalo (Bison bison) are each represented by two individuals. The remainder of the sample show a minimum number of one each except for the category "Bison or Bos" (table 6) which is a catchall for indeterminate materials of those genera (from a minimum of three).

Avi-fauna (birds) (table 5) are represented by eight genera including Gallus, Meleagris, Bonasa, Pediocetes, Canachites(?), Branta, Anas, and 01or. Two groups including "other duck" (fam. Anatidae), and "small bird" (fam. Parulidae(?)) could not be given identification to the genus leve1. Bird remains amount to 409.3 grams by weight, $54.9 \%$ of which were identified. A total of 19 individuals are represented, four ( $21 \%$ ) of which are mallard ducks. Grouse remains (not identified to genus) account for three ( $15.8 \%$ ) individuals; sharptail grouse two individuals (10.5\%), and ruffled grouse one individual ( $5.2 \%$ ). Domestic chicken is also represented by a minimum individual count of two; and the balance of the list by one individual each.

Fishes (table 7) are represented by the remains of 11 types, identified to the family, genus, or species level. These include lake sturgeon
(Acipenser fulvecens), sucker (Catostomus sp.), cisco(?) (Coregoninae), sculpin(?) (Cottidae), minnow (Cyprindae), northern pike (Esox lucius), burbot (ling) (Lota lota), sauger-walleye (Percidae), trout-perch (Percopsidae), grayling-trout(?) (Salmonidae) and brook trout or Dolly Varden (Salvelinus sp.). A total of 168.7 grams representing 833 bone fragments comprise the sample which also includes 1,569 fish scales. The proportion identified was not computed nor was a minimum individual count obtainable. Analysis of scales for age determination was not undertaken at this time.

## Activity Area

Small mammal remains (table 1) with one exception are not significantly numerous anywhere in the area excavated during 1975 to warrant discussion. The remains of varying hare (Lepus americanus) however do appear in some quantity in the privy fill, trash pit \#1, trash pit \#2 and the large exterior midden feature. The provenance of these remains, that is in secondary refuse, strongly suggests their use as a food resource. Remains of hare from the general and provision store, front gate, southeast palisade, east test, and men's house are almost wholly from the upper level (plough zone) and are therefore of uncertain association.

Large mammalian remains are definitely skewed toward Bison, Bos, Alces and Equus, either by the minimum count obtained (table 6) or by the actual number of specimens representing each animal. In addition, there is a considerable amount ( 40 specimens) of bovine material which cannot be given species identification.

Secure bison remains originate from the block, privy, and trash pit \#3 (table 2). The balance is from upper levels. Other bovine material comes from the picket fence trench, block, privy, trash pit *4, and the exterior midden. Again a large quantity ( 21 specimens) derives from the plough zone. Two moose, represented by a pair of lateral maleoli, originate from the privy and the southeast palisade (upper level). On this basis, only the remains of one moose can be associated with site occupancy. Similarly, all horse remains were recovered from the plough zone and thus may or may not be contemporaneous with site occupation. Other secure association of animal remains with the site include elk (privy), deer
(diagonal), pig (lower southeast palisade, privy, and trash pit \#4) since these remains are linked with features that date without question to the early period. Pig was apparently husbanded at Fort Victoria from the very earliest times.

The distribution of birds (table 3) is certain only where their remains are associated with discrete features such as the men's house (lower), southeast palisade (lower), palisade trench, privy, trash pits $1-4$ or the midden (lower), all of which are of known origin. Those included therefore are sharptail grouse, "other" grouse, mallard duck, pintail duck, "other" duck, and the Canada goose. The remains of chicken, including three individual "burials", and ruffled grouse are of uncertain origin. The suggested presence of domestic turkey remains in the midden (lower), and swan (0lor sp.) in the privy is tentative and must await the recovery of additional material.


Table 1 (Cont'd). Distribution of Small Mammals by Activity Area

| AREA | BEAVER | HARE | MARTEN | MINK | MUSKRAT | SKUNK |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | C. canadensis | L. americanus | M. americanus | M. vison | 0 , zibethicus | M. mephitis |

## Palisade Trench

(fill) - 1 humerus
Privy
(fill) - 1 mandible - 1 mandible

## Trash Pit \#1

(fill) -
3 molars

Table 2 (Cont'd). Distribution of Large Mammals by Activity Area

| AREA | BISON <br> Bison bison | $\begin{aligned} & \text { BOS or BISON } \\ & \text { Bos spp. } \end{aligned}$ | CANIS <br> Canis spp. | DEER <br> Odocoileus spp. | ELK <br> C. canadens is | HORSE <br> E.caballus | MOOSE <br> Alces alces | $\begin{aligned} & \text { PIG } \\ & \text { Sus scrofa } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Trash Pit \#3 |  |  |  |  |  |  |  |  |
| Lower - | 1 mandible | - | - | - | - | - | - | - |
| Trash Pit \#4 |  |  |  |  |  |  |  |  |
|  | - | 3 carpus <br> 1 maxilla <br> 2 ischia <br> 1 inominate | - | - | - | - | - | $\begin{aligned} & 1 \text { tibia } \\ & 2 \text { scapulae } \end{aligned}$ |
| Midden |  |  |  |  |  |  |  |  |
|  | - | 1 ulna <br> 1 calcaneus <br> 1 illium <br> 2 carpus <br> 1 1.maleolus <br> 1 scapula <br> 1 radius <br> 2 libiae | 1 maxilla | - | - | - | 1 carpal | 1 ulna |

Table 2 (Cont'd). Distribution of Large Mammals by Aetivity Ar月月

| AREA | BISON <br> Bison bison | $\begin{aligned} & \text { BOS or BISON } \\ & \text { Bos spp. } \end{aligned}$ | CANIS <br> Canis spp. | DEER <br> Odocotleus | 480 | 11K <br> f embadanels |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Picket Trench |  |  |  |  |  |  |  |  |  |
| (fil1)- | - | 1 scapula | - | * |  |  |  |  |  |
| Block |  |  |  |  |  |  |  |  |  |
| (fill)- | 2 molars | $\begin{aligned} & 1 \text { femur } \\ & 1 \text { metacarp. } \\ & 1 \text { carpal } \end{aligned}$ | - | - |  | + |  |  |  |
| Díagonal |  |  |  |  |  |  |  |  |  |
| (fill)- | - | - | - | $\begin{aligned} & 1 \text { radius } \\ & 1 \text { ulna } \end{aligned}$ |  | a |  |  |  |
| Privy |  |  |  |  |  |  |  |  |  |
| (fi11)- | $\begin{aligned} & 1 \text { scapula } \\ & 1 \text { ulna } \end{aligned}$ | 4 carpus <br> 2 incisors <br> 3 tibiae <br> 1 radius <br> 1 ulna <br> 1 orbit <br> 1 humerous | * | * |  | I ant <br> 1 geapuis |  | flimplinife | Will |
| Trash Pits \# 2,3 |  |  |  |  |  |  |  |  |  |
| Upper - | $\cdots$ | = | - | 1 fnetsor |  | $\cdots$ |  |  | (wim) |

Table 3. Distribution of Avi-Fauna by Activity Area

| AREA | CHICKEN * <br> Gallus spp. | RUFFED GROUSE B. umbellus | $\begin{aligned} & \text { SHARPTAIL } \\ & \text { GROUSE } \\ & \text { P.phasianellus } \end{aligned}$ | OTHER GROUSE | MALLARD <br> DUCK <br> A.platyrhyncos | PINTAII Duck <br> Anas acutn | H1II: tili 1 Fhint Ahth inf | Lunid \|r and |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Provision Store |  |  |  |  |  |  |  |  |
| Upper - | 2 crania | - | - | - | - |  |  |  |
| Men's House |  |  |  |  |  |  |  |  |
| Upper - | $\begin{aligned} & 1 \text { humerus } \\ & 1 \text { femur } \\ & 1 \text { phalange } \end{aligned}$ | 1 ulna | 1 metacarp. | - | - |  |  |  |
| Lower - | 1 coracoid | - | - | - | 1 coracoid(?)-- | ( 31 |  |  |
| Southeast Palisade |  |  |  |  |  |  |  |  |
| Upper | 1 phalange 1 metacarp. 1 coracoid | - | 1 humerus | 1 humerus | 1 phalange <br> \& digit <br> 1 humerus <br> 1 coracoid | 1 tibta | 1116.14 |  |
| Lower - | - | - | 1 ulna | - | - |  | 1 tramin |  |
| $\frac{\text { Palisade Trench }}{\text { (fill) - }}$ |  |  |  |  |  |  |  |  |
| $\frac{\text { Privy }}{(\text { fil1) }}$ | - | - | - | 1 humerus | $\begin{aligned} & 3 \text { sterna } \\ & 1 \text { tibia } \end{aligned}$ | $\begin{aligned} & 1 \text { ulna } \\ & 1 \text { humerus } \end{aligned}$ |  |  |

Table 3 (Cont'd). Distribution of Ayt faiman by Arl|hl|f hinf

| AREA | CHICKEN * <br> Gallus spp. | RUFFED <br> GROUSE <br> B. umbellus | SHARPTAIL <br> GROUSE <br> P.phas ianellus |  abotis! | Mat tabe |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Trash Pit \#1 |  |  |  |  |  |
|  | - | - | - |  |  |
| Trash Pit \#4 - |  |  |  |  |  |
|  | - | - | - | 1 humertes | 1 StBratim |
| Midden |  |  |  |  |  |
|  | 1 furcula <br> 1 humerus | - | - | , | \| Cotatal |

* Domestic turkey (Meleagris spp.) may also be present.
** Swan (01or spp.) may be present

Table 4. Individual Bird Features

## FEATURE \#1

FEATURE \#2

Gallus spp. (chicken $甲$ )
cranium
premaxilla
mandible
vertebral column
sternum
furcula
pelvis

## pygostyle

L-R lst phalange \& digit
L radiale
L ulnare
L-R 3-4 metacarpus
L-R scapulae
L-R coracoids
L-R t. metatarsus
L-R tibiotarsus
L-R fibulae
L-R femora
L-R patellae
34 ribs \& fragments
15 sesamoids
3 unident. fragments
19 phalanges

Gallus spp. (chicken \&)
cranium
premaxilla
mandible
vertebral column
sternum
furcula
pelvis
pygos tyle
L-R 1st phalange \& digit
L-R 3-4 metacarpus
L-R radii
L-R ulnae
L-R humerii
L-R scapulae
L-R coracoids
L-R t. metatarsus
L-R fibulae
L-R femora
L-R patellae
23 ribs
24 unident. fragments
15 phalanges

Gallus spp. (chicken \&)
cranium
premaxilla
mandible
vertibral column
sternum
furcula
pelvis
pygostyle
L-R 1st phalange \& digit
L-R ulnare(?)
L-R 3-4 metacarpus
L-R radii
L-R humerii
L-R scapulae
L-R coracoids
L-R t. metatarsus
L-R tibiotarsus
L-R femora
55 ribs \& fragments
10 sesamoids
6 unident. fragments
29 phalanges
( I )

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2
( 1 )

Table 5 (Cont'd)
Part I


## I

|  | $I$ |
| :--- | :--- |
| 2 | 1 |

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( I )
(t)
( I$)$

I
(I) ( I )

I



Table 5 (Cont'd).


|  |  |  | I |  | (2) <br> b <br> โ <br> I <br> I <br> โ <br> ( 1 ) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |



Table 6 (Cont'd). Minimum Number, Small and Large Mammals
Part I



Table 6 (Cont'd).
Minimum Number, Small and Large Mammals
Part II


| Hot Mo. |  | $\begin{aligned} & 4 \\ & \frac{3}{3} \\ & \frac{3}{3} \\ & \frac{1}{3} \\ & \frac{3}{3} \\ & 3 \end{aligned}$ |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| R2W9A3 | $x$ |  |  |  |  |  |  |  |  |  |  |
| R2M108 | \% |  |  |  |  |  |  | ? |  |  |  |
| R2M11A6 |  | $x$ |  |  |  |  |  |  |  |  |  |
| (2am12A1 | $x$ |  |  |  |  |  |  | ? |  |  | $x$ |
| 22M1381 | $x$ |  |  |  |  | $x$ |  |  |  |  |  |
| R2M13Cl | $x$ |  |  |  |  |  |  |  |  |  | x |
| R2M13A1 | * |  |  |  |  | $x$ |  |  |  |  |  |
| R2M13C2 | K |  |  |  |  |  |  |  |  |  |  |
| P2113 302 | * |  |  |  |  |  |  |  |  |  |  |
| R2M13E1 | * |  |  |  |  |  |  |  |  |  |  |
| R2M1316 |  |  |  |  |  |  | $x$ |  |  |  |  |
| R2M1317 | * |  |  |  |  |  |  |  |  |  |  |
| R2M1319 |  | $x$ |  |  |  |  |  |  |  |  |  |
| R2m)31. 10 |  |  |  |  | $x$ |  |  |  |  |  |  |
| R2M14F3 | * |  |  |  |  |  |  |  |  |  |  |
| R21414E4 | * |  |  |  |  |  |  |  |  |  |  |
| H2M14.16 | $x$ |  |  |  |  |  |  |  |  |  |  |
| R2miat 3 | * |  |  |  |  |  |  |  |  |  |  |
| R2M)AEA | $\times$ |  |  |  |  |  |  |  |  |  |  |
| R2M14.36 | K |  |  |  |  |  |  |  |  |  |  |
| R2M14KI | $\times$ |  |  |  |  |  |  |  |  |  |  |
| R2M14K3 | $\times$ |  |  |  |  |  |  |  |  |  |  |
| R2M14N6 | $x$ | $x$ | ? |  |  |  |  |  |  |  |  |
| R2M1 AN7 | $\times$ |  |  |  |  |  |  |  |  |  |  |
| R2M14N8 R2M14N9 | $\times$ | $\times$ |  |  |  |  |  | x | x |  |  |
|  | $\times$ |  |  | $\times$ |  |  |  |  |  |  |  |



```
#
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```


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Instrument:

Ruler (Figure 60 ):
A portion of a folding ivory ruiler (R2MI3CTO-85) is present. Incised on one face are the 10 - and 71 -inch marks, with subdivisions into sixteenths below and twelfths above. The opposite face has the one-and two-inch marks with subdivisions into eighths below and tenths above. One edge is incised in half-inch intervals with one section subdivided into twenty-fourths of an inch. There is a brass end cap at one end and remnants of a mortice at the swivel end. The artifact is broken at the swivel pin holes.

Toys
Doll Fragments (Figure 60):
A portion of a doll's head (R2M14N8-59) consists of the left forehead from below the eye to the hair. It is made of white porcelain and has a blue painted eye, black eyelashes, eyebrow and hair. A second doll's eye (R2M13C1-142) is made of glass. It has a blue iris, black pupil, clear glass cornea and milk glass eyeball.

## Marbles (Figure 60):

Two ceramic marbles (R2M12C4-85, R2M13M2-55) are approximately $7 / 10$ inch in diameter. One has remnants of pink paint, the other is grey.

Wheel (Figure 60):
This is only a small fragment of a wheel (R2M13H1-28). The radius is about one inch. Presumably this is from an iron toy vehicle.

Harmonica Parts (Figure 60):
These are two leaves of a harmonica (R2M12B2-13). They are about $33 / 4$ by one inch and contain remnants of the reeds.

## Instruments

Ruler (Figure 60):
A portion of a folding ivory ruler (R2M13L10-85) is present. Incised on one face are the 10 - and 11 -inch marks, with subdivisions into sixteenths below and twelfths above. The opposite face has the one- and two-inch marks with subdivisions into eighths below and tenths above. One edge is incised in half-inch intervals with one section subdivided into twenty-fourths of an inch. There is a brass end cap at one end and remnants of a mortice at the swivel end. The artifact is broken at the swivel pin holes.

Scalpel(?) Handle (Figure 60):
This is an ivory(?) handle (R2M13A1-44) about $31 / 4$ inches long. An attached iron ferrule is slotted, presumably for a blade. Cut into the handle is: "MADE IN/ENGLAND". The actual function of the artifact is uncertain, but it is too small for a common utility knife.

Slate Pencils and Boards (Figure 60)
There were 16 slate pencils recovered. Most of these are non-diagnostic, but one pencil (R2M13L7-71) has a notch cut around one end for the attachment of a string or cord. Most of the fragments of slate boards recovered were also non-diagnostic, except for three (R2M13L1-74, R2M13L7-72, R2M13L9-41) which are side pieces and show a straight edge produced by flaking. A fourth side (R2M14M4-3) has a beveled edge.

Table 1. Miscellaneous Artifact Provenances

| ARTIFACT | CATALOGUE NUMBER | PROVENANCE |
| :---: | :---: | :---: |
| Toys |  |  |
| Doll's Head <br> Doll's Eye <br> Marble <br> Marble <br> Whee 1 <br> Harmonica | R2M14N8-59 <br> R2M13C1-142 <br> R2M12C4-85 <br> R2M13M2-55 <br> R2M13H1-28 <br> R2M12B2-13 | Trash Pit 4 <br> SE Palisade: Upper Midden <br> Front Gate: Upper <br> SE Palisade: Upper Midden |
| Instruments |  |  |
| Ruler <br> Scalpel(?) | R2M13L10-85 <br> R2M13A1-44 | Privy East Test |
| Slate Pencils |  |  |
| $\begin{array}{ll} \text { Quantity: } & 1 \\ & 1 \\ & 2 \\ & 1 \\ & 1 \\ & 1 \\ & 2 \\ & 1 \\ & 1 \\ & 1 \\ & 2 \\ & 1 \\ & 1 \end{array}$ | R2M12A1-66 <br> R2M12B7-188 <br> R2M13B1-122 <br> R2M13E1-80 <br> R2M13H1-142 <br> R2M13L1-74 <br> R2M13L6-62 <br> R2M13L7-70 <br> R2M13L7-71 <br> R2M13L10-87 <br> R2M13L12-45 <br> R2M14F1-70 <br> R2M14K3-26 | Midden <br> Midden <br> SE Palisade: Upper <br> SE Palisade: Upper <br> SE Palisade: Upper <br> Men's House: Upper <br> Privy <br> Privy <br> Privy <br> Privy <br> Privy <br> SE Palisade: Upper <br> Trash Pits 2,3 |
| Slate Board Fragments |  |  |
|  | R2M9E2-20 <br> R2M9K1-90 <br> R2M10B1-71 <br> R2M10C1-82 <br> R2M11A1-62 <br> R2M12A3-27 <br> R2M12B1-262 <br> R2M12B7-201 <br> R2M12C1-288 <br> R2M13B1-123 <br> R2M13C1-158 <br> R2M13C2-28 <br> R2M13D1-82 <br> R2M13D2-66 | Warehouse: Upper Warehouse: Upper Men's House: Upper Men's House: Upper Blacksmith's: Upper Midden <br> Midden <br> Midden <br> Midden <br> SE Palisade: Upper <br> SE Palisade: Upper <br> SE Palisade: Upper <br> SE Palisade: Upper <br> SE Palisade: Lower |


| ARTIFACT | CATALOGUE NUMBER | PROVENANCE |
| :---: | :---: | :---: |
|  | R2M13E1-79 <br> R2M13H1-143 <br> R2M13L1-74 <br> R2M13L6-63 <br> R2M13L 7-72 <br> R2M13L9-41 <br> R2M13L11-17 <br> R2M13L 12-46 <br> R2M14E1-61 <br> R2M14E2-29 <br> R2M14E3-133 <br> R2M14E4-24 <br> R2M14G1-65 <br> R2M14G2-18 <br> R2M14H1-67 <br> R2M14J5-10 <br> R2M14K1-74 <br> R2M14K3-28 <br> R2M14M3-42 <br> R2M14M4-3 <br> R2M14N1-6 <br> R2M1 4N2-20 <br> R2M14N6-48 <br> R2M14N8-58 | SE Palisade: Upper <br> SE Palisade: Upper <br> Men's House: Upper <br> Privy <br> Privy <br> Privy <br> Privy <br> Privy <br> SE Palisade: Upper <br> SE Palisade: Lower <br> SE Palisade: Upper <br> SE Palisade: Lower <br> SE Palisade: Upper <br> SE Palisade: Lower <br> SE Palisade: Upper <br> Trash Pit 1 <br> SE Palisade: Upper <br> Trash Pit 2,3 <br> Front Gate: Upper <br> Front Gate: Lower <br> Block <br> Trash Pit 1 <br> Trash Pit 4 <br> Trash Pit 4 |

## Introduction

Wood and charcoal remains from archaeological sites are often used to reconstruct previous vegetation patterns. Remains from such sites may not represent an accurate description of the vegetation because the wood may have been culturally selected. The purpose of this appendix is to explore the use of wood products at Fort Victoria through the analysis of preserved wood and charcoal remains. What major tree species are found in the area? What major woods were used, and how was this mood used at Fort Victoria?

Cultural selection of wood, for construction and other uses at Fort Victoria, may well be dependent upon the abundance, availability, and specific properties of wood types. Specific properties may include length and diameter of a tree, its strength, its resistance to rot, or its heat potential when burned. Uses for construction and repairs, furniture, tools and fuel, may also be dependent upon abundance, availability, and the specific properties of various woods.

## Present and Past Vegetation

Large areas of natural timber, which existed during the occupation of Fort Victoria, have been cleared for agriculture today. Figure 1 classifies wood types into three major categories, local or extra-local, abundance of the tree and its availability for use. Trees which are locally abundant are willow, poplar, birch, pine and white spruce, which would be easily available for use. Local trees commonly found are larch and black spruce, but problems would be encountered in harvesting these trees since they grow in poorly drained, swampy areas. Trees which are sparse in the area are balsam fir, Manitoba maple and some shrubs which may be either common or sparse (choke cherry, service berry and the like). The question of when Manitoba maple and caragana were introduced locally cannot be answered at this time. They may have been introduced at the end of Fort occupation.
Extra-local trees or improted wood products are those trees which did
not grow in the area during Fort occupation. Maple, oak, ash, hickory, elm, Douglas fir and cedar are some of the major extra-local trees. Their availability for use at Fort Victoria was probably minimal.

## The Sample

A total of 127 wood and charcoal samples, from seven major areas (Figure 2) of the site, were collected. These include: trash pit 1 (located near the southeast corner of the palisade), trash pit 2 (located immediately east of the men's quarters), the midden (located northeast of the north gate), the east palisade wall, the south palisade wall, the provisions store and the men's quarters.

The total number of pieces of wood and charcoal identified to genera or family was 91, while those only identified as deciduous or coniferous consisted of 38 pieces. A total of 53 pieces of wood or charcoal were identified as to genera; 34 pieces of wood or charcoal were unidentifiable due to small size, fragmentation, or because they were knots. The sizes of the pieces of charcoal or wood ranged from one-quarter inch in diameter to three to four inches in diameter.

Not all charcoal and wood was saved for identification. In areas such as trash pits and middens, samples were randomly taken; whereas samples of palisade posts were selected on the basis of preservation, in order that thin sections of the wood could be made. Samples of this type may be rather biased, but wood which turns to dust when touched is difficult to identify. Another problem concerning samples from the palisade posts is that only two walls, south and east, have been sampled and are restricted to a relatively small area. Wood and charcoal samples were not weighed for the simple reason that not all wood and charcoal was saved. The objectives of this report did not warrant weighing every piece.

## The Method of Analysis

## A. Comparative Material

A good reference collection of all major tree species in the area is essential, and the best method of obtaining such reference material is to collect it from the local area. If this cannot be done, wood samples of

40 major species found in Canada, may be obtained from the Canadian Forestry Service in Ottawa. Samples of the various species are wrapped in tin foil, charred at approximately $300^{\circ} \mathrm{C}$ in a lab oven and snapped in half to obtain a transverse section. Comparisons of unknown to known be made.

In wood or charcoal identification, transverse sections are of minimal use, especially when dealing with coniferous wood. Microscopic thin sections of various species or genera were obtained; this includes transverse, tangential-longitudinal and radial-longitudinal sections. Longitudinal sections are very important for an accurate identification of coniferous wood, as well as some deciduous woods with similar cell morphology.
All wood and most charcoal samples from Fort Victo. a were thin-sectioned on the two longitudinal planes, and examined through a 400 x microscope. These samples were keyed out using Jane's (1970) hardwood and softwood key. Samples were also observed in transverse section under a stereoscope.
B. Basis of Identification

All coniferous and deciduous woods possess a number of diagnostic features which enables one to distinguish the genus and, at times, even the species, although diagnostic features overlap considerably at the species level. Coniferous wood is difficult to identify as to genus and often impossible at the species level. Thin sections of all three planes must be made for an accurate identification. For example: identification of pine Pinus sp. and spruce Picea sp. is most easily done by looking at thin sections of the tangential-longitudinal section and radial-longitudinal section (Figure 3); some subtle differences on the transverse section occur (Pinus may contain more resin ducts than Picea). The distinction between spruce Picea and larch Larix is very difficult to make. The two genera have only two differences: transition from spring to summer wood is abrupt in Larix and subtle in Picea; and there is a difference in the number of epithelial cells surrounding the resin ducts.
A simplified description of the diagnostic features of deciduous woods should be given. Most deciduous woods can be identified, to the generic level, using a low power stereoscope on the transverse plane only. There
are exceptions, however, as in the case of willow Salix and poplar Populus where the thin sections of all three planes must be viewed. To ensure against gross error, all deciduous woods were thin sectioned on the two longitudinal planes and the transverse section was viewed under the stereoscope.

Deciduous woods can be broken down into three categories based on vessel arrangement (transverse section). Ring porous woods are those having their vessels concentrated in the spring wood only (oak). Diffuse porous woods are those which have their vessels evenly distributed throughout the spring and summer wood (poplar). And semi-ring porous woods are those where the continuity of the ring is broken by wider spacing of the spring wood vessels (hickory). Other diagnostic features helpful in identifying deciduous woods are vessel size, shape and grouping, or vessels running in horizontal or oblique lines, as in willows. Types of vessels help in distinguishing some genera. Simple vessels occur in maple, but are scalariform (barred) in birch. The size of rays is also useful, some being visible to the unaided eye, as in oak, while others can only be seen with the use of a stereoscope. Different types of rays also occur. Uniseriate rays are one cell wide and may contain homogeneous or heterogeneous cells, or rays may be biseriate (two cells wide) or multiseriate (a number of cells wide).

## Results and Discussion

Eleven different genera of wood, five coniferous and six deciduous, were identified at the Fort Victoria site (Table 2). Deciduous elements found include oak Quercus sp., ash Fraxinus sp., birch Betula sp., willow Salix sp., and poplar Populus sp.. Coniferous woods found include pine Pinus sp., spruce Picea sp., larch Larix sp., Douglas fir Pseudotsuga sp., and cedar Cedrus sp. . Two conifers, Cedrus sp., and Pseudotsuga, and three deciduous woods, Acer sp., Quercus sp., and Fraxinus sp., do not grow in the area. As well, not all major genera found in the area today are represented in the sample.

Excavations of some portions of the provisions store revealed that any foundation logs which may have existed had been destroyed by ploughing. However, a few remnants of what might have been the east wall,
were exposed. The few pieces of wood which were found have been identified as either spruce or larch. Wood remnants of what might have been the west wall were also exposed. This wood was also found in the plough zone within a caragana hedge. An identification of the wood samples revealed it to be oak. Based on the assumption that local wood was used in construction, it seems highly unlikely that the small pieces of wood exposed were remnants of a foundation $\log$, but were perhaps some other structural member such as a doorsill.

Again, most remains of the men's quarters have been destroyed through ploughing. A few wood fragments of the east wall may have been found, although they remain questionable. The wood identified was spruce.

Although a large area of the palisade footer trench was exposed, many of the samples taken were in poor condition and were unidentifiable. Those that were identified consisted of six pine posts, four spruce posts and one post which may have been larch. One large support post from the east wall was pine and one of the large king posts from the south gate was also pine. Three samples of wood from the small picket fence, which roughly followed the lines of the east and south palisade walls, were identified as spruce.

Wood samples of the palisade posts are very limited considering the total number of posts required for the construction of the four palisade walls. The total length of the four walls is 708 feet, and the diameter of one post is approximately four inches, so it would have taken approximately 2100 posts to build this enclosure. The sample includes 11 posts, which make up only $.52 \%$ of the palisade uprights. Needless to say, further sampling is needed to draw any concrete conclusions. The palisade posts analysed thus far reveal that no major patterns of selection seem to have occurred. It should be noted that the tree best suited for palisade posts is larch, because it has the highest degree of rot resistance of any of the genera found in the area, as well as providing tannin from the bark. The builders may have been aware of these properties, but logistical problems involved in procuring the wood may have outweighed the benefits.

The major wood samples from trash pit 1 were identified as pine and oak. A large amount of the charcoal could only be identified as coniferous
or deciduous. Ash layers within the pit contained small pieces of charcoal, which were impossible to identify to the genus level. Six major tree genera were found in trash pit 2, the major portion consisting of charcoal. All but one of the identified charcoal samples consisted of deciduous genera; willow, poplar and one piece of oak. The one piece of coniferous wood was pine. Identified wood samples were spruce and birch (bark). The oak found here is an extra-local wood but its specific use is unknown. It may have been shipped in as raw material or as a finished product for furniture, tools and so on.

The occurrence of a large amount of deciduous wood in the ash lens is also of some interest with regard to the heat potential that various woods possess. Table 1 indicates the number of B.T.U.'s per dry cord of wood. Charred oak was found in limited quantities in the ash lens, and has the highest heating potential, 28 million B.T.U.'s (per dry cord). Poplar and willow were the most abundant woods, both having relatively low heat values; pine has a moderately high heat value of 20 to 22 million B.T.U.'s. Selection of fuel was probably primarily due to availability.

The question still remains whether or not the midden is contemporary with Fort occupation. Deciduous elements (wood and charcoal) found in the upper strata were oak, maple, willow, poplar, and ash. Coniferous elements found include pine, spruce, Douglas fir(?), and cedar(?). However, accurate identification of these small charcoal samples is somewhat questionable at the present time. It is interesting to note that five extra-local genera were found in the midden. If the midden is post1900, extra-local woods would have been more readily available than during the days of Fort occupation.

## Summary and Conclusions

To summarize, the preliminary examination of wood and charcoal remains at Fort Victoria suggests the following points. The selection of wood best suited for construction material did not occur, availability or abundance of wood in the area probably being the controlling factor. Extra-local woods were being used, although the analysis does not allow any concrete interpretations as to what these uses were. Samples from the trash pit ash lens indicate that the availability and abundance of
wood may have been more important than heat potential. The sample size, from previous excavations, is minima1. A more rigorous and systematic sampling technique is needed in order that more concrete conclusions may be drawn. Wood samples from the trader's house, which still contains original structure, should be taken. Also, more palisade posts must be tested. And, finally, the analyses of wood and charcoal remains from Fort Victoria indicate that in some instances, cultural bias in the use of woods may have occurred. Vegetation patterns as indicated from the analyses of wood and charcoal alone might not be valid when this cultural variable is considered.

Table 1. Wood



Major Tree Types: Frequency and Availability

|  | Local Trees | Extra-Local Trees |
| :---: | :---: | :---: |
| Abundant | Willow <br> Poplar <br> Birch <br> Spruce (white) <br> Pine |  |
| Common | Alder <br> Spruce (black) <br> Larch (shrub) |  |
| Sparse | Balsam Fir (shrub) | Manitoba Maple (?) |
| Rare or Absent |  | Oak <br> Ash <br> Maple <br> Hickory <br> Elm <br> Cedar <br> Douglas Fir |

Figure 1. Wood

Diagnostic Features of Populus and Salix

|  | Populus | Salix |
| :---: | :---: | :---: |
| Physical Features | - fine texture <br> -no lustre <br> -no characteristic colour |  |
| Transverse Section | -diffuse, porous <br> - vessels angular <br> -oblique grouping |  |
| Radial Long. Section | -spiral thickening of vessels. never present -vessel perforations-simple. large, oval or angular |  |
|  | -large pits near vessels, two to three horizontal rows | -small pits near vessels, three to five horizontal rows |
| Tangential Long, Section | -homogeneous rays (cells are the same) | -heterogeneous rays (cells are different) |



DATE DUE SLIP


GOV DOC CA2 AL Cu33 016 No. $003{ }_{3}$
Archaeological investigations, Fort Victoria 1975 ,


[^0]:    Skate Heel Plate (R2M12A1-72)
    Skate (R2M12A1-11)
    3. Trunk Hinge (R2M12C1-33.1)
    4. Trunk Hinge (R2M12C1-33.2)
    5. Trunk Lock (R2M12B1-29)
    6. Trunk Catch (R2M12B1-30)
    7. Trunk Catch (R2M12A1-7)
    8. Lamp Part (R2M12C1-56)
    9. Lamp Part (R2M12A1-8)
    10. Lamp Part (R2M12C2-8)
    11. Lamp Part (R2M12C4-7)
    12. Lamp Part (R2M12B7-19)
    13. Lamp Part (R2M12B7-18)

[^1]:    1. File (R2M14K1-13)

    File (R2M14M3-14)
    3. File (R2M13L7-21)
    4. Wedge (R2M12C1-40)
    5. Wedge (R2M12B7-23)
    6. Hoe (R2M9Gl-13)
    7. Harness Fragment (R2M14H1-13)
    8. Spring Clasp (R2M13B1-23)
    9. Bell (R2M9B1-7)
    10. Horseshoe (R2M12B1-24)

[^2]:    1. Type E (R2M12B7-142)
    2. Type EI (R2M12C2-67)
    3. Type EII (R2M12C4-40)
    4. Type F (R2M12C1-122)
    5. Type FI (R2M12C1-178)
    6. Type FII (R2M12B1-166)
    7. Type FIII (R2M12B1-172)
    8. Type G (R2M12B1-218
    9. Type GI (R2M12B1-192)
    10. Type GII (R2M12B1-191)
    11. Type H (R2M12C1-216)
    12. Type HI (R2M12C2-66)
    13. Type HII (R2M12B5-32)
[^3]:    Bead Pattern

